
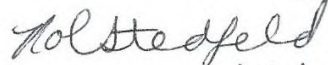

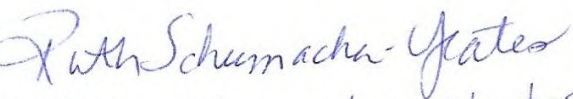


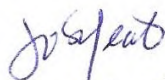
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SIGNATURE 
PRINTED NAME Jonathan D. White
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EMAIL rstedfeld@yahoo.com

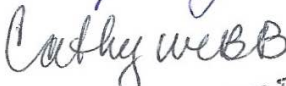
SIGNATURE 
PRINTED NAME Rita Allen
ADDRESS 410 Balsa St. La Grande Or.
EMAIL

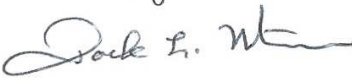
SIGNATURE 
PRINTED NAME Ruth Schumacher Yeates
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SIGNATURE 
PRINTED NAME JOHN YEATES
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SIGNATURE 
PRINTED NAME LOIS BARRY
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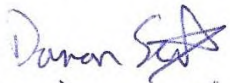
SIGNATURE 
PRINTED NAME CATHY WEBB
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EMAIL thunkski@gmail.com


SIGNATURE 
PRINTED NAME Jack L. Martin
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EMAIL Buff Martin 27 @GMail .com

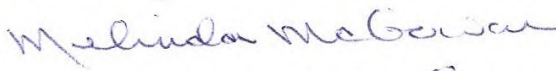
SIGNATURE 
PRINTED NAME GERALDINE BRASETH-PALMER
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EMAIL 


SIGNATURE 
PRINTED NAME Jean BAPH
ADDRESS 1509 MADISON AVE LaGrande, OR 97850
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SIGNATURE 
PRINTED NAME Damon Sexton
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PRINTED NAME Melinda McGowan
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SIGNATURE 
PRINTED NAME Laura Elly Hudson
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EMAIL ellyhudson@gmail.com

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SIGNATURE *Gary D. Pierson*
PRINTED NAME Gary D. Pierson
ADDRESS 489 Modelaire Drive, La Grande OR 97850
EMAIL -

SIGNATURE *Lynn Wheeler Duncan*
PRINTED NAME LYNN WHEELER DUNCAN
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EMAIL rlvw1910@gmail.com

SIGNATURE *Anne G. Cavinato*
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EMAIL acavinat@eou.edu

SIGNATURE *Joe Horst*
PRINTED NAME JOE HORST
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EMAIL joehorst@eoni.com

SIGNATURE *Angela Sherer*
PRINTED NAME ANGELA Sherer
ADDRESS 91 - W. Hawthorne Dr. LaGrande, OR 97850
EMAIL asherer@frontier.com.

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Robert J. Sherer*
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SIGNATURE *Heather M. Null*
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SIGNATURE *Bert R. Frewing*
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EMAIL jeanfrewing@gmail.com

SIGNATURE *Lindsay McCullough*
PRINTED NAME Lindsay McCullough
ADDRESS 406 Balsa St., La Grande, OR 97850
EMAIL lindz_mm91@hotmail.com

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Merle E. Comfort*
PRINTED NAME MERLE E. COMFORT
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SIGNATURE *Robin L. Maille*
PRINTED NAME Robin Maille
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EMAIL r.maille@icloud.com

SIGNATURE *Bruce C Kevan*
PRINTED NAME *Bruce C*
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SIGNATURE *Carol S. Summers*
PRINTED NAME CAROL S. SUMMERS
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EMAIL carolsummers1935@gmail.com

SIGNATURE *Caroline Kaye Juniper*
PRINTED NAME Caroline Kaye Juniper
ADDRESS 406 NTH St. LaGrande - OR 97850
EMAIL

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SIGNATURE *Gerald D. Juniper*
PRINTED NAME *Gerald Darwin Juniper*
ADDRESS *406 4th St. LaGrande OR. 97850*
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
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PRINTED NAME
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EMAIL

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:28 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposal Order 5/23/2019
Attachments: Scan 2019-8-15 17.14.06.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter sign by me and 46 other residents of La Grande expressing our concerns regarding the B2H Project and requesting that EFSC Deny the Site Certificate.

I have also sent a bound copy of this material by US Postal Service.

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, Oregon. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the predicted noise levels resulting from construction and operation of the proposed Boardman to Hemingway Transmission Line Project. I would like to address the noise coming from the blasting and rock breaking specifically above the area at the top of Modelaire Drive 1 both to the north and the south of that area and also the construction traffic noise that that will impact the west hills and the area below.

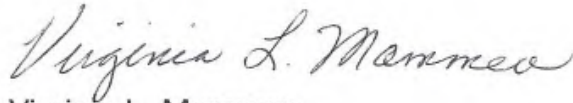
In Exhibit X page X-9 3.3.1.1 2 blasting and rock breaking is mentioned saying that "Modern blasting techniques include the electronically controlled ignition of multiple small explosive charges in an area of rock that are delayed fractions of second, resulting in a total event that is generally less than a second. Impulse (instantaneous) noise from blasts could reach up to 140dBA at the blast location or over 90 dBA within 500 feet." This sounds oh so "don't worry about it, it will be OK just over in a split second." Living in this area off Modelaire Drive, I don't find this at all comforting. And the fact that this will be overseen by properly licensed personnel and all of the necessary authorizations doesn't help anything either.

The area in question, which for such inordinate construction is extremely close to many residents, has been my home for over 50 years and during

related medical problems and exhibit various reactions to loud noises.¹⁰
These children also live in the neighborhoods to be affected by the noise
so they would be impacted coming and going to school, at home and also
while at school. To impose the constant possibility of loud noises is cruel,
disrespectful and totally unacceptable. ¹¹

For a project like this involving blasting and heavy machinery noise so
close to homes, schools, and medical facilities impacting hundreds of
peoples' daily lives, the day to day agitation, wondering what is coming
next, fear and being on constant alert are not just addressed by some type
of mitigation but must be addressed by a route that is much less impactful
to peoples' safety, sanity, and health.

Sincerely,

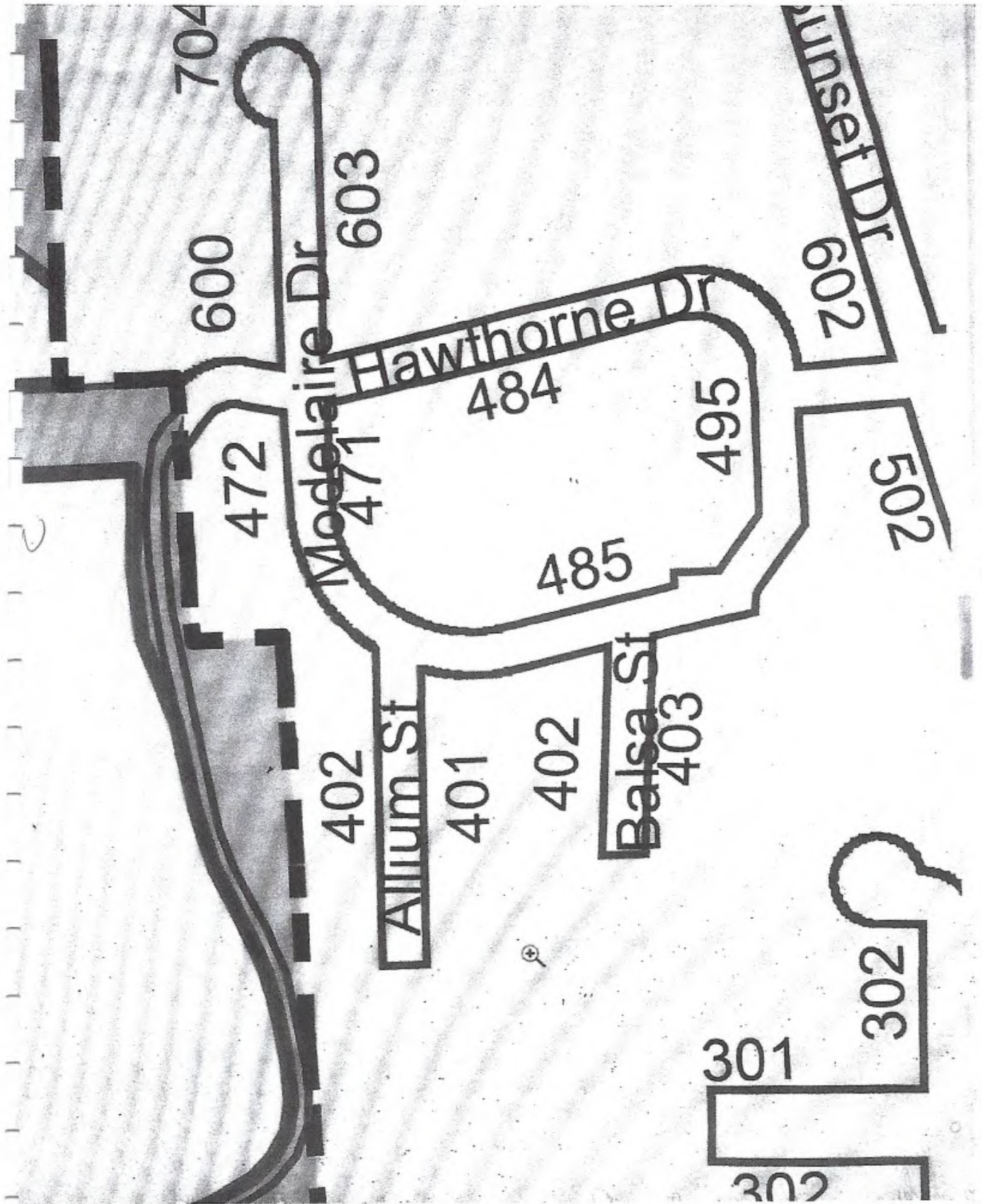


Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

gmammen@eoni.com

Exhibit 1

N



2

11

5

Exhibit 2

Boardman to Hemingway Transmission Line Project

Exhibit X

1 **3.3 Predicted Noise Levels**

2 OAR 345-021-0010(1)(x)(A): Predicted noise levels resulting from construction and operation
3 of the proposed facility.

4 **3.3.1 Construction Noise**

5 **3.3.1.1 Predicted Construction Noise Levels**

6 Project construction will occur sequentially, moving along the length of the Project route, or in
7 other areas such as near access roads, structure sites, conductor pulling sites, and staging and
8 maintenance areas. Overhead transmission line construction is typically completed in the
9 following stages, but various construction activities may overlap, with multiple construction
10 crews operating simultaneously:

- 11 • Site access and preparation
- 12 • Installation of structure foundations
- 13 • Erecting of support structures
- 14 • Stringing of conductors, shield wire, and fiber-optic ground wire

15 The following subsections discuss certain construction activities that will periodically generate
16 audible noise, including blasting and rock breaking, implosive devices used during conductor
17 stringing, helicopter operations, and vehicle traffic.

18 **Blasting and Rock Breaking**

19 Blasting is a short-duration event as compared to rock removal methods, such as using track rig
20 drills, rock breakers, jackhammers, rotary percussion drills, core barrels, or rotary rock drills.
21 Modern blasting techniques include the electronically controlled ignition of multiple small-
22 explosive charges in an area of rock that are delayed fractions of second, resulting in a total
23 event duration that is generally less than a second. Impulse (instantaneous) noise from blasts
24 could reach up to 140 dBA at the blast location or over 90 dBA within 500 feet.

25 Lattice tower foundations for the Project typically will be installed using drilled shafts or piers;
26 however, if hard rock is encountered within the planned drilling depth, blasting may be required
27 to loosen or fracture the rock to reach the required depth to install the structure foundations.
28 Final blasting locations will not be identified until an investigative geotechnical survey of the
29 analysis area is conducted during the detailed design.

30 The contracted blasting specialist will prepare a blasting plan that demonstrate compliance with
31 applicable state and local blasting regulations, including the use of properly licensed personnel
32 and the acquisition of necessary authorizations. The Framework Blasting Plan is set forth in
33 Exhibit G, Attachment G-5.

34 **Implosive Devices**

35 An implosive conductor splice consists of a split-second detonation with sound and flash.
36 Implosive splicing activities are anticipated to be limited to daytime hours. A blasting plan will be
37 developed by an individual certified and licensed to perform the work. The plan will
38 communicate all safety and technical requirements including, but not limited to, delineation of
39 the controlled access zone and distance away from residences.

Exhibit 3

Public Services

OAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

OAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

OAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (OAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (OAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

OAR 345-024-0010 and 345-024-0015

- This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety.
- Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

OAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



8/5/2019

Oregon Secretary of State Administrative Rules

Exhibit 4a

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Chapter 340

Division 35

NOISE CONTROL REGULATIONS

340-035-0035

Noise Control Regulations for Industry and Commerce

(1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 7, except as otherwise provided in these rules. [Table not included. See ED. NOTE.]

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind energy facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies. [Table not included. See ED. NOTE.]

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b)-(f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind energy facility may conduct measurements to determine the actual ambient L10 and L50 background level.

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with wind speed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient background level" does not include noise generated or caused by the wind energy facility.

(III) The noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 8), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. The easement or covenant must authorize the wind energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

Exhibit 4b

8/5/2019

Oregon Secretary of State Administrative Rules

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

Exhibit 5a

Controlling the Adverse Effects of Blasting

This module addresses the control of offsite impacts that result from blasting, namely:

- vibrations,
- airblast, and
- flyrock.

Much of the information in the module is derived from the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The performance standards apply to all surface coal mines. Similar standards have been adopted on some State and local levels and applied to non-coal blasting operations such as quarrying and construction.

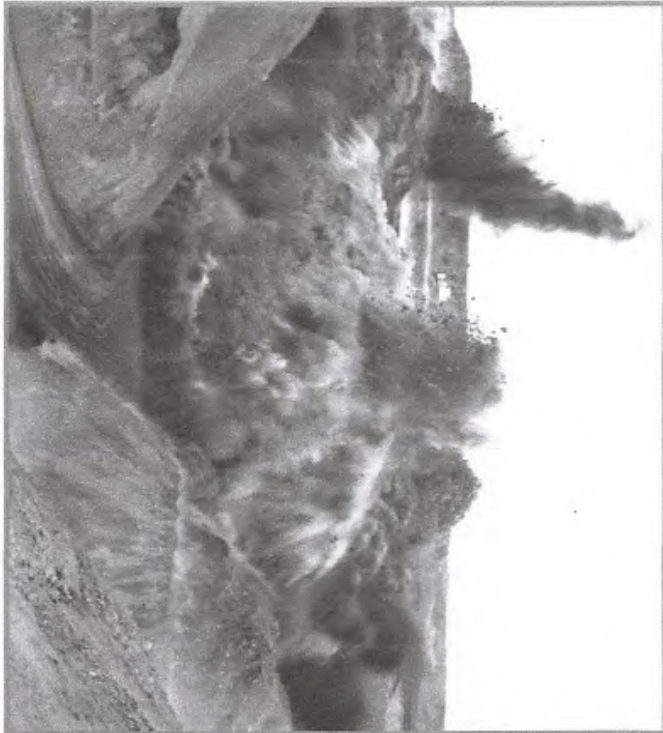
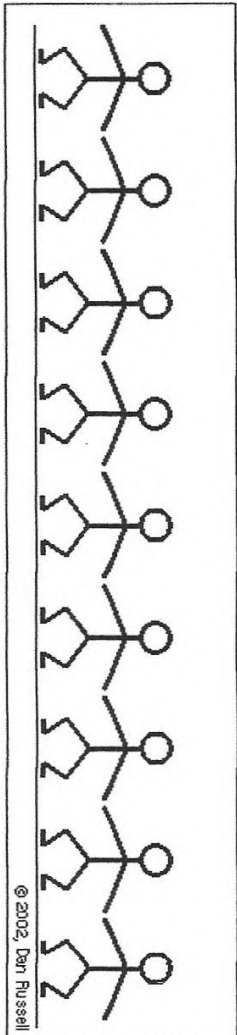


Exhibit 5b

Part I: Ground Vibrations, Airblast, and Flyrock

Explosive energy is used to break rock. However, the use of this energy is not 100-percent efficient. Some of the energy escapes into the atmosphere to generate *airblast or air vibrations*. Some of the energy also leaves the blast site through the surface soil and bedrock in the form of *ground vibrations*.



Both air and ground vibrations create waves that disturb the material in which they travel. When these waves encounter a structure, they cause it to shake. Ground vibrations enter the house through the basement and airblast enters the house through the walls and roof.

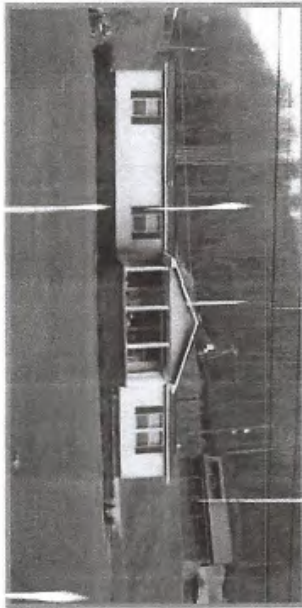
Airblast may be audible (noise) or in-audible (concussion). When outside a house the blast may be heard because of the noise, however noise has little impact on the structure. The concussion wave causes the structure to shake and rattles objects hanging on walls or sitting on shelves. This "interior noise" will alarm and startle people living in the house.

Flyrock is debris ejected from the blast site that is traveling through the air or along the ground. Flyrock the single most dangerous adverse effect that can cause property damage and personal injury or death.

Exhibit 5g

Blasting Impacts on Structures

Both above-ground and below-ground structures are susceptible to vibration impacts. Structures can include onsite mine offices and buildings, as well as offsite residences, schools, churches, power-transmission lines, and buried pipelines. Some of these structures may include historic or cultural features sensitive to even low levels of vibrations.



It is important to understand:

1. the causes of ground vibrations and airblast, and
2. what practices can be followed to control and minimize the adverse effects

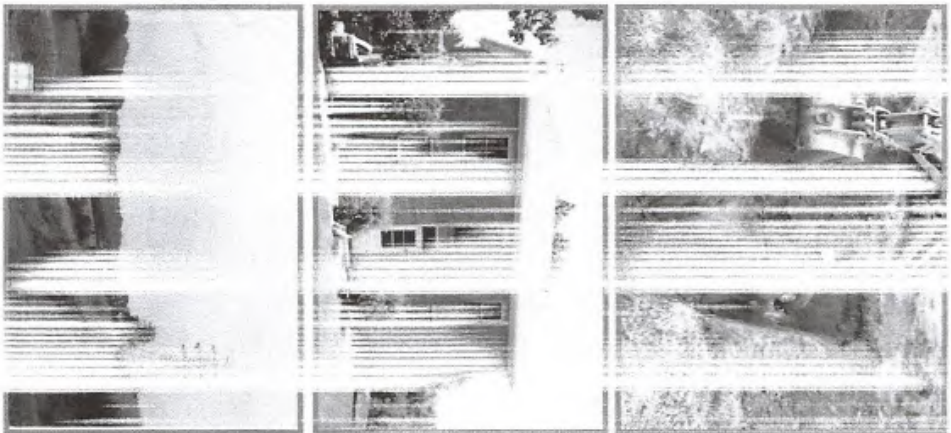
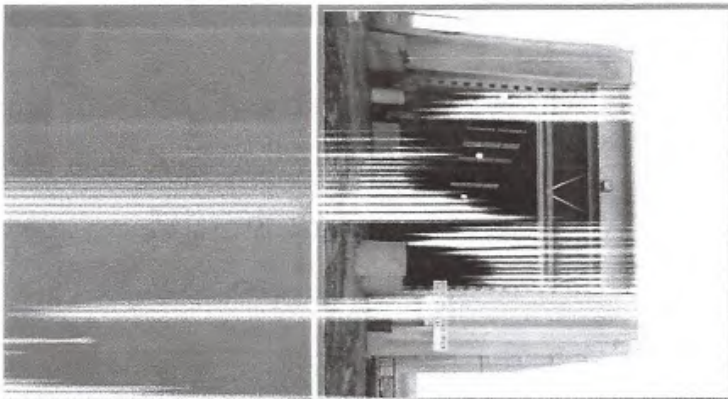
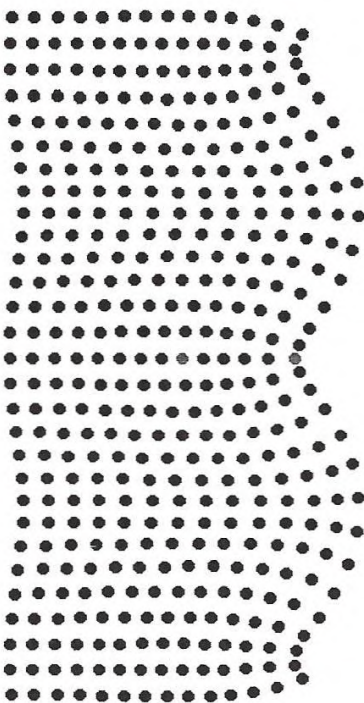


Exhibit 5d

Ground Vibrations

Ground vibrations propagate away from a blast site as Rayleigh (or surface) waves. These waves form a disturbance in the ground that displaces particles of soil or rock as they pass by. Particle motions are quite complicated. At the ground surface (free boundary), measured particle motions have the greatest displacements, and displacements decrease with depth (see the illustration below). At a depth of between 20 to 50 feet below ground surface, particle displacements are barely detectable. Structures that are well coupled to the ground tend to move with this motion; structures buried in the ground are less affected by surface motions.



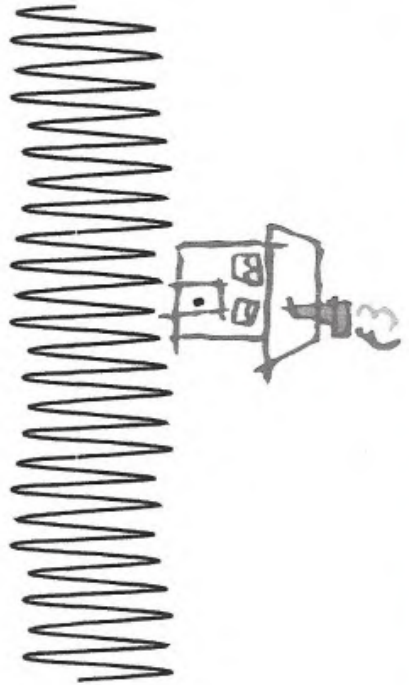
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Ground vibrations are measured in terms of **particle velocity** and are reported in inches per second (ips) or the speed at which a particle of soil or rock moves.

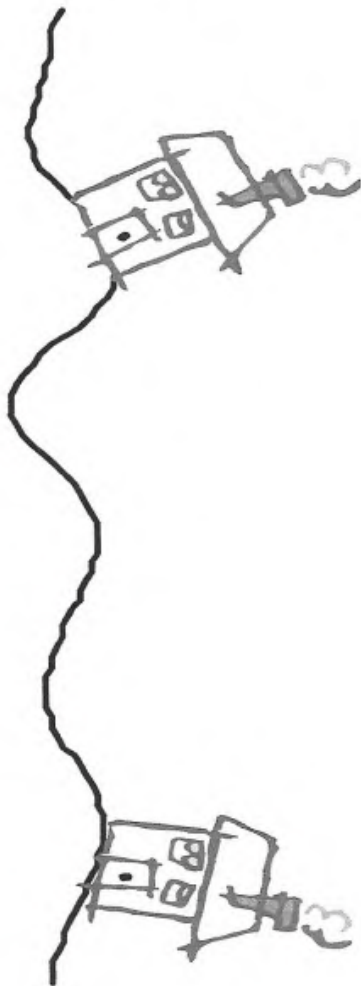
At typical blasting distances from residential structures, the ground only moves with displacements equal to the thickness of a piece of writing paper. In terms of displacement, this equates to hundredths of an inch; visually, such movement cannot be detected.

Ground Vibration Structure Response

Exhibit 5g



On the other hand, low-frequency wave cycles are long as compared with the dimensions of structures. Accordingly, low frequencies tend to efficiently couple energy into structures and to promote higher-amplitude, long-duration shaking.



High frequencies do not promote structure shaking. The length of a single high-frequency wave cycle is short as compared with the dimension of a structure. A structure does not significantly respond to high frequencies.

8/4/2019



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A noisy problem - Harvard Health

Exhibit 16
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A noisy problem

People often become more sensitive to noise as they age, which can affect their mental and physical health.

Published: March, 2019



Image: © Juanmonino/Getty Images

Are you more sensitive to noises than you used to be? Do certain sounds now feel too loud and jarring? Don't worry; it's actually quite normal.

Age-related hearing loss is common among older adults and affects about two-thirds of men in their 70s and 85% of men ages 80 and older. Although it's not clear why, this can also make people hypersensitive to sounds that they used to tolerate easily, which in turn can affect their well-being.

"Exposure to noises from crowds, traffic, and other everyday sounds can become harder to tolerate and increase stress levels, leading to anxiety and a reduction in overall quality of life," says Dr. Stephanie Tompkins, an audiologist with Harvard-affiliated Massachusetts Eye and Ear. "As your sensitivity to noises increases, this can lead to greater isolation, too, as you may try to avoid potentially noisy places and situations."

Exhibit 7a

8/4/2019

Hospital Noise: How Noise Reduction Helps Patients Heal



UVM Medical Center Blog (<https://medcenterblog.uvmhealth.org>) » Blog (<https://medcenterblog.uvmhealth.org/blog/>) »
Quiet in the Hospital: How Noise...

Quiet in the Hospital: How Noise Reduction Helps Patients Heal

on June 7, 2018 (<https://medcenterblog.uvmhealth.org/innovations/hospital-noise-reduction/>) in Innovation (<https://medcenterblog.uvmhealth.org/category/innovations/>) by UVM Medical Center (<https://medcenterblog.uvmhealth.org/author/uvmmedcenter/>)

Noise. It is present in almost every aspect of our lives. From the traffic in the streets, to the fan that provides us white noise in the background to sleep, noise exists. Unfortunately, like stress, too much of it can have a negative impact on a person's health and rest. Some sounds we do like to hear, such as birds chirping, signaling spring in Vermont, but what about sounds in a hospital?

Many of us get admitted to hospitals when we are too sick to take care of ourselves at home. We expect exceptional care from physicians and nurses and, of course, to rest in order to help our bodies heal. We understand that some noises in a hospital are necessary for care; however, others simply aren't.

The Sounds of a Hospital

Many organizations, including the UVM Medical Center, have high tech equipment, which greatly assists in the delivery of care to our patients, but can also be noisy. Sometimes, healthcare providers are the source of the noise as we interact and communicate with our patients and other health team members.

Another factor is visits from families and friends during visiting hours. It is difficult when one's roommate is trying to rest in the opposite bed. Yet, we need to be cognizant of noise in patient care areas as sounds can be magnified and misinterpreted, increasing agitation and even confusion for some patients.

We become accustomed to the noise; our patients are not.

The Research on Noise, Quiet, and Healing

8/4/2019

Hospital Noise: How Noise Reduction Helps Patients Heal

Exhibit 76

Research has shown that noise plays a negative role in healing and that decreasing noise in patient care areas aids in healing processes and helps facilitate speedier recoveries for patients. Patients are able to heal, sleep better and recover more quickly when able to rest. A quieter environment can also help decrease burnout for hospital staff.

Studies show that patients are more likely to develop negative side effects from a noisy hospital, such as sleep disturbances, elevated blood pressure and heart rate, and increased use of pain medications.

Noise can also increase annoyance levels for staff. One study indicated noise, such as talking inside and outside patient rooms, is the most common source of noise as well as visitors' voices, TVs, and behaviors of other patients.

Research concluded that best practices to eliminate noise from talking included staff education about noise reduction, public indicators such as sound monitors, a quiet time protocol, and lower cost environmental fixes, such as fixing noisy doors and squeaky wheels. Lastly, by introducing scripting with routine monitoring, patients' perception of quietness increased and the perception of noise decreased.

How We Address Noise at the UVM Medical Center

We introduced the "Culture of Quiet" Organizational initiative. The Nursing Professional Governance Patient and Family Experience Global council continued this work. After convening a small task force of nurses and assessing current quiet strategies, we introduced the following tactics:

- Many hospital units have designated 'quiet hours' with automatically dimming of lights at quiet hour intervals.
- Signage is visible in most patient care areas to help keep patients, family, and visitors aware. Throughout the hospital, you will see signs with a relaxing pair of Adirondack chairs and the sun setting with details on when a unit has quiet hours.
- Many semi-private rooms have windows in doors, so doors can be closed allowing for patient rest.
- We offer headphones for TVs and earplugs to help minimize sounds.
- In-patient kits contain a sleeping mask and other comfort items that can be provided at time of admission. Each kit contains a card and explains, 'the best healing occurs in a quiet environment.'
- New education material is available for staff, patients and visitors-just ask to review the next time visiting.
- Some units offer white noise machines, others have this built in.
- Noisy equipment such as wheels and doors can be tagged and replaced.
- Our facility and distribution staff have changed their cleaning and supply delivery schedules to accommodate patient care.
- Healthcare teams within the hospital are focusing efforts to cluster patient care to minimize interruptions to provide restful moments.

How you can help us.

We ask patients and visitors to hold us accountable when sounds are too loud. We want our community to alert us when noise levels are high and we will do what we can to minimize sound. In turn, we ask that all members of the healthcare team, patients, family, and friends be aware to keep voices soft, cell phones on vibrate, and hold each other accountable for these are the times of the day when our patients take pause to rest and positively impact their healing.

8/4/2019

Dangerous Decibels: Hospital Noise More Than a Nuisance | RN.com

Exhibit 8a

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Dangerous Decibels: Hospital Noise More Than a Nuisance

By Diane Sparacino, Staff Writer

Imagine a world where hospitals have become so noisy that the annoyance has topped hospital complaints, even more than for the tasteless, Jell-O-laden hospital food (Deardorff, 2011). If you're a nurse, you know that we're already there – with noise levels reaching nearly that of a chainsaw (Garcia, 2012). In fact, for more than five decades, hospital noise has seen a steady rise (ScienceDaily, 2005).

But it wasn't always that way. At one time, hospitals were virtually noise-free like libraries – respected spaces, preserved as quiet zones. The culture was such that a loud visitor might be silenced by a nurse's purposeful glare or sharply delivered "Shhh!" As early as 1859, the importance of maintaining a quiet environment for patients was a topic for discussion. In Florence Nightingale's book, "Notes on Nursing," she described needless noise as "the most cruel absence of care" (Deardorff, 2011).

Fast forward to 1995, when the World Health Organization (WHO) outlined its hospital noise guidelines, suggesting that patient room sound levels not exceed 35 decibels (dB). Yet since 1960, the average daytime hospital noise levels around the world have steadily risen to more than double the



Exhibit 8b

8/4/2019

Dangerous Decibels: Hospital Noise More Than a Nuisance | RN.com

acceptable level (from 57 to 72 dB), with nighttime levels increasing from 42 to 60 dB. WHO found that the issue was not only pervasive, but high noise levels remained fairly consistent across the board, despite the type of hospital (ScienceDaily, 2005).

Researchers at Johns Hopkins University began to look into the noise problem in 2003. They maintained that excessive noise not only hindered the ability for patients to rest, but raised the risk for medical errors. Other studies blamed hospital noise for a possible increase in healing time and a contributing factor in stress-related burnout among healthcare workers (ScienceDaily, 2005).

Technology is, of course, partly to blame. State-of-the-art machines, banks of useful alarms, respirators, generators, powerful ventilation systems and intercoms all add up to a lot of unwanted racket. When human voices are added to the mix, (i.e., staff members being forced to speak loudly over the steady din of medical equipment), it's anything but a restful environment. For the recovering patient in need of sleep, that can be a real issue (Deardorff, 2011).

Contributing to the problem, experts say, are the materials used in hospitals. Because they must be easily sanitized, surfaces cannot be porous where they could harbor disease-causing organisms. Rather than using noise-muffling materials like carpet, acoustic tiles and other soft surfaces, hospitals have traditionally been outfitted using smooth, hard surfaces – especially in patient rooms. Good for cleanliness – not so great for dampening sounds, which tend to bounce around the typical hospital (Deardorff, 2011).

Which brings us to the most recent research, published January 2012 in the *Archives of Internal Medicine*. In the report, Jordan Yoder, BSE, from the Pritzker School of Medicine, University of Chicago, and his colleagues associated elevated noise levels with "clinically significant sleep loss among hospitalized patients," perhaps causing a delay in their recovery time (Garcia, 2012). During the 155-day study period, researchers examined hospital sound levels. The numbers far exceeded (WHO) recommendations for average hospital-room noise levels, with the peak noise at an average 80.3 dB – nearly as loud as a chainsaw or electric sander (85 dB), and well over the recommended maximum of 40 dB. And while nights tended to be quieter, they were still noisier than recommended allowances, with "a mean maximum sound level of 69.7 dB" (Garcia, 2012).

Perhaps most interestingly, the researchers broke down the sources of noise into categories: "Staff conversation (65%), roommates (54%), alarms (42%), intercoms (39%), and pagers (38%) were the most common sources of noise disruptive reported by patients" (Garcia, 2012). "Despite the importance of sleep for recovery, hospital noise may put patients at risk for sleep loss and its associated negative effects," they wrote. In addition, researchers found that the intensive care and surgical wards had some work to do in dampening noise levels, with ICU peaking at 67 dB and 42 dB for surgical areas. Both far exceeded WHO's 30 dB patient room recommendation (Garcia, 2012).

Besides patient sleep deprivation, which itself can lead to a multitude of health problems including high blood sugar, high blood pressure and fatigue, studies have reported that elevated noise levels can increase heart and respiratory rates, blood pressure and cortisol levels. Recovery room noise causes patients to request more pain medication, and preterm infants "are at increased risk for hearing loss, abnormal brain and sensory development, and speech and language problems when exposed to prolonged and excessive noise" (Deardorff, 2011).

There is still more research to be done, of course, but Yoder and his colleagues had good news, as well; much of the hospital noise they identified is modifiable, suggesting that hospitals can take steps to successfully create a quieter environment for both patients and healthcare providers (Garcia, 2012).

Exhibit 3

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Around the country, "quiet campaigns" have been launched by hospitals in an attempt to dampen nighttime noise. Besides dimming lights and asking staff to keep their voices down at night, they are working to eliminate overhead paging systems, replace wall and/or floor coverings – even the clang of metal trashcans. Northwestern's Prentice Women's Hospital in Chicago was built with noise reduction in mind, replacing the idea of centralized nursing stations with the advent of smaller, multiple stations (Deardorff, 2011)

Billed as "one of the nation's largest hospital construction projects," Palomar Medical Center in North San Diego County is a state-of-the-art facility that has been designed "to encourage quietness," according to Tina Pope, Palomar Health Service Excellence Manager. Slated to open its doors this August, the hospital will feature a new nursing call system to route calls directly to staff and help eliminate the need for overhead paging, de-centralized nursing stations and clear sig lines, allowing staff to check on patients without having to leave unit doors open. With measures already in place including "Quiet Hospital" badges on staff and posters at the entrance of every unit, a "Quiet at Night" campaign (9 p.m. – 6 a.m.), and a "Quiet Champions" program that encourages staff to report noise problems, Palomar is one of a growing number of hospitals working toward a new era of quiet.

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8/6/2019

<https://knops.co/magazine/noise-and-ptsd/>

Exhibit 9
a



Noises Are Truly Horrible For People Who Have PTSD

20 Mar '2018 [Sound](#)

Noise is a really big issue for PTSD survivors: people who have mental health problems because of their traumas. How are they connected?

Almost everybody has experienced a trauma. But some traumas are more scarring than others and can even result in long-lasting mental disorders like **PTSD**, which can have an extreme impact on someone's life. It's a disorder that can develop in the brain after a horrifying experience, like war or a car crash.

Symptoms

The symptoms of PTSD are, to say the least, not pleasant. They range from nightmares about the traumatic events, disturbing thoughts and feelings, anxiety, trying to avoid anything that has something to do with the traumatic event, and an increase in the fight-or-flight response.

Around ten percent of the population suffers from PTSD, according to data from **NCBI**, a part of the US National Library of Medicine. And, remarkably enough, that percentage is the same for people who suffer from tinnitus (the sound of a constant beep in your ears). The NCBI clearly sees a link between the two.

PTSD survivors also suffer from the Exaggerated Startle Syndrome, with anxiety and actions in an extreme and irrational way too loud noises and bangs. And then there are the sounds that remind them of the sounds during the traumatic events, which can trigger memories of the

Exhibit 9b

8/6/2010

trauma or flashbacks.



Fear

PTSD can also cause a general fear of sounds: phonophobia, or a fear of some specific sounds: misophonia. Survivors of the disorder also are generally much more sensitive to sounds and perceive them as much louder than other people would.

All of this makes the life of people with PTSD very hard. If you think you are suffering from this, consult your doctor. Really, please do it. For yourself, and for the ones you love.

Do you have PTSD and would you like to tell your experiences to us? We are always very open and interested to hear what you have to say. And again: if you haven't done it yet, visit your doctor, please. Thank you!

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8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

Exhibit 10a



Front Psychol. 2013; 4: 578.

PMCID: PMC3757288

Published online 2013 Aug 30. doi: [10.3389/fpsyg.2013.00578](https://doi.org/10.3389/fpsyg.2013.00578)

PMID: [24009598](https://pubmed.ncbi.nlm.nih.gov/24009598/)

Does noise affect learning? A short review on noise effects on cognitive performance in children

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This article was submitted to Developmental Psychology, a section of the journal Frontiers in Psychology.

Received 2013 May 14; Accepted 2013 Aug 12.

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Abstract

The present paper provides an overview of research concerning both acute and chronic effects of exposure to noise on children's cognitive performance. Experimental studies addressing the impact of acute exposure showed negative effects on speech perception and listening comprehension. These effects are more pronounced in children as compared to adults. Children with language or attention disorders and second-language learners are still more impaired than age-matched controls. Noise-induced disruption was also found for non-auditory tasks, i.e., serial recall of visually presented lists and reading. The impact of chronic exposure to noise was examined in quasi-experimental studies. Indoor noise and reverberation in classroom settings were found to be associated with poorer performance of the children in verbal tasks. Regarding chronic exposure to aircraft noise, studies consistently found that high exposure is associated with lower reading performance. Even though the reported effects are usually small in magnitude, and confounding variables were not always sufficiently controlled, policy makers responsible for noise abatement should be aware of the potential impact of environmental noise on children's development.

Keywords: noise, cognitive performance, cognitive development, children, speech perception, listening comprehension, irrelevant sound effect, classroom acoustics

8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

EXHIBIT 10/12

In everyday life, cognitive tasks are often performed in the presence of task-irrelevant environmental noise. Accordingly, numerous studies on noise effects on performance have been conducted since the middle of the 20th century (for reviews see Hellbrück and Liebl, 2007; Szalma and Hancock, 2011), showing that—depending on characteristics of sounds and tasks—noise of low to moderate intensity may in fact evoke substantial impairments in performance.

Most of these studies were conducted with adults. The present review, however, will focus on studies including children. Children are especially vulnerable to harmful effects of environmental noise, as cognitive functions are less automatized and thus more prone to disruption. We will report findings concerning effects of acute noise on performance in concurrent auditory and non-auditory tasks, as well as effects of chronic noise on children's cognitive development.

Effects of acute noise on children's performance in auditory tasks

Psychoacoustic studies have consistently shown that children's speech perception is more impaired than adults' by unfavorable listening conditions. The ability to recognize speech under conditions of noise or noise combined with reverberation improves until the teenage years (Johnson, 2000; Wightman and Kistler, 2005; Talarico et al., 2007; Neuman et al., 2010). With stationary noise makers, signal-to-noise ratios (SNRs) have to be 5–7 dB higher for young children when compared to adults in order to achieve comparable levels of identification of speech or nonspeech signals, with adult-like performance reached at about 6 years of age (Schneider et al., 1989; Fallon et al., 2000; Werner, 2007). However, with maskers that vary over time, i.e., with trial-by-trial variation of the maskers' spectral composition (Oh et al., 2001; Hall et al., 2005; Leibold and Neff, 2007) or with fluctuating maskers such as single-talker speech (Wightman and Kistler, 2005), adult-like performance is usually not reached before the age of 10 years. Furthermore, children are less able than adults to make use of spectro-temporal and spatial cues for separation of signal and noise (Wightman et al., 2003; Hall et al., 2005). These findings demonstrate that children are especially prone to *informational* masking, i.e., masking that goes beyond energetic masking predicted by filter models of the auditory periphery.

Studies identified a range of linguistic and cognitive factors to be responsible for children's difficulties with speech perception in noise: concerning the former, children are less able than adults to use stored phonological knowledge to reconstruct degraded speech input. This holds for the level of individual phonemes, as children's phoneme categories are less well specified than adults' (Hazan and Barrett, 2000), but also for the lexical level since children's phonological word representations are more holistic and less segmented into phoneme units. Therefore the probability of successfully matching incomplete speech input with stored long-term representations is reduced (Nittrouer, 1996; Metsala, 1997; Mayo et al., 2003). In addition, young children are less able than older children and adults to make use of contextual cues to reconstruct noise-masked words presented in sentential context (Elliott, 1979). Concerning attention, children's immature auditory selective attention skills contribute to their difficulties with speech-in-noise perception. Children's susceptibility to informational masking has been attributed to deficits in focusing attention on auditory channels centered on signal frequencies, while ignoring nonsignal channels (Wightman and Kistler, 2005). Behavioral and ERP measures from dichotic listening paradigms provide evidence that auditory selective attention improves throughout entire childhood (Doyle, 1973; Pearson and Lane, 1991; Coch et al., 2005; Wightman et al., 2010; Gomes et al., 2012).

Owing to the mediating role of linguistic competence and selective attention, children with language or attention disorders are still more impaired than normally developing children by noise in speech perception tasks (Geffner et al., 1996; Ziegler et al., 2005, 2009). A stronger noise effect is also evident for children tested in their second language when compared to native children (Crandell and Smaldino,

8/4/2018



Walk Donate Q

Exhibit 11a

Autism & Anxiety: Parents seek help for extreme reaction to loud noise

September 5, 2018

Our 12-year-old son has autism, mild intellectual disability and anxiety attacks so severe that we end up in the emergency room. Loud noises are the worst – for example the school fire alarm, thunderstorms, a balloon popping, fireworks. Any help would be greatly appreciated.



This week's "Got Questions?" answer is by Judy Reaven, a clinical psychologist and associate professor of psychiatry and pediatrics at the University of Colorado School of Medicine and Children's Hospital Colorado, in Denver. Dr. Reaven's conducted research on the effectiveness of cognitive-behavioral therapy for anxiety in adolescents with autism, with the support of an [Autism Speaks research grant](#).

Editor's note: The following information is not meant to diagnose or treat and should not take the place of personal consultation, as appropriate, with a qualified healthcare professional and/or behavioral therapist.

Thanks for the great question. It certainly sounds like your family is experiencing a very difficult situation. Anxiety symptoms and reactions are very common in individuals with autism spectrum disorder (ASD). They can interfere with functioning across home, community and school settings.

Although your son's reaction sounds more severe than most, many people with autism struggle with a range of fears, phobias and worries. These can range from a debilitating fear of, say, spiders or the dark to chronic anxiety about making mistakes or being late.

Fortunately, recent research suggests that anxiety in children and adults who have autism is quite treatable. Often, these individuals are helped by the same or similar strategies that work well in treating anxiety in the general population.

These approaches include cognitive behavior therapy, or CBT. Cognitive-behavioral approaches are well-established, evidenced-based treatments that have become the gold standard of psychosocial treatments for anxiety. [My own research](#) and that of my colleagues has demonstrated the helpfulness of modifying cognitive-behavioral approaches to address the special needs of those who have autism.

Where to begin?

You describe a number of fears that may be related to sensory sensitivities. I recommend that you begin by consulting an occupational therapist who can assess whether your son's extreme sensitivities to noises are part of a broader sensory processing disorder. If this is the case, and if your son's fears are exclusively triggered by sensory stimuli, then his symptoms may be best addressed by a sensory-focused intervention. Many occupational therapists who specialize in autism receive special training in this area.

It's common for children with ASD and anxiety to become extremely frightened in response to sensory stimuli. Perhaps – like many individuals with autism – your son also has difficulty telling you what's scaring him. Instead, he may show his fear with extreme avoidance of a situation.

8/4/2011

For example, he might refuse to go to school after a fire drill. He might become fearful of birthday parties after being frightened by a balloon that popped unexpectedly. Other signs of extreme distress can include yelling, crying, clinging and general agitation. Because your son may have difficulty communicating, it's important to observe his behavior for these signs of distress. This can help you determine what's triggering his fears.

Avoidance versus learning to cope

Many parents go to great pains to protect their children by avoiding agitating situations. This approach is sometimes appropriate and even necessary. However, it denies individuals the opportunity to learn how to manage anxiety-provoking situations on their own.

By helping your son learn to manage his fear, you can prepare him for an unpredictable world so that he can participate in it to the maximum extent possible.

Given the severity of your son's anxiety symptoms, I suggest that you seek professional support in addition to the strategies offered here. Families whose children have milder symptoms of anxiety can try these strategies on their own – seeking professional help if symptoms worsen.

Tackling one fear at a time

I suggest making a list of your child's major fears and worries. Try to rank order them from mild to severe. To encourage success, I'd start with a mild-to-moderate fear before taking on his extreme reaction to loud noises.

Key components of a cognitive behavioral approach include introducing coping strategies such as deep breathing and "helpful thoughts" that can help a person manage fearful reactions.

For example, you can teach your son to take deep slow breaths to help manage his body's physical anxiety reactions.

"Helpful thoughts" are statements that your son can say to himself when faced with a situation that makes him anxious. For example, you can coach to your son to say, "This is a loud noise. I don't like it, but I can handle it."

To help your son to learn these strategies, I suggest you model taking deep breaths while repeating a "helpful thought" out loud.

Graded exposure

The most important step is to help your son face his fears a little at a time. We call this "graded exposure." For example, explain to your son that the two of you are going to listen to a recording of thunder. The first time, you might play the recording at a soft volume, then gradually increase the volume over time as he demonstrates increased comfort with the sounds

Or you might try watching a video of a balloon pop – perhaps with the volume off the first time. Then he can watch a real balloon pop while standing some distance away. Over time, he can move closer and closer to the balloon.

After such exercises, you can present him with small rewards for being brave and "facing fears." Remember that even a small act of bravery – such as listening to a recording of thunder for 10 seconds – represents an important step toward handling fears. It deserves to be acknowledged.

Although graded exposure may seem counterintuitive, research indicates that this strategy is the single most effective strategy for getting over a particular fear.

I wish you and your son the very best. Please let us know how you're doing with an email to GotQuestions@autismspeaks.org.

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Pages

Additional Resources & Tools

EXPERT
OPINION

[Help for Child with Autism & Recurring Behavioral Crises: Part 2](#)

EXPERT
OPINION

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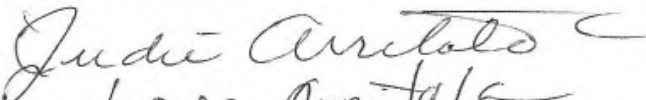


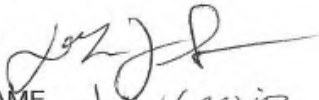
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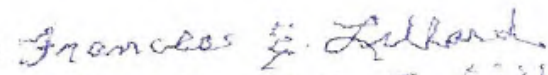
[Parents Seek Help: Child with Severe Autism Eats Only Sweets](#)


I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

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I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

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SIGNATURE

PRINTED NAME

Shawn K. Mangum

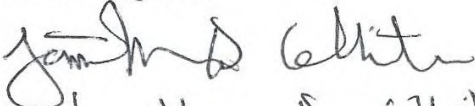
ADDRESS


2409 E. M. Ave.


EMAIL

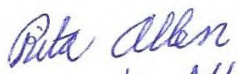
Hoyalaw95@me.com

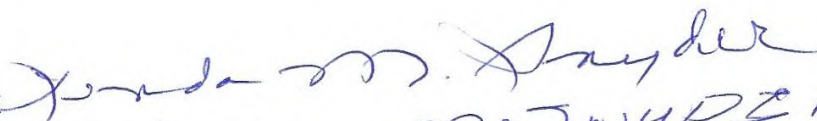
I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE 
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SIGNATURE 
PRINTED NAME Lonnie L. ALLEN 541-963-7720
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EMAIL N/A NONE:

SIGNATURE 
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SIGNATURE 
PRINTED NAME LINDA M. SNYDER
ADDRESS 491 1770 DEHAIRE
EMAIL

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SIGNATURE *Robin J. Ostermann*
PRINTED NAME Robin J. Ostermann
ADDRESS 495 Modelaine Dr La Grande, OR 97850
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SIGNATURE *Robert J. Ostermann*
PRINTED NAME Robert J. Ostermann
ADDRESS 495 Modelaine Dr. La Grande, OR 97850
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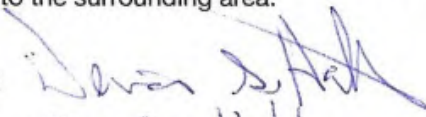
SIGNATURE *John Yeates*
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SIGNATURE *Ruth Schumacher Yeates*
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SIGNATURE



PRINTED NAME

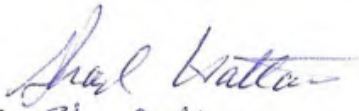
Denise Hattan

ADDRESS

507 Sunset Dr. La Grande, OR

EMAIL

SIGNATURE



PRINTED NAME

Shad Hattan

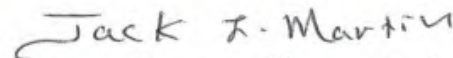
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SIGNATURE



PRINTED NAME

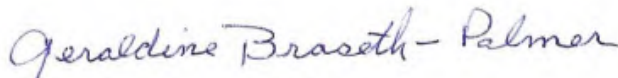
Jack L. Martin

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1412 Gildcrest Dr.

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SIGNATURE



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GERALDINE BRASETH-PALMER

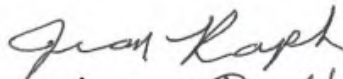
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PRINTED NAME

Jean RAPH

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jraph19@gmail.com

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SIGNATURE *Lois Barry*
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EMAIL ellyhudson@gmail.com

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SIGNATURE *Lynn Wheeler Duncan*
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SIGNATURE *Gary D. Pierson*
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SIGNATURE *Anne G. Cavinato*
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SIGNATURE *Merle E Comfort*
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EMAIL

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SIGNATURE *Robert J. Sherer*
PRINTED NAME Robert J. Sherer
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SIGNATURE *Heather M. Null*
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SIGNATURE *Bert R. Frewing*
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PRINTED NAME
ADDRESS
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SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

ESTERSON Sarah * ODOE

From: Fuji Kreider <fkreider@campblackdog.org>
Sent: Thursday, August 22, 2019 4:41 PM
To: B2H DPOComments * ODOE
Cc: 'Jim Kreider'; 'lois barry'; 'Irene Gilbert'; 'Charlie Gillis'
Subject: Stop B2H DPO Comment on Boardman to Hemingway
Attachments: STOP B2H Comment-EFSC-8-22-2019.pdf

August 22, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

The Stop B2H Coalition, Greater Hells Canyon Council, WildLands Defense, (collectively, “Commenters”) have reviewed the Application for Site Certificate (9/28/2018) and Draft Proposed Order (5/22/2019) for the Boardman to Hemingway Transmission Project (B2H), submitted by Idaho Power Company (IPC; or applicant; or developer) and offer the following comments, attached.

Respectfully Submitted,

Fuji Kreider
B2H Coalition

August 22, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

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Commenters are nonprofit public interest organizations, with a strong interest in responsible energy generation and distribution, protection of public and private lands, in particular those with rare or special qualities and significance, preservation of cultural resources, our lands and heritage, and alignment with carbon reduction goals to enable sustainable adaption to the affects of climate change.

Commenter Stop B2H Coalition (“STOP”) is a nonprofit organization with nearly 700 individual members and 8 organizational members representing thousands of additional individuals. STOP’s mission is to stop the approval and construction of an unneeded 305 mile, 500 kv transmission line through Eastern Oregon and Western Idaho, thereby: protecting environmental, historical and cultural resources; preventing degradation of timber and agricultural lands and the Oregon National Historic Trail; promoting energy conservation and acknowledging the past decade’s revolutionary developments in renewable energy, energy storage and distribution.

Commenter Greater Hells Canyon Council is a member of the Stop B2H Coalition. Greater Hells Canyon Council (GHCC) is a grassroots conservation organization founded in 1967 (as Hells Canyon Preservation Council) to stop Hells Canyon and the Snake River from being dammed. Not only did we stop the dam, our advocacy led to the creation of the Hells Canyon National Recreation Area. Our work now focuses on public lands management in the

1. Introduction

The Oregon Energy Facility Siting Council is responsible for overseeing the development of large electric generating facilities, high voltage transmission lines, gas pipelines, radioactive waste disposal sites, and other projects. State-level oversight of energy facilities helps ensure that Oregon has an adequate energy supply while protecting Oregon's environment and public safety.

(Oregon.gov. About the Council, undated)

The Council's mission, to ensure an adequate energy supply while protecting Oregon's environment and public safety, should not be secondary to the process of reviewing procedures and siting standards.

Ensuring Oregon's energy supply is not an issue. Oregon is looking for markets for its growing renewable energy providers, while neighboring states have similar oversupplies. Even Idaho, slow to acknowledge the benefits of conservation and energy efficiency, now has more power available from renewable resources than its Integrated Resource Plan (IRP) filings have identified as "need" for the B2H.

The Application for Site Certificate (ASC) to construct a 500 kV transmission line across 300 miles of Oregon, spanning five eastern Oregon counties with a 200' clear cut, over 70% of which will impact private lands (100% in Umatilla Co.) Will approval of this project protect Oregon's environment? Quite the contrary. Valuable farm and forest land as well as natural habitats will be sacrificed. Species will be sacrificed and the materials and process of construction pose environmental and safety hazards. Scenic and recreation areas as well as community viewsheds will be negatively affected.

Rugged terrain, difficult for small public service agencies to access, will face dangers of fire, flooding and landslides. Rather than protecting public safety, approving this project will endanger not only open land but residents of bordering communities.

During its deliberations, it is essential that the Energy Facility Siting Council balance its oversight of high voltage transmission lines with the agency's mandate to guard Oregon's environment and public safety from unnecessary and potentially dangerous intrusions.

2. Need

The Boardman to Hemingway (B2H) Transmission Project does not meet the “least-cost plan nor the system reliability” standards of the Oregon Energy Facilities Siting Council.

Oregon Administrative Rule (OAR) 345-023-0005, “Need Standard For Nongenerating Facilities” states that before EFSC can issue a site certificate for a non-generating facility, the applicant for a site certificate must demonstrate the need for the facility.¹ The Rule further states that “The Applicant (Idaho Power) shall demonstrate need for electric transmission lines under the *least-cost plan rule*, *OAR 345-023-0020*, or the *system reliability rule for transmission lines*, and *OAR 345-023-0030*. We will explain that Idaho Power has failed to meet the Need Standard for the B2H transmission line under either Rule, and that **EFSC cannot find that the this Applicant has met the Need Standard, based upon this Application before the Council.**

1. The Applicant, Idaho Power, has not met the standards under EFSC’s Least Cost Plan Rule

The least-cost plan rule, [OAR 345-023-0020](#), states: (1) The Council shall find that the applicant has demonstrated need for the facility if the *capacity* [emphasis added] of the proposed facility or a facility substantially similar to the proposed facility, as defined by OAR 345-001-0010, is identified for acquisition in the short-term plan of action of “an energy resource plan or combination of plans” adopted, approved or acknowledged by a municipal utility, people’s utility district, electrical cooperative, other governmental body that makes or implements energy policy, or electric transmission system operator that has a governance that is independent of owners and users of the system...”, if the Council finds that the energy resource plan or combination of plans meets specific criteria outlined in the rule.² If, however, the plan or plans have been acknowledged by the OPUC, then the plan or plans are deemed to satisfy the specific criteria outlined in the Least Cost Plan Rule and the Council can rely on the OPUC acknowledgement to find that the energy resource plan satisfies the specific criteria outline in the Least Cost Plan Rule.³

Idaho Power seeks to meet the requirements in the Least Cost Plan Rule based solely upon a single plan: Idaho Power’s 2017 IRP. There is no dispute that OPUC acknowledged Idaho

¹ “To issue a site certificate for a facility described in sections (1) through (3), the Council must find that the applicant has demonstrated the need for the facility.”

² The criteria are specified in OAR 345-023-0020 (1) (a) through (L).

³ OAR 345-023-0020 (2) “The Council shall find that a least-cost plan meets the criteria of an energy resource plan described in section (1) if the Public Utility Commission of Oregon has acknowledged the least cost plan.

Power's 2017 IRP⁴ and that therefore, Idaho Power's IRP meets that criteria for an energy resource plan under the Least Cost Planning Rule. The facts are, however, that a single energy resource plan that acknowledged a much smaller transmission line does not meet the need standard under the Least Cost Planning Rule.

It is the Council's responsibility in this proceeding to determine whether the applicant has demonstrated the need for the capacity of the facility under the Rule. Idaho Power's acknowledged IRP alone does not meet requirements under the rule, as Idaho Power's IRP only evaluated a transmission line with a fraction (approximately 20%) of the capacity of the B2H transmission line that is the subject of the application for a site certificate.

Idaho Power has requested and received acknowledgement from the OPUC for their 2017 IRP, including B2H Action Items. This acknowledgement is for Idaho Power's share of B2H, a share that represents only approximately 20% of the total capacity of the B2H project at a cost of less than \$300 million, whereas the Applicant, Idaho Power, is requesting that EFSC issue a site certificate for a transmission line with 2,050 MW of capacity at a cost of approximately \$ 1 billion. The sections below from Idaho Power's 2017 IRP distinctly show that only a small amount of the capacity of the B2H facility was acknowledged by the OPUC.

Per the terms of the Joint Permit Funding Agreement (see Appendix D-3 of Idaho Power's 2017 IRP), each co-participant (funder) is assigned a discrete share of the bi-directional capacity of the project on a seasonal basis, as shown in Table 6.2 below.⁵ Idaho Power has the smallest share of the project capacity among the three participants in B2H.

Table 6.2 B2H capacity and permitting cost allocation

	Idaho Power	BPA	PacifiCorp
Capacity (MW) west to east	350 200 winter/500 summer	400 550 winter/250 summer	300
Capacity (MW) east to west	85	97	818
Permitting cost allocation	21%	24%	55%

Source: IPC 2017 IRP p. 62

As can be seen in Table 6.2, Idaho Power's capacity interest is seasonally shaped, as are the capacity shares of all three project participants. The detailed tables below derived directly from Table 6.2 above show that Idaho Power's capacity share is 13.9% of total B2H capacity in the

⁴ OPUC Order No. 18 176, May 23, 2018

⁵ IPC 2017 IRP p. 62

Winter season and 28.5% of project capacity in the Summer season. Idaho Powers weighted annual capacity allocation is 21.2% of total B2H capacity.

Winter Capacity Allocation				
	Idaho Power	PacifiCorp	BPA	Project Capacity
	(MW)	(MW)	(MW)	(MW)
West to East	200	300	550	1050
East to West	85	818	97	1000
Participant Shares (MW)	285	1118	647	2050
Participant Shares (%)	13.9%	54.5%	31.6%	100.0%

Summer Capacity Allocation				
	Idaho Power	PacifiCorp	BPA	Project Capacity
	(MW)	(MW)	(MW)	(MW)
West to East	500	300	250	1050
East to West	85	818	97	1000
Participant Shares (MW)	585	1118	347	2050
Participant Shares (%)	28.5%	54.5%	16.9%	100.0%

Annual Capacity Allocation				
	Idaho Power	PacifiCorp	BPA	Project Capacity
	(MW)	(MW)	(MW)	(MW)
West to East	350	300	400	1050
East to West	85	818	97	1000
Participant Shares (MW)	435	1118	497	2050
Participant Shares (%)	21.2%	54.5%	24.2%	100.0%

Idaho Powers Cost Inputs and Operating Assumptions from their Supply-Side Resource Data in their 2017 IRP Appendix C Page 73 again demonstrates that their 2017 IRP only evaluated a transmission line that provided 350 MW of eastbound capacity, which is less than 20% of the total capacity of the proposed project.

Cost Inputs and Operating Assumptions

(All costs in 2017 dollars)

Supply-Side Resources	Plant Capacity (MW)	Plant Capital (\$/kW) ^{1,3}	Transmission Capital \$/kW	Total Capital \$/kW	Total Investment \$/kW ²	Fixed O&M \$/kW ³	Variable O&M \$/kW	Other \$/MWh	Heat Rate Btu/kWh	Economic Life
Biomass Indirect—Anaerobic Digester (35 MW)	35	6,522	144	\$6,666	\$7,133	3	16	0	14,500	30
Boardman to Hemingway (250 MW)	350	0	734	\$734	\$734	0	0	0	0	55
Canal Drop Hydro (1 MW)	1	3,753	70	\$3,823	\$4,550	2	0	0	0	75
CCCT (1x1) F Class (300 MW)	300	1,246	98	\$1,344	\$1,574	1	0	0	6,714	30
CCCT (2x1) F Class (550 MW)	550	1,150	109	\$1,259	\$1,471	1	3	0	6,700	30
CHP (35 MW)	35	2,213	35	\$2,248	\$2,406	4	5	0	6,060	40
Demand Response—Additional (25 MW)	25	0	0	\$0	\$0	51	0	0	0	20
Geothermal (30 MW)	35	4,675	144	\$4,819	\$5,342	18	5	0	0	25
Reciprocating Gas Engine (18.8 MW)	18	775	112	\$887	\$945	1	7	0	8,370	40
SCCT—Frame F Class (170 MW)	170	878	117	\$995	\$1,060	1	11	0	10,300	35
Small Modular Nuclear (50 MW)	50	6,126	663	\$6,789	\$10,279	8	2	0	11,493	40
Solar PV—Rooftop C&I (1 MW)	1	2,925	0	\$2,925	\$3,040	1	0	1	0	25
Solar PV—Rooftop Residential (0.005 MW)	0	2,400	0	\$2,400	\$2,495	2	0	1	0	25
Solar PV—Utility Scale 1-Axis Tracking (30 MW)	30	1,375	144	\$1,519	\$1,579	1	0	1	0	25
Storage—Ice Thermal Storage (10 MW)	10	2,000	0	\$2,000	\$2,039	3	0	0	0	20
Storage—Li Battery Residential (10 MW)	10	3,114	0	\$3,114	\$3,175	4	0	0	0	10
Storage—Pumped-Hydro (300 MW)	300	2,352	183	\$2,535	\$3,017	4	0	0	0	50
Storage—V Flow Battery (10 MW)	10	3,736	0	\$3,736	\$3,809	6	0	0	0	10
Storage—Zn Battery (10 MW)	10	2,010	0	\$2,010	\$2,049	3	0	0	0	10
Wind (100 MW)	100	1,475	117	\$1,592	\$1,700	3	0	16	0	25

¹ Plant costs include engineering development costs, generating and ancillary equipment purchase, and installation costs, as well as balance of plant construction.

² Total Investment includes capital costs and AFUDC.

³ Fixed O&M excludes property taxes and insurance (separately calculated within the leveled resource cost analysis)

The Least Cost Plan Rule requires a finding of fact by the Council that the capacity of the proposed resource is identified for acquisition in an energy resource plan or combination of plans. Idaho Power has supported their application with only a single plan that identifies the acquisition of only approximately 20% of the capacity of the proposed B2H line. Idaho Power has not identified a combination of other participants least-cost energy resource plans that would utilize the remaining 80% of the capacity of the project as required per [OAR 345-023-0020\(1\)](#).

At the April 10, 2018 public meeting at which OPUC acknowledgement of the 2017 was granted Commissioner Bloom clearly stated that he expected the see PacifiCorp’s IRP before the OPUC for acknowledgement of B2H. He stated that the action that day was an acknowledgement for Idaho Power and was NOT an acknowledgement for PacifiCorp, a 54% capacity participant of the project. A review of the [video of the final 2017 IRP hearing](#)⁶ shows Commissioner Bloom at 4:16:18 say,

“My concerns are that Idaho power is the 24% participant and the two big parties, BPA which we can't control, and PAC doesn't even have it in their IRP. So if we

⁶ https://oregonpuc.granicus.com/MediaPlayer.php?view_id=1&clip_id=293&meta_id=14009

acknowledge this IRP for Idaho power this is not an acknowledgement for PAC. They are going to have to do all their own work on this to convince us that it's still in the money.”

Furthermore, an examination of the audio and video record of the April 10, 2018 public meeting clearly shows that the OPUC expressly disclaimed that the Commission’s acknowledgement of Idaho Power’s IRP meets the Council’s requirements for determining the need for B2H under the Council’s Least Cost Planning Rule as explained below.

During the OPUC public meeting on April 10, 2018, at which the OPUC Commissioners entered their decision to acknowledge B2H in Idaho Power’s IRP, counsel for Idaho Power addressed the Commissioner directly and told the Commissioners that Idaho Power hoped that the OPUC acknowledgement of B2H in the 2017 IRP would meet the EFSC standard for demonstrating need for the capacity of the B2H project.

“Idaho Power intends to rely on the Commission’s acknowledgement of the action items regarding B2H to fulfill the need showing that needs to be made at EFSC. The Department of Energy’s plan is to issue their draft proposed order either late this Spring or perhaps as late as late summer but it’s coming up very soon and at that time our hope is that the draft proposed order will reflect the recommendation on the part of the DOE that the need showing is satisfied by this Commission’s Order.”⁷

In direct response to this desire expressed by Idaho Power, Commission Chair Lisa Hardie responded with the following:

“I think it is probably fair to say that we’ll be, as you know, making a decision into our standards and then it, it will be up to EFSC to say how to interpret that. I think people are, what people are arguing is how they view that. We certainly wouldn’t be determining that here.”⁸

Indeed, OPUC issued their formal Order acknowledging the B2H Action Items in Idaho Power’s 2017 IRP expressly disclaiming that the OPUC acknowledgement of the 2017 IRP met any standards of any other State agency.⁹ This is clearly expressed in the first paragraph of the OPUC Order which states:

⁷ 2:24:20-2:26

⁸ 3:10-3:12

⁹ Order No. 18 176, May 23, 2018

“This order memorializes our decision, made and effective at the April 10, 2018 Regular Public Meeting, concerning Idaho Power Company’s 2017 Integrated Resource Plan (IRP). We acknowledge all but two of the action items proposed in Idaho Power’s revised action plan. Although our acknowledgement includes Idaho Power’s Boardman to Hemingway (B2H) related action items, we note that our acknowledgement is limited to our interpretation of IRP standards specific to the Public Utility Commission, and does not interpret or apply the standard of any other state or federal agency.”

It is the Applicant’s responsibility to demonstrate that the 2,050 MW capacity of the proposed B2H transmission line is supported by an acknowledged plan or plans. Idaho Power’s acknowledged IRP supports the need for a much smaller and less costly transmission line than that proposed by the applicant (approximately 20% of the project) and therefore, a demonstration of need has not been made by the applicant under the Least Cost Planning Rule, and EFSC cannot issue a site certificate based upon the evidence contained in this Application.

2. The Applicant, Idaho Power, has not met the standards under EFSC’s System Reliability Rule

The system reliability rule for transmission lines [OAR 345-023-0030](#) (1) states, “The facility is needed to enable the transmission system of which it is to be a part to meet firm capacity demands for electricity or firm annual electricity sales that are reasonably expected to occur within five years of the facility's proposed in-service date based on weather conditions that have at least a 5 percent chance of occurrence in any year in the area to be served by the facility.”

The DPO at pdf p 532 it states, “The language of OAR 345-023-0030 (Council rules) references that a least-cost plan meets the criteria of an energy resource plan or combination of plans if the OPUC has acknowledged the least-cost plan.” The DPO at pdf p 533 further states, “To demonstrate need for the facility under section (1) of the system reliability rule, an applicant must show that the transmission line is needed to meet the firm capacity demands for electricity or firm annual electricity sales anticipated to occur within five years of the facility’s proposed in-service date based on weather conditions that have at least a five percent chance of occurrence in any year in the area to be served by the facility.

EFSC rules require that the applicant provide specific information in their application if they choose to support the need for B2H under the System Reliability Rule. These specific requirements are stated in OAR 345-021-0010 (1) (n) Exhibit N:

(F) If the applicant chooses to demonstrate need for a proposed electric transmission line under OAR 345-023-0030, the system reliability rule:

(i) Load-resource balance tables for the area to be served by the proposed facility. In the tables, the applicant shall include firm capacity demands and existing and committed firm resources for each of the years from the date of submission of the application to at least five years after the expected in-service date of the facility.

(ii) Within the tables described in subparagraph (i), a forecast of firm capacity demands for electricity and firm annual electricity sales for the area to be served by the proposed facility. The applicant shall separate firm capacity demands and firm annual electricity sales into loads of retail customers, system losses, reserve margins and each wholesale contract for firm sale. In the forecast, the applicant shall include a discussion of how the forecast incorporates reductions in firm capacity demand and firm annual electricity sales resulting from:

- (I) Existing federal, state or local building codes, and equipment standards and conservation programs required by law for the area to be served by the proposed facility;*
- (II) Conservation programs provided by the energy supplier, as defined in OAR 345-001-0010;*
- (III) Conservation that results from responses to price; and*
- (IV) Retail customer fuel choice;*

(iii) Within the tables described in subparagraph (i), a forecast of existing and committed firm resources used to meet the demands described in subparagraph (ii). The applicant shall include, as existing and committed firm resources, existing generation and transmission facilities, firm contract resources and committed new resources minus expected resource retirements or displacement. In the forecast, the applicant shall list each resource separately.

(iv) A discussion of the reasons each resource is being retired or displaced if the forecast described in subparagraph (iii) includes expected retirements or displacements.

(v) A discussion of the annual capacity factors assumed for any generating facilities listed in the forecast described in subparagraph (iii).

(vi) A discussion of the reliability criteria the applicant uses to demonstrate the proposed facility is needed, considering the load carrying capability of existing transmission system facilities supporting the area to be served by the proposed facility.

(vii) A discussion of reasons why the proposed facility is economically reasonable compared to the alternatives described below. In the discussion, the applicant shall include a table showing the amounts of firm capacity and firm annual electricity

available from the proposed facility and each alternative and the estimated direct cost, as defined in OAR 345-001-0010, of the proposed facility and each alternative. The applicant shall include documentation of assumptions and calculations supporting the table. The applicant shall evaluate alternatives to construction and operation of the proposed facility that include, but are not limited to:

- (I) Implementation of cost-effective conservation, peak load management and voluntary customer interruption as a substitute for the proposed facility.*
- (II) Construction and operation of electric generating facilities as a substitute for the proposed facility.*
- (III) Direct use of natural gas, solar or geothermal resources at retail loads as a substitute for use of electricity transmitted by the proposed facility.*
- (IV) Adding standard sized smaller or larger transmission line capacity.*

(viii) The earliest and latest expected in-service dates of the facility and a discussion of the circumstances of the energy supplier, as defined in OAR 345-001-0010, that determine these dates.

Although the applicant has submitted information as required above when seeking to establish need under the System Reliability Rule, the applicant has failed to meet the standards required because the information provided relates to a transmission line that has only approximately 20% of the capacity of the B2H line, and the information is provided for only a subset of the area to be served by the proposed transmission line. For example, under requirement (A) above, the applicant is required to submit load-resource balance tables for the area to be served by the proposed facility. The applicant has requested a site certificate for a transmission line with a nominal capacity of 2,050 MW between the Pacific Northwest and the eastern Idaho region. Stated differently, the area served by this transmission line as proposed are the service territories of Bonneville Power and PacifiCorp Western Balancing Authority Area in the Pacific Northwest, and the service territories of Idaho Power and PacifiCorp Eastern Balancing Authority Area in the Intermountain (eastern) region of WECC. Despite the clear requirements of [OAR 345-021-0010](#), Idaho Power has only supported the application with load-resource balance tables that solely identify the loads and resources of Idaho Power.

The monthly average energy load-resource balance values that are submitted with the application are only for Idaho Power's load and resource data. The first page demonstrates that Idaho Power is ONLY talking about their approximately 20% or 500 MW of capacity to meet their "monthly average energy load-resource balance values."

LOAD AND RESOURCE BALANCE DATA

Monthly Average Energy Load and Resource Balance

	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Load Forecast—Included EE	10	11	10	10	12	14	15	15	13	12	11	10
Load Forecast (70th% w/CC)	(1,094)	(1,606)	(1,555)	(1,591)	(1,603)	(2,217)	(2,415)	(2,207)	(1,034)	(1,495)	(1,650)	(1,063)
Adjustment for FF Potential Study Forecast	1	1	1	1	1	1	1	1	1	1	1	1
Net Load Forecast (70th% w/ EE)	(1,893)	(1,885)	(1,554)	(1,590)	(1,802)	(2,216)	(2,414)	(2,206)	(1,834)	(1,494)	(1,649)	(1,862)
Existing Resources												
Total Coal	058	058	026	751	754	058	058	058	058	058	059	058
Total Gas	527	286	280	281	279	511	507	508	277	281	284	527
Hydro (70th%)—HCC	582	647	591	729	870	591	536	367	413	442	347	453
Hydro (70th%)—Other	202	214	211	200	318	328	283	212	223	198	182	189
Total Hydro (70th%)	784	861	801	995	1,187	919	819	578	636	640	529	642
CSPP (PURPA)	230	303	328	411	418	414	397	362	334	291	271	247
PPAs												
Elkhorn Valley Wind	35	35	39	35	33	34	36	32	20	30	42	30
Rafu River Geothermal	10	10	9	9	7	8	8	7	9	9	10	10
Neal Hot Springs Geothermal	25	25	23	20	16	15	12	13	16	17	23	25
Clatskanie Exchange—Take	5	0	7	9	10	11	10	7	4	1	3	4
Clatskanie Exchange—Return	0	0	(20)	(20)	0	0	0	0	0	(20)	(20)	0
Total PPAs	75	75	58	53	65	68	66	59	58	37	57	77
Transmission Capacity available for Market Purchases	203	245	320	285	222	399	313	335	175	290	237	182
Existing Resource Subtotal	2,777	2,728	2,713	2,776	2,925	3,268	3,060	2,801	2,439	2,496	2,335	2,634
Monthly Surplus/Deficit	884	1,043	1,159	1,186	1,123	1,052	646	595	605	1,002	686	772
2017 IRP Resources												
2026 Boardman to Hemingway Transmission	0	0	0	0	0	0	0	0	0	0	0	0
2033 Combined Cycle Combustion Turbine	0	0	0	0	0	0	0	0	0	0	0	0
2030s Reciprocating Gas Engines	0	0	0	0	0	0	0	0	0	0	0	0
New Resource Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Surplus/Deficit	884	1,043	1,159	1,186	1,123	1,052	646	595	605	1,002	686	772

The monthly peak hour load-resource balance values are reported confirm again that Idaho Power is ONLY talking about their approximately 20% or 500 MW of capacity in the project to meet “monthly peak hour load-resource balance values” of the project.

Peak-Hour Load and Resource Balance

	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Load Forecast (96th% w/no DSM)	(2,449)	(2,387)	(2,078)	(2,032)	(2,702)	(3,444)	(3,605)	(3,266)	(2,801)	(2,105)	(2,315)	(2,620)
Load Forecast—including EE	9	9	11	12	16	13	18	18	20	15	8	9
Load Forecast (95 th % w/DSM and EE)	(2,441)	(2,358)	(2,067)	(2,020)	(2,686)	(3,431)	(3,586)	(3,248)	(2,781)	(2,091)	(2,307)	(2,611)
Adjustment for EE Potential Study Forecast	1	1	1	1	1	1	1	1	1	1	1	1
Existing Demand Response	0	0	0	0	0	390	390	337	0	0	0	0
Peak-Hour Forecast w/DSM and EE	(2,440)	(2,357)	(2,066)	(2,019)	(2,685)	(3,040)	(3,195)	(2,910)	(2,780)	(2,090)	(2,307)	(2,611)
Existing Resources												
Total Coal	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020
Total Gas	716	716	716	716	716	716	716	716	716	716	716	716
Hydro (90 th %)—HCC	950	900	950	850	1,050	1,000	1,000	800	750	750	650	900
Hydro (90 th %)—Other	190	195	172	203	291	301	285	208	215	197	185	189
Total Hydro (90th%)	1,140	1,095	1,122	1,053	1,341	1,301	1,285	1,008	965	947	835	1,089
CSPP (PURPA)	66	69	152	194	234	311	314	307	210	174	151	68
PPAs												
Elkhorn Valley Wind	5	5	5	5	5	5	5	5	5	5	5	5
Raft River Geothermal	10	10	9	9	7	8	8	7	9	9	10	10
Neal Hot Springs Geothermal	25	25	23	20	16	15	12	13	16	17	23	25
Clatskanie Exchange—Take	5	6	7	9	10	11	10	7	4	1	3	4
Clatskanie Exchange—Return	0	0	(20)	(20)	0	0	0	0	0	(20)	(20)	0
Total PPAs	45	46	23	23	38	38	35	32	34	12	21	43
Transmission Capacity Available for Market Purchases	203	245	320	285	222	399	313	335	175	290	237	102
Existing Resource Subtotal	3,190	3,190	3,354	3,291	3,571	3,785	3,684	3,420	3,120	3,160	2,979	3,119
Monthly Deficit	0	0	0	0	0	0	0	0	0	0	0	0
2017 IRP Resources												
2026 Boardman to Hemingway Transmission	0	0	0	0	0	0	0	0	0	0	0	0
2033 Combined Cycle Combustion Turbine	0	0	0	0	0	0	0	0	0	0	0	0
2030s Reciprocating Gas Engine	0	0	0	0	0	0	0	0	0	0	0	0
New Resource Subtotal	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Deficit	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Surplus/Deficit	750	833	1,288	1,272	886	745	489	510	340	1,070	672	508

Idaho Power does not meet the system reliability rule for the project.

Idaho Power's monthly average energy load-resource balance values and the monthly peak hour load-resource balance values have demonstrated the need for less than 25% of the service area of the B2H project. The remaining information provided by the applicant under the System Reliability Rule suffers from the same infirmities. The site certificate requested is for a transmission line with a nominal 2,050MW of capacity, yet the information provided by the applicant supporting the project need under the System Reliability rule is for a small sub-area of the total service area to be served by the project and for a sub-area served by less than 25% of the capacity of the project. **The applicant has clearly not met the EFSC requirement for demonstration of need under either the Least-Cost Planning Rule or the System Reliability Rule and must be denied.**

3. Conclusion

EFSC has erred in its Findings Of Fact¹⁰ concerning the applicants attempts to meet Council's Need For Facilities standard. For each and all of the reasons enumerated, Idaho Power has not

¹⁰ Draft Project Order p 522-529

met the least-cost plan rule, OAR 345-023-0020, or the system reliability rule for transmission lines, OAR 345-023-0030. Nor has Idaho Power filed a complete application, as required by OAR 345-021-0010(1)(n)B(i). The *full* capacity of the proposed facility *has not been* identified for acquisition in the short-term plan of action of an energy resource plan, nor **in a combination of adopted plans**. In light of that situation, the **site certificate should not be approved**.

3. Notification

The Oregon Department of Energy (ODOE) unlawfully amended its rules on noise notification; the notification process must start again.

EFSC improperly modified the noise notification area, from 1 mile to ½ mile, in its Project Order. This reduction of the noise notification area is irresponsible and improper. A transmission line of this size and magnitude will be an ugly and noisy neighbor with an impact much boarder than a mile. The intent of the 1 mile notification is to ensure that the public is notified about energy facilities that would impact their lives. This rule change was done improperly and thus the notification done is invalid. Notice needs to be redone to include all owners of noise sensitive property within one mile of the proposed site boundary.

In Exhibit X at pdf p 8 in 2.3 Second Amended Project Order Provisions it states, The Second Amended Project Order includes the following provisions regarding Exhibit X:

All paragraphs [of OAR 345-021-0010(1)(x)] apply. However, because of the linear nature of the proposed facility, the requirements of paragraph E are modified. Instead of one mile, to comply with paragraph E the applicant must develop a list of all owners of noise sensitive property, as defined in OAR 340-035-10 0015, within one-half mile of the proposed site boundary.

There is no valid basis that we can find, for EFSC to use a Project Order to modify and existing Notice requirement in an adopted Rule. EFSC has not cited any authority for its assertion in the Project Order that a reduction of the notice area is allowed. Instead the Order just states that a reduction is authorized. That is neither legal, nor appropriate.

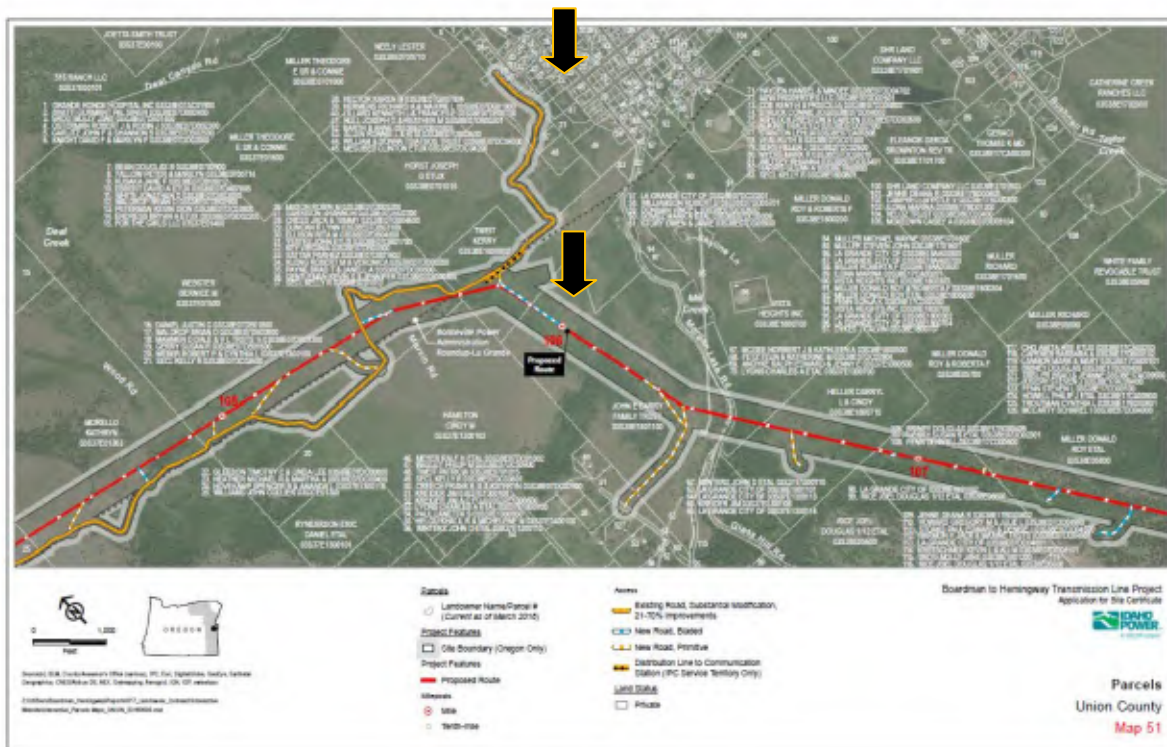
The 1-mile notice list is required by a Rule. To amend or modify an adopted Rule, EFSC (like any other agency) must follow the procedures set out in ORS 183.335 and OAR 345-001-0000(1). That was not done. Instead, the Project Order purports to amend or modify the Notice rule, as an administrative act by the agency. That type of amendment is not lawful.

For there to be lawful Notice in conformance with the rules, EFSC should insist that the applicant provide a list of all owners of noise sensitive property within 1 mile of all edges of the proposed site boundary, notify them properly – and then re-open the comment period on this project.

Case in point regarding non-compliant Noise Notification

Under the current incorrect rule of a .5 mile, notice was still not properly given to landowners at the terminus of the site boundary on Hawthorne Drive in La Grande.

In the map below, the arrow at the top of the map points to Hawthorne Drive where the site boundary ends. The second arrow points to where the access road boundary meets the transmission line boundary at an approximately 45 degree turn in the transmission corridor.



The Google earth map below shows 1/2 mile circles radiating out from the arrows above. The red circle on the right is drawn at the intersection of the site boundary at Hawthorne Dr and represents landowners within 1/2 mile of that site boundary. These landowners have not been notified. The red circle on left is drawn where the transmission corridor turns south and represents the 1/2 zone that was notified.



It is very clear that many of the landowners in La Grande that will be significantly impacted by the project have not been notified per the rule requirements. Of special concern in La Grande, is the neighborhood at the intersection of site boundary at Hawthorn Dr. This neighborhood and its infrastructure are ill-equipped to deal with the construction traffic that will invade their quite residential neighborhood and they have written many comments to express this (see Attachment 9.1 in our Section 9. Wildfire and Public Safety demonstrate.) There are other less invasive routes for Idaho Power to access their project in this area. Attacking this neighborhood as a transportation corridor to gain access to the site is inappropriate and plainly, stupid. We hope ODOE-EFCC will agree and protect this neighborhood and terminate site access from this neighborhood.

In conclusion, the Energy Facility Siting Council needs to **deny** Idaho Power's application for the B2H transmission project due to the fact that the application **violates several OARs, including 345-001-0010(55) (clear mapping), 345-021-0010(1)(x)(E) (notification of noise sensitive property owners), and ORS 183.335 and OAR 345-001-0000(1) (modification of adopted rules by an agency). Or, the Council should direct the applicant to reinitiate the notification process and begin again.**

4. Noise

Because Idaho Power cannot comply with the State DEQ Ambient Noise Rules/Standards, the project is “unpermissible.” (p. X-1.) The Council cannot grant a variance of these noise standards because the violations are too prevalent throughout the ASC, and adherence to these standards are “black and white” (LUBA case number 2011-014.)

Because Idaho Power fails to comply with noise notification requirements and the ODOE is unlawful in amending and applying its rules regarding this notification.

1. Notification

The notification requirement was addressed in the section above. However, more specifically, by arbitrarily reducing the size and locations of the site boundary, Idaho Power, by design:

- Limited the notifications to citizens/residents within and near the site boundary in violation of OAR 345-021-0010 noise notification requirement (see above, 1. Notification.)
- Reduced the number of potential NSRs that needed to be monitored for baseline in violation of OAR 340-035-0035 and the “Sound Measurement Procedures Manual 1” (NPCS-1.)
- Caused a mis-representation to numerous land owners, who have not been informed and whose quality of life will be severely compromised.
- Disregarded residents who may experience health problems (ORS 467.010) and other issues that sound will exasperate, the latter needing special care with mitigation.

The Oregon Department of Energy should issue another Project Order that requires an expansion of the noise monitoring and notification area to align with the project boundary and forces the developer to comply with OAR 345-021-0010(1)(x)(E): the application must include “*a list of names and addresses of all owners of noise sensitive property . . . within one mile of the proposed site boundary.*” (*emphasis added*).

For there to be lawful Notice in conformance with the rules, EFSC should insist that the applicant provide a list of all owners of noise sensitive property within 1 mile of all edges of the proposed site boundary – and then re-open the comment period on this project.

2. Two Types of Compliance

Section IV.Q.1. of the Draft Proposed Order (DPO) explains the Noise Control Regulations (beginning on p. 546.) In the DPO the Oregon Department of Energy (ODOE) correctly defines the proposed project as an unused or “new industrial and commercial noise source;” therefore, it must comply with two standards: the “ambient antidegradation standard” and the “maximum allowable noise standard.” (p.547)

On page 551 of the DPO, ODOE states that because the maximum L50 sound levels would be less than the “Table 8” maximum allowable sound level, and that the proposed facility would be in compliance with the maximum allowable sound level standard identified in OAR 340-035-100035(1)(b)(B)(i).

The developer also appears to comply with the maximum allowable noise standard, per Table NC-2 on page 547 of the DPO, since construction and maintenance noise is apparently exempt from these rules. However, it is apparent in the following discussion, the operations standards with regard to the **ambient antidegradation standard** (hereinafter referred to as “ambient noise standard, noise standard or ambient standard”) **cannot comply with state rules and standards and therefore a site certificate cannot be issued.**

If a site certificate were to be approved, a condition must include compliance with all local noise standards. State statute 467.100: *local regulation of noise sources; exemption from state enforcement* rules, that a city or county may adopt and enforce noise ordinances or noise standards otherwise permitted by law. These local standards must be at least as restrictive as state standards and they can go higher. A city or county may also adopt such standards for a class of activity exempted by the commission or noise emission sources not regulated by the commission, for example: construction noise (**see below, Attachment 4.1. regarding construction noise in an urban area.**)

The city of La Grande has a much stricter noise standard than the state one. It basically says that noise can not disturb people in their homes; this includes but is not limited to avoiding weekends and time frames for construction. The transmission line would be close enough to a significant number of La Grande homes and therefore inevitably it would exceed this standard.

Therefore, a **condition must be stated clearly, if a site certificate is granted, that all construction noise must conform to regulations of the local jurisdictions** (e.g.: cities and counties.)

3. Ambient Noise Standard

The remaining comments and discussion apply to the ambient noise standard within OAR 340-035-0035. **It is stated clearly in the Introduction to the Noise Section of the ASC, Exhibit X, p.X-1, that the project cannot comply with this state standard.** On p. X-1, Idaho Power “requests that the Council grant a variance on the basis that requiring the Project to strictly comply with the ODEQ Noise Rules is unreasonable and likely to make the Project unpermittable.”

Numerous pages of attempted justification for this variance and exemption still do not bring the project into compliance. There are errors in the baseline establishment and monitoring, as well as the modeling methods used to predict impacts. Furthermore, Idaho Power attempts to use other methods for arriving at compliance (Big Eddy Knight EIS, USDOE, etc.) However, the applicant cannot meet the State of Oregon’s ambient noise standard—Period! Therefore, the **project cannot move forward without the developer re-doing their methods for baseline monitoring and impact modeling** measures in a way that meets the state standards and follows the ODEQ Sound Measurement Procedures Manual (NPCS 1.) Once this study has been corrected and conducted, including appropriate notification, the **developer could reapply for the site certificate,** as stated above.

A. Establishing Baseline: Not Compliant with ODEQ rules and standards

The noise rules do not require noise monitoring to establish the baseline measure. The rules and the Manual (NPCS1) do state the methods that are to be used to establish baseline noise levels in the event the developer chooses to do actual noise measurements. The developer had the option: a) use the standard assumed 26 dBA for any noise sensitive property; or, b) monitor the noise sensitive properties per the ODEQ Manual, to establish the baseline. (OAR Chapter 340, Division 35.)

The only monitoring results which should have been used to establish a baseline noise level other than the standard 26dBA, should have been the 22 measuring points (MP) which performed during the monitoring period, assuming they were placed at a time and location as described in OAR 340-035-0035(3)(b). Locations where baseline modeling was not completed per the DEQ protocol need to use the assumed baseline sound measurement of 26dBA. Instead, the developer used the measurements from one residence (aka Noise Sensitive Property, NSP or Noise Sensitive Receptor, NSR) to establish what they assumed it would be at another, in some cases they averaged the measure and in other cases they used one NSR measure as representative for another NSR.

Monitoring of noise to establish baseline noise levels failed to comply with the requirements of OAR 340-035-0035(3)(b). This rule establishes the location and procedure for completing sound measurements as listed in the Sound Measurement Procedures Manual 1. The location is specifically described as the further point from the noise source between a point 25 feet toward the noise source from the noise sensitive building or the point on the property line nearest the noise source.

Idaho Power ignored the specific procedural requirements for establishing a baseline noise level in several ways:

1. The practice of using a baseline sound measurement at a single monitoring point to represent a group of nearby noise sensitive properties is unacceptable. The developer stated that due to the large number of NSR's identified within the analysis area, it was not feasible to conduct baseline monitoring at every individual noise sensitive property. (Page 5, Line 36.) This is why a standard baseline exists. They could have simply followed the ODEQ standard and used 26dBA as a baseline.
2. They placed measuring points "representative of the house and yard accommodations." Measuring points were placed "in similar surroundings experiencing the same weather and acoustic conditions of where a resident was expected to spend the majority of time when outdoors" or they were placed to accommodate the homeowner's request. See 3.2, Page 7 of Baseline Sound Survey. The procedure for noise monitoring to establish baseline very specifically defines where the monitoring equipment is to be placed in relation to the noise sensitive property. The applicant failed to follow the procedure as outlined by DEQ's procedure manual NPCS 1 which includes specific information and diagrams of the locations where noise monitoring should have occurred.
3. The developer used the measurements from one residence to establish what they thought it would be at another. For example, they averaged the results from MP 13 and MP 16 to guess at the measurement at MP 15. These MP's were located roughly 5 miles in different directions from MP 13

and MP 16. And in some instances, the equipment malfunctioned at MP 13. See description on page 8, lines 17 through 26, in the Baseline Sound Survey, for an example of the methods used to complete the monitoring which clearly would not hold up under peer review.

4. On page 7 of the “Supplemental Baseline Sound Survey for the Tub Mountain, Burnt River, and East of Bombing Range Road Alternate Corridors, the developer states, “MP’s were placed in similar surroundings experiencing the same weather and acoustic conditions to where a resident was expected to spend the majority of time when outdoors. However, some property owners voiced opinions and preferences on the exact locations of the MP on their properties.” No reliable results can be obtained when the individual(s) doing the monitoring do not adhere to the strict protocol used to complete the monitoring.
5. Worse is the attempt at placing 63 NSP into one group, with one measurement point (MP11), miles from the NSRs. This is completely non-compliant! Idaho Power attempts to claim that they had approval of this method from the ODOE staff (see memo, ODOE’s Max Wood with David Stanish of Idaho Power, in Attachment X-6) however, Mr. Wood clearly states that he cannot approve such a change in methods.

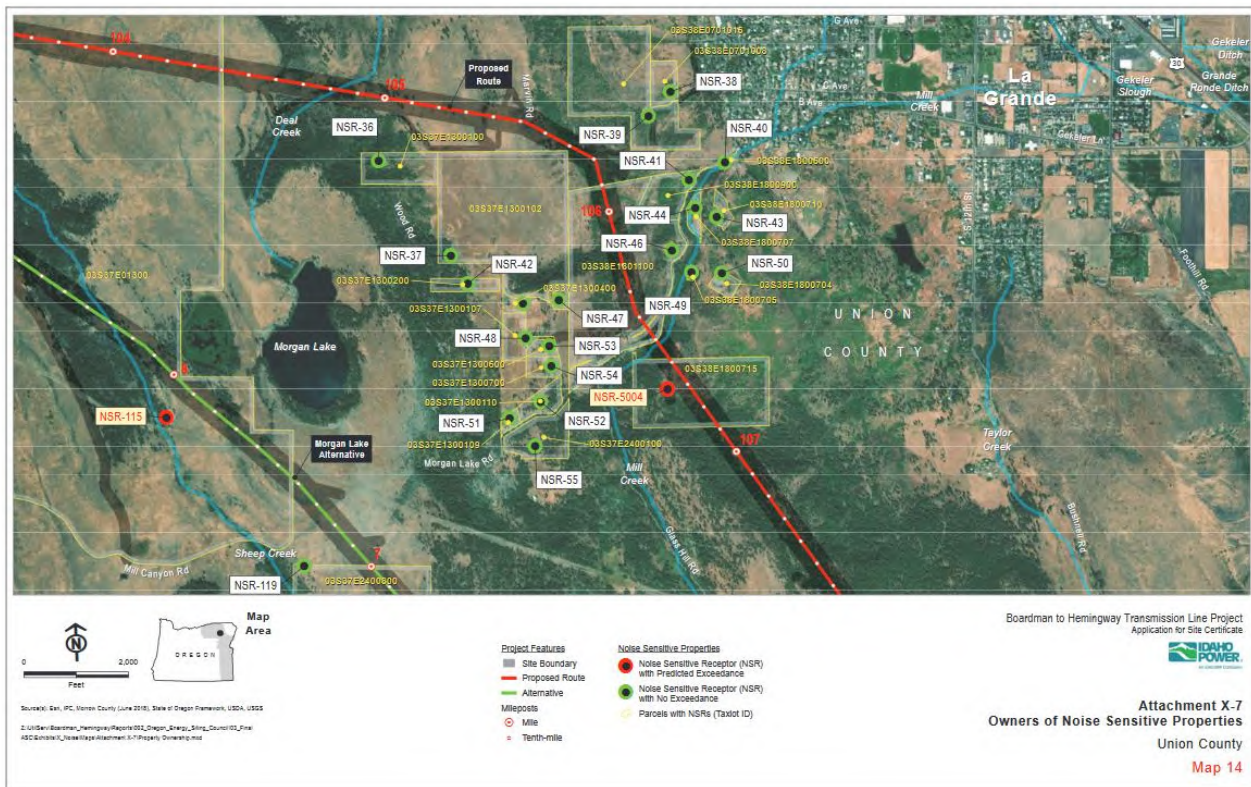
“I would like to be clear with a similar caveat as we provided on the roads guidance document, ODOE doesn’t necessarily “approve” the use of these MPs as baseline data for the NSRs, and should it be challenged during the contested case it would ultimately be up to EFSC to make a decision on compliance with the noise regulations.”

His comment is a response to a question from Idaho Power about changing the monitoring methods.

IP, in their self-serving justification claimed that there are “too many” NSRs. They went ahead anyway and attributed noise measurements at a single location to multiple other noise sensitive properties where measurement did not occur based upon a subjective evaluation that the terrain was similar or they were in the reviewers estimation close to the property that was actually measured. For example, the measurement for MP 11 was used to establish baseline noise level for a total of 63 noise sensitive properties according to Table 1 listing.” Monitoring Points representing Noise Sensitive Receptors”, Page 2 of the “Technical Memorandum, Ch2M dated April 29, 2016.” Monitoring Position 11 is 207 feet from the Union Pacific Railroad. This alone should preclude any determination that it is consistent with the other locations which do not have railroad traffic located this near to them. It invalidates all results from the Monitoring Position 11 being used as the baseline noise measurement applied to other noise sensitive receptors.

In Attachment X-4 and Attachment X-6, it becomes very clear that the entire Morgan Lake and Mill Creek areas in Union County are out-of-compliance and need to be either re-done or the standard ambient noise baseline used. Not only is the distance of MP 11 outside of the “25 feet from the source,” but the “representative conditions” are completely unrepresentative.

The image below shows some of the NSRs being assigned to MP11



This next image is the cone shape graphic for MP11 with red dots for NSRs. However, the lines and colors for the routes in this diagram (below) are outdated or in error, since the actual NEPA route is not the blue line. That route is much further west and not a part of this image at all. Regardless, the MP and the NSRs seem accurate according to the methodology described.

B2H Preliminary: Morgan Lake and Mill Creek Alternatives
 Overall view of MP11, MP13, and MP14



LEGEND	
	Sound Measurement Point
	Structure - identified previously
	Structure - newly identified
	Measurement Point Representative Area
	Route - ApASC Proposed
	Route - NFPA
	Route - alternative

6. The Draft Proposed Order on page 549, line 16 through 24 concurs that the monitoring positions for baseline were “representative baseline sound measurements.” However, the DPO continues as IF the baseline was done correctly. There is no mention of DEQ requirements for the location of the Monitoring Points (MP). In fact, changing the measurement point, or using measurements from one residence to assume sound level at others makes all the measurements that were not performed at the stated location for each residence invalid.
7. There are Noise impacts in Recreation and Protected Areas as well but IPC has not addressed these adequately. Morgan Lake Park, in Union County, was not monitored because it was not a “residence.” However, according to the rules, a Noise Sensitive property is: “...real property normally used for sleeping, or normally used as schools, churches, hospitals or public libraries...” (340-035-0015 (38). Morgan Lake is a quiet, pristine campground – with overnight camping -- where people sleep! Plus it is a scenic and important recreation area and should have been designated as a NSR also, per OAR 345-022-0100 and ODEQ standards 340-035-0000-0100. (see Attachment 4.2: [Non-compliance with Noise Standards in Recreation Area.](#))

In Baker County, no measurements were done at the Oregon Trail Interpretive Center viewpoint or walking trails endpoint near milepost 146. Perhaps not a “Noise Sensitive Property,” in the context of residential sleeping areas (similar to the Morgan Lake example above); however, certainly for tourists and visitors to OTIC and its hiking trails, noise will be disturbing. Map 23 in Attachment X-1 does not even show the Oregon Trail. Within OAR 345-022-0040 Protected Areas and ODEQ standards 340-035-0000-0100, this area should have been monitored and modeled as a Noise Sensitive Property and was not.

While the developer makes several references to other methodologies, they are irrelevant if they cannot first comply with the state standards of the DEQ, plain and simple. Idaho Power failed to follow the methodology for establishing a baseline noise level required by OAR 340-035-0035 or use the assumed baseline noise level which resulted in the establishment of numerous flawed baseline noise levels. As a result, none of the results of the noise modeling for baseline measures can be assumed to be accurate. All material needs to be corrected and resubmitted. No site certificate can be issued due to the lack of compliance and validity of the noise monitoring protocol.

B. Predicted Exceedances: Attachment X-4 Tabulated Summary of Acoustic Modeling Results by Receptor location

If Idaho Power and the ODOE follow the rules as stipulated by ODEQ, the predicted noise increase from this proposed transmission line will be shown to exceed state standards. This could affect the health and safety of numerous citizens, as well as wildlife, across five counties in Eastern Oregon. It will most certainly create a continuing nuisance and it will reduce property values.

1. If IPC used the required DEQ baseline of 26 dBA the number of exceedances would be far greater than what Idaho Power is spending hundreds of pages trying to justify. The truth is that they cannot meet the standard. In Exhibit X of the application, [Attachments X-4, X-5, X-6 and X-7](#), we have been able to piece together (but with limited exact references because reference numbers are not used consistently) that 45 residences/NSRs will exceed the noise standard for the proposed Mill Creek

route, and 19 will exceed the noise standard for the Morgan Lake Alternative. This is calculated by using the regulatory standard of 26 dBA for baseline, not the incorrect representative measure of 32dBA that Idaho Power is attempting to use without following the DEQ Manual NPCS1 methods for baseline monitoring.

2. Using the applicant's non-compliant methods for monitoring, Attachment X-4 of the application shows that Noise Sensitive Property Number 7, 119 and 132 all are modeled at +10 and therefore should be included as exceeding the L50 standard. The applicant only included those at +11 and above. So the number of exceedance is under-reported; the number should be (at least) 39 properties exceeding the standard.
3. If the 26 dBA baseline standard is applied, as it should have been for all NSRs, except the 22 locations where assumed, compliant, monitoring did occur, then the noise exceedances would be at least 84 residences. (This is conservatively estimated: 36 exceedances already identified by IPC and in the DPO + 45 exceedances in just one example from one route in Union Co = 81 + the 3 not counted in previous paragraph = 84 residences.) This is clearly unacceptable! **There is no valid process for ODOE and EFSC to authorize a variance to the ODEQ noise standards.**

The site certificate MUST be denied. The negative impacts to citizens, the economy, and the resources of this state far exceed any benefits it could provide.

C. Modeling: Total Noise Has Not Been Modeled

The Department and Council cannot issue a site certificate until all information is provided to assess noise impacts of the complete development or site boundary. The next step after establishing the baseline ambient measure was to "model" the noise impacts.

1. If the Oregon Department of Energy were to go through a properly noticed Rulemaking, under the Oregon Administrative Procedures Act (APA). (*See*, ORS 183.335 and OAR 345-001-0000(1)) and were to prevail and change the noise notification rule to ½ mile, the developer, the Oregon Department of Energy and the Energy Facility Siting Council will **still be out of compliance with state law ORS 467.020** for the following reason:

One half mile is 2640 feet. The noise monitoring provided by Idaho Power, Attachment X-4. Tabulated Summary of Acoustic Modeling Results by Receptor Location, predicts that there are residences beyond ½ mile from the development which exceed the noise standard. These noise sensitive properties are not being included in the study.

2. When modeling results showed a "potential for increasing sound levels by 10 dBA or less," the developer assumed compliance with the ambient degradation standard and did not complete testing to determine baseline sound levels. This did not provide for any margin of error as any level over 10 dBA would be an exceedance of the standard. The developer failed to apply a reasonable margin of error, which would have resulted in doing measurements for any residence

predicted to have an increased sound level of 8 dBA to allow for a 95% reliability. (Page 5 of Baseline Sound Survey, Line 24.)

3. The application does not include modeling for all noise sensitive properties within ½ mile (or mile) of the site boundary. This information is specifically requested on p. 21 of the Second Amended Project Order and is required by OAR 345-021-0010(l)(x). The modeling was only completed for the area adjacent to the transmission line right of way. There is no evaluation of noise impacts at many access roads and at areas such as lay down and multi-use areas, which are not directly connected to the right of way; however they are part of the site boundary and must be modeled, and if used for baseline, monitored as well. On pages 22 and 23 of the second amended project order the analysis area for noise and other surveys is identified as “all required assessments in the application apply to the entire site boundary, which by definition includes all corridors under consideration, including alternatives as well as related or supporting facilities and temporary laydown and staging areas.”

4. In addition to the lack of noise modeling of the entire boundary, the application does not demonstrate compliance with OAR 340-035-0015(38) because the noise monitoring and modeling was not completed on multiple noise sensitive properties impacted by the development. Noise Sensitive Property “means property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries.” The application documents, per the notification/mailling lists, that only residences were modeled and notified. Schools, hospitals, churches and libraries were NOT notified.

Additional NSPs that need to be modeled (and monitored) and were not are: campgrounds, for example (but not exclusively): Morgan Lake Park, Hilgard State Park. Also, depending on the resolution over the notification distance (1/2 or 1 mile), there are additional schools and a hospital, and potentially more.

5. In the modeling of ambient statistical noise impacts, the total noise applicable, has not been included in the modeling and therefore is out of compliance as well. According to OAR 340-035-0035, subsection (5), noise that applies to this development needs to include noise generated by: (b) warning devices not operating continuously for more than 5 minutes; (c) sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles; (e) sounds created by bells, chimes or carillons; (j) sounds generated by the operation of aircraft and subject to pre-emptive federal regulation and (k) sounds created by the operation of road vehicle auxiliary equipment complying with the noise rules for such equipment as specified in OAR 340-035-0035(l)(b)(B)(ii). For example, Idaho Power needs to model helicopter noise and noise from road worthy vehicles to figure out the noise impacts of the development. That was not done.

6. The Draft Proposed Order and the application do not include modeling of noise effects other than weather conditions and how they will increase noise levels. There is no modeling of “burn in period” which normally occurs during the first year, impact of dirt or oil from construction and maintenance of the lines, nicks and scrapes on the conductor surfaces, sharp edges on suspension hardware, nor the effects from fog, dew and bird feces. The Oregon Department of Energy’s

consultant, Golder Associates, stated in their letter of December 19, 2017, Project No. 17-88390, page 3 of their report, the following: "Some of the above irregularities such as nicks and scrapes, could result in longer term noise impacts (not infrequent) and may be within IPC's ability to fix and control. Such irregularities would not qualify as infrequent." The report also states that these would not be conditions outside the developer's control.

The analysis regarding the developer's request for a variance or exception to the noise standard and the department's justification for allowing one cannot be made until all the noise information has been provided as required by OAR 340-035-00151, the Project Order and OAR 340-035-0015. In addition, since the developer could control some of the noise exceedances, according to their own consultant, there should not be an exemption or variance based on the "infrequent irregularities."

4. Noncompliant Exemption/Variance Request

The Council cannot issue a cite certificate, exception or variance, to the DEQ noise rules because the methods used by Idaho Power are not in compliance with the DEQ regulations and the "Sound Measurements Procedures Manual 1." The definition of "Statistical Noise Level" in OAR 340-035-0015 (59) states: "Statistical Noise Level means the noise level which is equaled or exceeded a stated percentage of the time. An L10=65 dBA implies that in any hour of the day 65 dBA can be equaled or exceeded only 10% of the time for 6 minutes." Per the definition in the DEQ rules, a modeled noise level of +10 over the baseline standard equals an exceedance of the standard. Furthermore, there should be a margin of error applied, as mentioned above.

1. The applicant's arguments to support their request for an exemption and a variance to the Ambient Antidegradation Standard is reflected in the DPO beginning on p. 552.

"The Department agrees that OAR 340-035-0035 applies to new industrial or commercial noise sources, and in this instance, the noise source is the proposed transmission line. However, in the absence of a formal definition of "noise source" within the rule and given the extent of the linear facility, the Department interprets noise source as the source of noise and specific noise level at identified NSR locations. Based on this interpretation, the exception would only apply at the identified NSR locations or grouping of NSRs where the specific noise level from the noise source exceeds the ambient antidegradation noise standard, which is estimated to occur at specific NSR locations. An exception for the entirety of the proposed transmission line is not necessary as the noise source would not exceed the ambient antidegradation standard at other NSR locations along the route. Therefore, the Department recommends Council evaluate and apply the requested exception to the noise source at the 36 identified NSR locations, and not for the entire alignment of the proposed."

The ODOE, to their credit, stated that an exception could only be granted on the specific NSRs; however, we disagree that 36 exceedances should be granted! Imagine when the baseline monitoring is done correctly, and there are 83+ NSRs and a recreation area impacted? Will ODOE still recommend an exemption? As mentioned below, the time frame for modeling is inaccurate, it must be for a 24 hour period; and, the foul weather analysis is being applied with averages across the full 300 miles with 4 meteorological stations; and.

For the full route variance request, starting on p. 561 in the DPO, the developer and the ODOE essentially use the same rationale as the exemption request and recommend that the Council approve. We completely disagree with the analysis that a full variance could be applied, since the modeling (and the monitoring) methodology is in violation ODEQ rules. Idaho Power does not meet the test for an exemption or variance!

A review of the report provided by the applicant's consultant, Golder Associates, indicates the following:

- a. The use of the night time monitoring measurement (midnight to 5 a.m.) was determined to be appropriate for the establishment of the baseline noise level only; however, it is not appropriate for the modeling of impacts that the line will create. [We agree and according to the ODEQ rules that is a correct methodology/time frame, as the developer has the choice to use either the ODEQ baseline ambient noise level of 26 dBA—or—to monitor at the site location (per NPCS1) for each NSR affected. However, this was not done. All of this was described above.]
- b. The consultant indicates that conditions other than weather may increase the noise level. These conditions are under the control of the developer. Per section 2.6, page 3 of the evaluation by Golder Associates, "Based on the ODEQ's Noise Control Regulations, the Project would not qualify for an exceedance/variance for non-weather related irregularities as those irregularities could be long term in nature and potentially within IPC's control. Golder recommends that ODOE confirm that the exemption would not include non-weather related irregularities that are not caused by foul weather events or a variance for irregularities that are under the operator's control."

While we appreciate that ODOE is NOT recommending a variance for non-weather related exceedances, we disagree that 'weather related' exceedances are compliant with ODEQ standards because the 36 dBA noise limit (10 dBA over the 26) is "black and white;" it does not mean substantial compliance or no more than a de minimis violation (see LUBA case number 2011-014.)

We agree with the consultant that all of the non-weather related exceedances cannot be exempted.

- c. The exceedances of the L10 or L50 noise standard cannot be determined by identifying the times the standard would be exceeded during the period from midnight until 5:00 a.m. The definition of "Statistical Noise Level" in OAR 340-035-0015 (59) states: "Statistical Noise Level means the noise level which is equaled or exceeded a stated percentage of the time. An

L10=65 dBA implies that in any hour of the day 65 dBA can be equaled or exceeded only 10% of the time for 6 minutes.

While the night time monitoring may be an acceptable methodology determining baseline levels, it cannot be used exclusively for the modeling measurements to determine exceedances. This is not correct methodology; therefore does not meet compliance.

- d. The consultant's evaluation of the Request for Exemption contained in section 2.4, Page 2 of their review contains information not relevant in a ODEQ evaluation as follows:
- i. The consultant stated the following: *"Baseline noise levels are conservatively estimated and are based on a late night period of time when outdoor human activities are limited. Based on the typical attenuate of open windows or doors of -10 dBA, the noise levels impacting humans indoors would be close to that of the original outdoor baseline noise levels."*

The developer is required to make conservative estimates of noise impacts due to the potential for modeling to be incorrect. The use of the actual late night noise levels resulted in a significantly higher noise baseline than the 26dBA which is the standard absent measurement of the actual noise levels. The levels the developer is using are as much as 18 dBA above the 26 dBA standard. The use of actual noise levels as opposed to the standard mean that the evaluation is clearly not "conservative."

The noise standard is measured and applied at a clearly defined location. The suggestion that if the citizen were to move to another location (inside the home), the noise would be less is not legitimate. The baseline noise level would have been less inside the house and the modeling would have shown exceedances at this location also. ODEQ modeling methods do not allow for interpretations on levels based on location (e.g.: inside or outside the house.)

- ii. *"Impact noise levels were conservatively estimated based only on distance attenuation, therefore, this noise level is not expected to be consistently this elevated during every foul weather event."*

Noise modeling procedures dictate the methods used by developer to model noise impacts. Arguing the fact that the developer followed the procedures in this instance does not support discounting the results.

- iii. *"The infrequency of foul weather events given the meteorological data provided and the arid nature of the area of the Project."*

Corona effect is not only the result of rainy weather, but also a result of altitude with higher altitudes having more and louder corona effect, winds, moisture on the lines from fog, dew, and/or ice, etc. None of these additional impacts were considered by Idaho Power, the Oregon Department of Energy or the consultant in their determination.

In LUBA case number 2011-014, the final order regarding David Mingo vs. Morrow County addressed the issue of exceptions for unusual and infrequent events in their final opinion and order: on page 11 and 12 it states: "We restate the planning commission's findings below to clarify the planning commission key findings:

- A. Inverenergy's facility violates noise limits at the Eaton, Mingo, Wade and Williams Residence.
 - B. The evidence that the planning commission relied on to conclude that noise limits are violated at those four locations was provided by Inverenergy's expert, Michael Theriault Acoustics, Inc. (MTA) and Eaton's expert Dailey Standlee & Associates, Inc. (DSA) and that evidence appears at Planning Commission Record 88 and 273.
 - C. Inverenergy will comply with the applicable noise limit when the noise measurements at those four locations do not exceed 36 dBA.
 - D. Inverenergy's noncompliance with the noise standard at the four residences does not qualify for the exception for "unusual and/or infrequent" events at OAR 340-035—0035(6)(a)
 - E. Compliance with the 36 dBA noise limit means compliance ("black and white"); it does not mean substantial compliance or no more than a de minimis violation."
2. The developer averaged metrological data in their noise source estimates over the entire transmission line rather than using noise at a given residence and noise in a 24hr period. The standard applies to noise at a specifically identified location per NPC51. The developer only included weather from midnight till 5:00 A.M. to count the times the standard was exceeded. The standard is based upon the definition of "Any one Hour" as given in OAR 340-035-0015 (7). It states that this term means any period of 60 consecutive minutes during the 24 hour day.
 3. The Oregon Department of Energy has casually defined "infrequent" or "unusual," as events that are "not constant, not continuous, and not representative of normal operating conditions." This definition needs consultation and concurrence from the Oregon Department of Environmental Quality that they agree with this definition or intended the use of this definition in the application of their rules. The Oregon Department of Energy and Energy Facility Siting Council are charged with applying other agency rules as the other agency would, not creating new rules or definitions. In addition, the term has been defined in litigation. See LUBA case Number 2011-014, page 7 indicating that compliance is to be treated as "black and white." Either they meet the standard or they do not, and that same order states that locations with far less exposure than those in this development were determined to not meet the standard.
 4. The developer used the US Department of Energy Corona and Field Effects Program and the Datakustic Computer-Aided Noise Abatement Program standard 9613-2, Attenuation of Sound During Propagation Outdoors. These models are based upon a 24 hr. period. Applicant's use of only portions of the 24 hr. period invalidate the results.

5. Mitigation & Complaint Resolution

1. The Oregon Department of Energy Draft Proposed Order suggests that the modeling performed by the applicant should be relied upon to determine if an exceedance has occurred. Modeling is not an appropriate method of determining if an exceedance occurred or is occurring once a development is built.
2. Once the development is completed, ORS 469.507 requires testing or sampling to show ongoing compliance with the standard. The developer has the burden of proof, not the impacted citizen, to prove that the modeling completed by the applicant was not accurate. When the noise is too loud, the approach to mitigation according to the DPO, places the property owner at the mercy of the developer and the Oregon Department of Energy. If the property owner does not agree with the modeling provided by Idaho Power, they have to provide alternative noise data. See page 555, Line 10. The property owner would have to pay to obtain evidence to argue that the “modeling” was not accurate.

In the event of a noise exceedance, the Oregon Department of Energy should require the developer to purchase a noise easement or reduce the noise level through mitigation or other means to bring the noise level within the standard.

All noise complaints should be addressed through having the developer provide documentation in the form of noise monitoring of the actual impacts of the development on the identified property. Since most of the material in the application is based upon noise modeling, not actual monitoring, it will not provide credible documentation proving the developer is correct and the developer is supposed to pay for proving the true noise level. The rules state that the developer is supposed to pay for monitoring.

3. The developer claims that they cannot mitigate noise through line shielding or burial because it is “too expensive.” Therefore, the developer recommended that if their development can’t meet the noise requirements that they provide or pay for noise blocking drapes. Residents then would be able to live with the noise, but would not be able to see out their windows! Not sure what campers would do? The Oregon Department of Energy should not be allowing an exception or variance, and they should not be determining mitigation for any noise impacts from this development.

6. Summary

Idaho Power needs to be held accountable to the rules! Their problem is that they **cannot comply and ODOE should not be issuing any exemptions or a variance to this project. The applicant cannot comply with OAR 340-03500 and its sub-divisions, therefore this application for Site Certificate should be denied!**

This site certificate should be denied due to the many problems with the establishment of the baseline noise level methods used by Idaho Power. Once the noise measurements comply with NPC-1 procedures, the developer needs to:

- Reapply using acceptable monitoring, or reapply using the 26 dBA standard baseline noise level.
- Determine which properties are over the standard, including residences whose ambient degradation amount is +10 dBA and above.
- Do the modeling for all areas within ½ mile of the entire site boundary, including schools, churches, hospitals and libraries; and recreation areas.
- Include helicopters, road worthy equipment and other noises not exempt in the standard in the modeling.
- Not average any of the results.
- Be site specific, complete noise monitoring and modeling consistent with DEQ direction, not based upon average noise or average weather conditions over a 300 mile area.
- Not limit exceedances to the 5 hr. period between midnight and 5:00 a.m.

There is currently no basis for making any decisions regarding the exceedances, the amount and frequency of those exceedances, or justifying any exemptions or variances. Allowing a site certificate to be issued based upon a clearly faulty analysis of the impacts can and will result in legal action from the injured parties due to the malicious and reckless interference with landowners' rights to enjoy their property. The developer and the Oregon Department of Energy are clearly culpable as they are aware of the exceedances of the standard and have failed to disclose the inconsistencies with the statutes and rules. ODOE also unlawfully amended the rules.

Idaho Power fails to comply with the requirements of OAR 345-021-0010, OAR 345-022-0000, OAR 345-022-0100, OAR 345-022-0040, OAR 340-035-0035, OAR 340-035-0010, OAR 340-035-0100, ORS 467.010 and 467.020; therefore, the application and request for variance must be DENIED!

Attachments:

- 4.1 [Construction Noise in Urban Area](#) (use link)
- 4.2 [Non-compliance with Noise Standards in Recreation Area](#)

5. Scenic, Recreation and Protected Areas

Idaho Power has mischaracterized Scenic and Visual Resources and Recreational Areas based on a corporate self-serving subjective evaluation. As a result, the site certificate must be denied.

The ODOE accepted these unsupported evaluations without conducting a thorough or independent evaluation of scenic and recreational assets, thereby limiting the essential scope of identifying and analyzing scenic, recreation and protected resources.

The standard, Scenic Resources 345-022-0080 enables the developer and the Council to limit the scope of their analysis to only the “*local use plans, tribal land management plans and federal land management plans...*”

Scenic Resources 345-022-0080 “*(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to scenic resources and values identified as significant or important in local land use plans, tribal land management plans and federal land management plans for any lands located within the analysis area described in the project order.*”

The Recreation Standard 345-022-0100 states:

(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area as described in the project order. The Council shall consider the following factors in judging the importance of a recreational opportunity:

- (a) Any special designation or management of the location;*
- (b) The degree of demand;*
- (c) Outstanding or unusual qualities;*
- (d) Availability or rareness;*
- (e) Irreplaceability or irretrievability of the opportunity.*

It appears that the developer, by deciding what is *important* and what is *scenic*, is taking advantage of understaffed rural counties that have not been able to keep up with the bureaucratic

nuances of their “lists.” For example, the only areas in Union County so designated are the Blue Mountain Forest Wayside and the Minam River, (DPO p.12) because they are identified with the precise word “**scenic**” in the “Union County Comprehensive Plan.” Considering the endless exceptions ODOE regularly grant to developers, it would be appropriate for ODOE to provide similar leeway to the interpretation of local documents.

Idaho Power conjured up many pages of a methodology for Exhibits R and T, to support their charade of analysis. However, their conclusions are unsupported with relevant credible data and fail to consider Oregonians’ subjective “opinion/evaluation” of their scenic and recreational resource. Current tourism promotion of local scenic and recreational assets, as well as data from Chamber of Commerce records or campground host daily logs could give a more accurate measure of the resources. Instead, Idaho Power created an elaborate “analysis” to confuse the public or worse, to attempt to impress the Council with an obfuscating methodology.

Admittedly, Scenic and Recreation areas will have a degree of subjectivity in any analysis. There is not an objective or scientific basis for visual/scenic resource evaluation within the Oregon statutes or rules. The ODOE has allowed the developer to develop their own methods for evaluation. Within the Recreation standards a few criteria are mentioned to guide the analysis.

We have attached our Comments on:

1) Morgan Lake Park:

https://drive.google.com/open?id=1AiVdT5jXr9Dm7P6B5ZRi91x_jv2Iiy7x

2) Twin Lakes (omitted entirely from ODOE evaluation):

<https://drive.google.com/open?id=1Pd0YZs-27zxAtpjcJrDdk37OYKw8amRy>

3) a [summary of Union County’s Land Use Plan’s references to preserving the integrity of the valley’s rural scenic landscape](#).

Even evaluated using Idaho Power’s convoluted methodology, we have shown in these attachments that these areas -- of vital importance to Union County -- deserve protection from the overwhelmingly industrial impacts of ugly, looming transmission towers.

Baker County’s premier scenic and recreation site, visited by people from all over the world, is covered within Section 8. Historical & Cultural, and demonstrates another non-compliance with Oregon’s Scenic and Recreational Standards.

6. Geology, Soils, Carbon

This section begins by addressing the ODOE/EFSC Structural Standard (Geology & Seismic) OAR 345-022-0020, particularly in Union County, Oregon. It is followed by an overall and up-to-date look at effects of climate change in the context of OAR 345-022-0022 Soil Protection; however this standard is woefully inadequate.

1. Structural Standard.

The context for analyzing the proposed B2H line in and around the city of La Grande in Union County needs to be stated clearly: any of the potential routes could become a de facto utility corridor. That possibility is inherent in the BLM's statements contained their FEIS/ROD. Any appraisal of the proposed routes must, therefore, evaluate the cumulative impacts of multiple utilities asking to site their equipment in any of the possible right-of-way corridors. We do not see any evidence in the BLM analysis for any consideration of those cumulative impacts. This site certificate should be denied given the high probability of just such impacts.

Furthermore, the following review of the landslide, fault, and slope instability; of the earthquake potential; and of the implications of dynamite blasting; will highlight the fragility and instability of the Mill Creek route. This is a very poor choice for a transmission line and for a likely utility corridor.

The developer's review of the structural risks in Union County's Mill Creek alternative route does not comply with OAR 345-022-0020 Structural Standard which states:

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that:

(a) The applicant, through appropriate site-specific study, has adequately characterized the seismic hazard risk of the site; and

(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site, as identified in subsection (1)(a);

(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a

seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and

(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).

A. Landslides

The Mill Creek Route would traverse a minimum of ten significant landslide areas in Union County¹¹. The route would enter the Grande Ronde Valley from the West and then run South and out of the Valley through Ladd Canyon, crossing many of the historical landslides listed below. Some of these SLIOD's are within the city of La Grande, others are along Foothill Road, with their descriptions taken directly from Attachment H-4 of the DPO. Pointedly, there are 13 towers along this proposed route potentially impacted these SLIDO's. It must be noted that none of the other proposed routes in Union County contain this degree of landslide risk.

SLIDO 380, 33 - The IPC Proposed Route crosses the mapped limits of the slide between towers 108/2 and 109/2, and may affect stability at towers 108/3 through 109/2, along with associated work areas. In the Schlicker and Deacon (1971) map, the one slide area is about 650 feet southeast of tower 107/4 and 465 feet northeast of tower 107/5. A field reconnaissance of all these areas should be performed as part of the geotechnical exploration program.

SLIDO 225 is mapped as a landslide referenced at a scale of 1:100,000 (Ferns et al., 2010). It intersects the IPC Proposed Route between towers 110/2 and 112/2, and may affect stability at towers 110/1 through 112/1, along with associated work areas. A field reconnaissance of this area should be performed as part of the geotechnical exploration program. Schlicker and Deacon (1971) mapped slightly different extents of the same feature at a scale of 1:24,000.

SLIDO 115 is referenced at a scale of 1:100,000 (Ferns et al., 2010), and its mapped extents intersect the IPC Proposed Route between towers 112/5 and 113/1. The feature is mapped as an alluvial fan, not a landslide; and the material appears to be contained within a drainage spanned by the two towers. The feature is unlikely to affect the proposed towers or associated

¹¹ These landslides are denoted as SLIDO 380, 33, 225, 115, 114, 2280, 2282, 2279, 2281, and 56.

work areas. However, a field reconnaissance of this area should be performed as part of the geotechnical exploration program.

SLIDO 114 is mapped as a landslide and referenced at a scale of 1:100,000 (Ferns et al., 2010). It intersects the IPC Proposed Route between towers 113/3 and 114/3, and may affect stability at towers 113/4, 113/5, 114/2, along with associated work areas. A field reconnaissance of this area should be performed as part of the geotechnical exploration program.

The landslide risk for the Mill Creek Route is unacceptable given the other options open to the applicant.

Faults in Union County

Exhibit H Table H-2 (pdf p 16) is a summary of the significant faults considered capable of generating a large earthquake within 5 miles of the Proposed Route and the Alternative Route by county. These faults are potentially capable of producing a PGA greater than 0.05 g along the Proposed Route and Alternative Route. Of the youthful Quaternary faults identified by USGS (Table H-2), faults less than 15,000 years old are recent by geologic standards and likely pose the greatest potential for future earthquakes. These faults are assumed to be active. The Mill Creek route is placed right on an active fault in the West Grande Ronde Valley Fault Zone.

B. Hite Fault Zone

The discussion of the Hite Fault Zone is contradictory. The fault is listed as inactive in Table H-2, while the text in *Section 3.7.6* has this to say:

Of these active faults, the Hite Fault System, Agency Section, West Grande Ronde Valley Fault Zone, Unnamed East Baker Valley Faults, West Baker Valley Fault, and the Cottonwood Mountain fault crosses the Proposed Route and should be considered during final design.

In fact the status of the fault system is shrouded in uncertainty. The fault is a suture zone between the accreted terranes to the West and the Blue Mountain uplift. It may be capable of generating very large earthquakes¹². Again, no one knows. The power-line has to cross

¹² What follows below is taken from an included document, the hazard sheet distributed by the Washington Department of Natural Resources (DNR) which has this to say about this part of the Blue Mountains:

The Hite fault system is a zone of faults that parallels the northeast-trending flank of the Blue Mountains in Oregon and Washington. This fault system is thought to be the suture between the stable North American craton to the east and accreted terranes to the west.

While the Hite fault has not seen any recent activity, it must be acknowledged as a potential danger. The scenario

directly over the surface expression of that faulting, where the Blue Mountains first rise up from the Columbia River Basin. That must be accounted for in much greater detail by Idaho Power.

In addition, in Exhibit H: Geological Hazards and Soil Stability, Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated as “severe.” While in Exhibit H Part 2, the maps 19-22 clearly demonstrate that both routes run through areas of extreme erosion hazards.

C. Earthquake potential

The *DOGAMI Oregon HazVu: Statewide Geohazards Viewer* () clearly shows that the proposed Mill Creek Route is on an active fault. In even a moderate earthquake, this would be a zone of liquefaction and a zone of very strong earthquake shaking. A GIS overlay of the Mill Creek route onto a map of these known geohazards should be performed. It might reveal that the route overrides and follows the western most fault line.

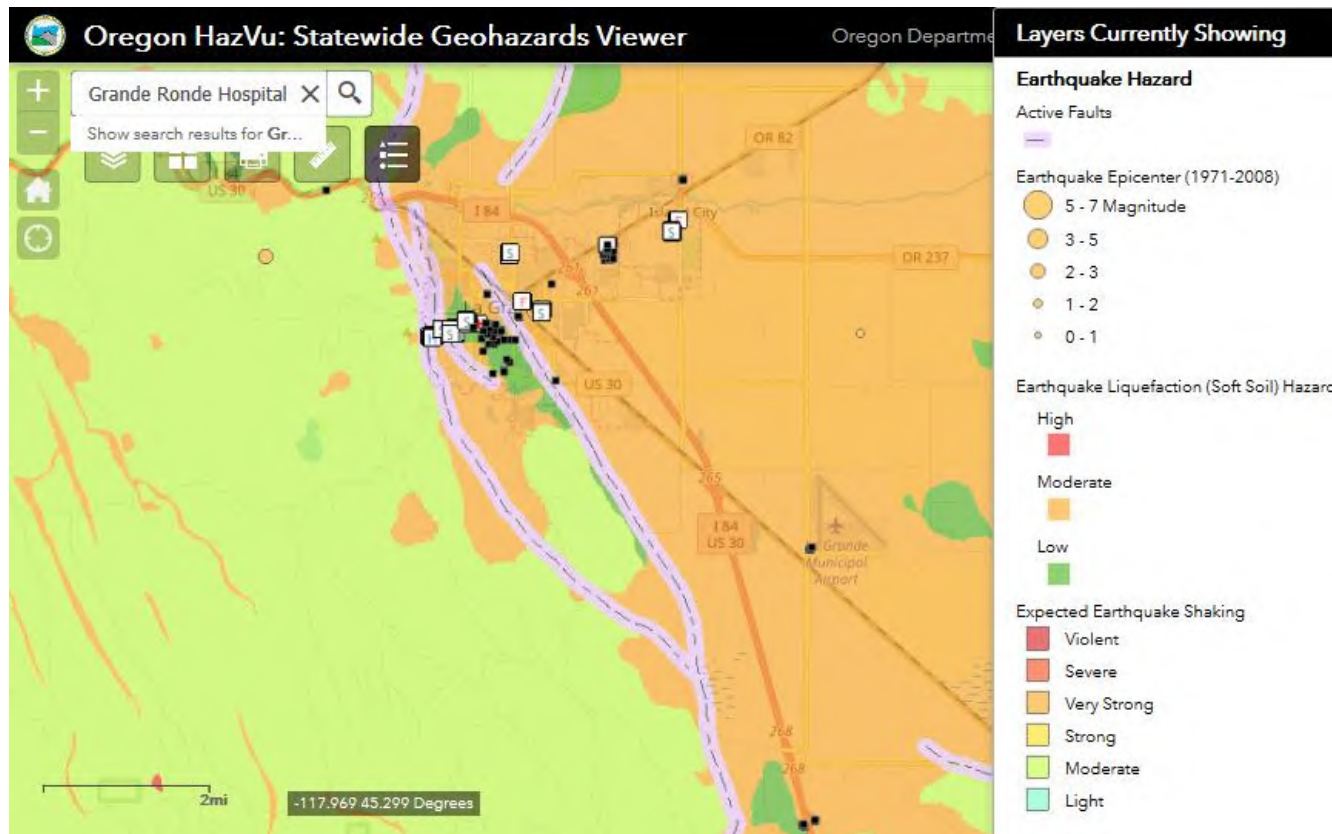


Figure 1: Geohazards in the immediate vicinity of the proposed Mill Creek Route.

modeled by the DNR is for an extremely damaging shallow quake of magnitude 6.8, a distinct possibility.

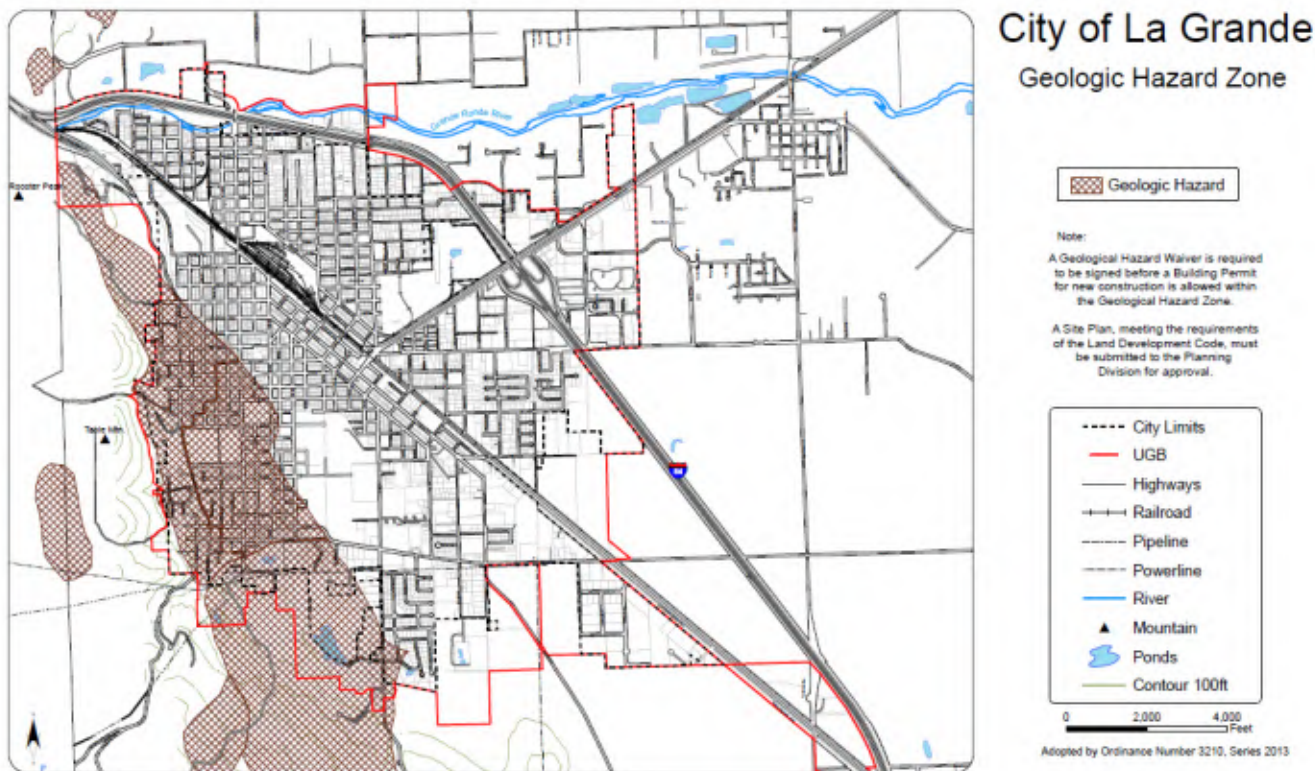


Figure 2: City of La Grande Geologic Hazard Zone

It is worth noting that the area is unstable, with the Grande Ronde Hospital’s FEMA rating (3) classified as having a 100% collapse potential even in a moderate zone of seismicity. Given that reality, the **hospital has had significant seismic retrofitting done**, with all the newer facilities built to comply with the most current earthquake standards.

Seismicity Zone: Moderate											Grande Ronde Hospital - LaGrande	
FEMA 154 Rapid Visual Screening Score Card											Final RVS Score	
	Type	Basic Score	Vert Irreg	Plan Irreg	Pre-Code	Post-Bench	Soil C	Soil D	Soil E	RVS Score	Final Type	Final Score
Primary	C1	3	-2	-0.5	0	0	0	-1	0	-0.5	C1	-0.5
Secondary		0	0	0	0	0	0	0	0	0		
Tertiary		0	0	0	0	0	0	0	0	0		
											FEMA-154 Collapse Potential	
											Very High (100%)	

Figure 3: FEMA scoring for the effect of a moderate earthquake on the Grande Ronde Hospital complex.

In light of the above information, the discussion of earthquake potential is inadequate¹³. Specifically, restricting the analysis to those quakes expected to occur within a 5-mile distance is of little use in any real-world scenario. Under the right circumstances, earthquake wave propagation could easily extend over hundreds of miles causing ground shaking, ground failure, landslides, liquefaction, fault displacement, and subsidence from reasonably probable seismic events on the routes.

This is important because the earthquake potential for the Blue Mountains is largely unknown and the geology problematic. There has been little in the way of geological mapping, and what is known is disturbing. A large structure of unknown origin, the [Olympic-Wallowa lineament](#), bisects the Northern portion of the range, just a few dozen miles from the proposed route of the power-line. Its path can be traced through Puget Sound, the Cascade Range, the Wenatchee Mountains, the Rattlesnake Hills on the Hanford Nuclear Reservation, the Walla Walla River canyon, the Blue Mountains, and into the Wallowa Mountains. Scientists have no clue about its tectonic origin.

What is known is that the area has been the site of [earthquakes in the past](#), and a [recent cluster of small quakes](#) as well. Given the brief span of European occupation and settlement, the historical time-series for earthquakes in this area is so short as to be useless. We simply do not know the geology of this area well enough to write off the possibility of large quakes.

While power-line towers are fairly resistant to propagation of s-waves from an earthquake, p-waves are also possible and would be more problematic in the event of liquefaction – also represented by contradictory statements in the document¹⁴. The up-and-down motion of those waves can quickly cause that to happen in wet soils, undermining the integrity of the towers. The towers as proposed are to be located in very isolated locations for much of the potential routes, so they will be hard to get to quickly.

There should be contingency planning for a large earthquake, the possible compromise of soil integrity, and the resulting potential for damage to the towers, with a loss of power or in the worse case, the possibility of wildfire ignition from an unmoored power-line. In the face of the destruction visited on rural California, this should no longer be seen as a remote

¹³ Section 3.7, [2018-09-28-B2H-ASC-Exhibit-H-Part-1.pdf](#)

¹⁴ Section 3.7.6 in discussing seismic hazards mentions liquefaction in its first paragraph:

The Project may be subject to ground shaking, ground failure, landslides, liquefaction, fault displacement, and subsidence from reasonably probable seismic events.

While the section that follows, which directly addresses the potential for liquefaction, has this to say:

Because the majority of the transmission line crosses relatively stable terrain with shallow bedrock and deep groundwater, the majority of the Site Boundary has a low susceptibility to liquefaction.

This isn't horseshoes or hand grenades, so having the *majority of the Site Boundary* of low susceptibility isn't close enough, it's not adequate. All the potential routes are difficult. Each will at some point stage towers in areas where liquefaction is a problem. The Exhibit needs to address this directly, not by hand-waving.

possibility. Emergency planning and risk mitigation, including financial risk, must be adequately addressed.

D. Blasting

Blasting would likely be required during the construction phase of the B2H line near many of the SLIDO's on the Mill Creek route. *Attachment G-5 Framework Blasting Plan* states (1.2 Blasting Plan Purpose):

Blasting may be needed in certain areas with rocky terrain to excavate tower footings, prepare station pads, and to construct access roads.

3.1 Overview of Blasting Principles:

The Construction Contractor(s) will avoid blasting in potential rockslide/landslide areas to the maximum extent possible and will consult with a geologist before blasting in such areas.

In reviewing the application it is very clear that Idaho Power has not fully considered the impacts of blasting on the unstable slope nearby a populated area in La Grande, Oregon. The maps on page 169 of *Exhibit H Geological Hazards and Soil Stability*, show the B2H line at MP 106—108, where it is within about 2500' of a zone of *Unconsolidated Sediments* in (Qf of). It then crosses a zone of *Landslide Deposits* near MP 108 (Qi of).

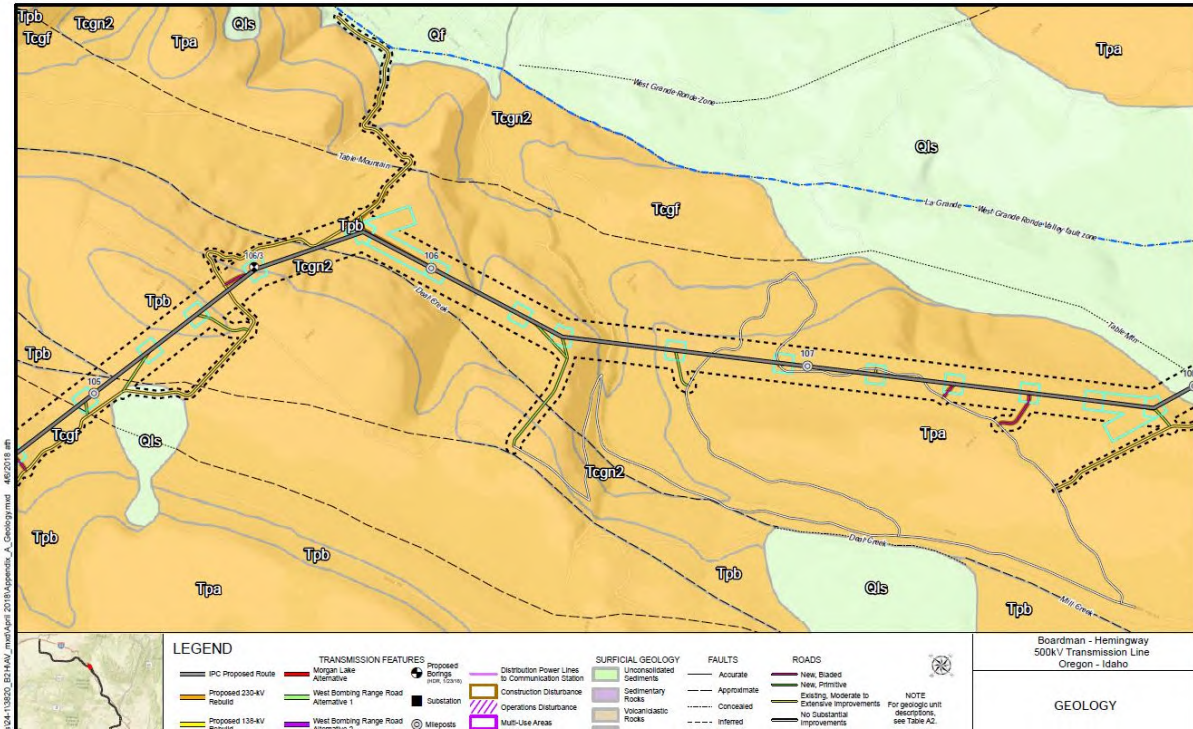


Figure 4: Proposed B2H line within 2500' of unconsolidated sediments and nearby population

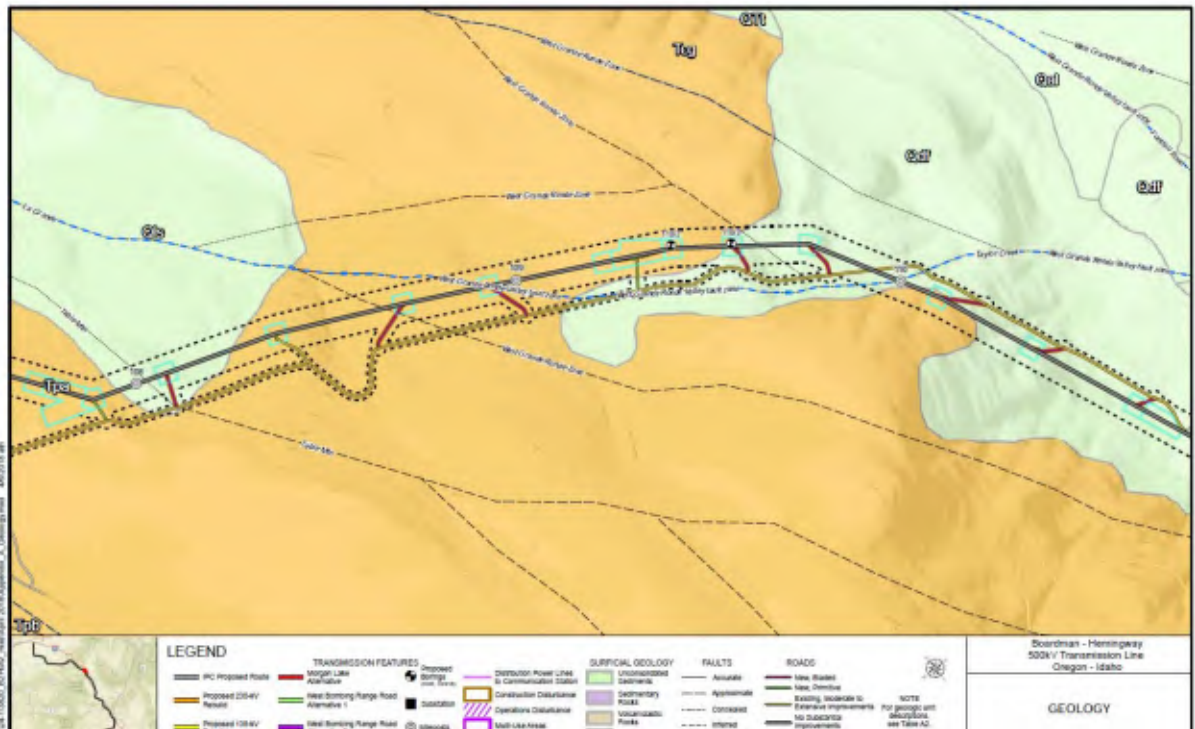


Figure 5: Proposed B2H line crossing landslide deposits

Section 3.3.2 *Blasting Notification and Safety Procedures* states that:

...damages that result solely from the blasting activity will be repaired or the owner fairly compensated.

while Section 3.4 *Design Features of the Project for Environmental Protection in Design Feature 32* has this to say:

Watering facilities (tanks, natural springs and/or developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction and/or maintenance activities to their predisturbed condition as required by the landowner or land-management agency. Should construction and/or maintenance activities prevent use of a watering facility while livestock are grazing in that area, then the Applicant will provide alternate sources of water and/or alternate sources of forage where water is available.

After-the-fact damage control is not acceptable. Before any blasting occurs Idaho Power must meet with the landowners of land they want to set off explosives. Items that might be damaged in blasting must have baseline data collected on them for any reasonable compensation to occur.

In the case of a well, natural or developed spring, baseline cfs data must be compiled. For a water line, road, building, or other natural or human-made structure, an assessment must be developed before any blasting is done. Damage due to blasting and a proper replacement value can only be calculated from such a baseline.

The rational conclusion is that the Mill Creek Route is not suitable for any type of utility placement when landslide potential, the soils, the existing faults, the slope instability and the probability of an earthquake in the future, all exist. When combined with the blasting which would be unleashed along the proposed project route, it's clear that siting a transmission line – much less a utility corridor – is not a decision a prudent person would make.

The applicant failed to comply with OAR 345-022-0020, because they have NOT “...adequately characterized the seismic hazard risk of the site.” Furthermore, it would be nearly impossible for any developer to “...design, engineer, and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site,” (per the OAR cited above.) **Therefore, the Council should outright eliminate from further decision, the Mill Creek alternative in Segment 2 of the B2H.**

2. Soil, Climate, Carbon

OAR 345-022-0022, Soil Protection, states:

“To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.”

The following analysis will focus on concerns related to soil productivity, existing and future above and below ground carbon sequestration, carbon dioxide emissions, climate change, monitoring of effects and reclamation efforts. While the standard does not directly mention carbon, we believe it MUST be included as critical and necessary criteria for the Council’s decisions on the 300 mile B2H project.

To jump to the conclusion: the project is in direct opposition to the State of Oregon’s efforts to proactively do its part for addressing climate change (OGWC 2018a, 2018b) and should not be approved.

A review of Exhibits I, K and Y make clear that this project will have a negative, long-term impact on climate by reducing soil productivity, removing existing above ground stored carbon, accelerating the decomposition of below ground carbon, and generating carbon dioxide emissions during the construction process and as a result of construction activities. We have ample past evidence (super fund sites, Forest Service roads left unmaintained, old mine shafts, hydroelectric dams without promised fish passage etc.) to know that what IPC promises will happen, will not actually happen. Money dries up, priorities change, funds are not sufficient for the work needed, staff are not allowed time to monitor, staff changes and historical knowledge of monitoring and reclamation commitments end up on a shelf gathering dust and forgotten or in court with people attempting to get commitments fulfilled. Therefore, rather than travel the same tired road, using up valuable energy, time and resources, the EFSC should not approve the project and stop it before destructive construction begins.

Specific concerns related to project are described below.

A. Carbon dioxide emissions and OAR 345-021-0010 (1)(y)

In Exhibit Y (Section 3.1, p.Y-1), IPC states that OAR 345-021-0010 (1)(y) regarding carbon dioxide emissions does not apply to the Project because *“the Project does not include a base load gas plant, does not include a non-base load power plant, and will not emit carbon dioxide.”* However, IPC should not be exempt from complying with OAR 345-021-0010 (1)(y) because the construction of the transmission line will result in large amounts of carbon dioxide emissions.

Actions in the project that will generate carbon dioxide emissions are found in Exhibit K, Attachment K-2. In this Attachment, IPC states that they will harvest timber and burn or masticate the slash along the ROW depending on the fuel loads (p. 12-15). The timber harvest, as well as any vegetation removal along ROW and for roads and buildings, will speed up below

ground plant decomposition and further contribute to carbon dioxide emission. Given that soil carbon has been identified as representing a substantial portion of the carbon found in terrestrial ecosystems (Ontl and Schulte 2012), actions that release it back into the atmosphere are of concern and will contribute to climate change. IPC also plans to build roads and structures which will result in carbon dioxide emissions. All of these activities are directly tied to the project and necessary for the project to be completed (connected actions). Therefore, the project **should be held accountable to OAR 345-021-0010 (1)(v) and the existing application is incomplete and should not be approved.**

B. The project is not in alignment with Oregon's climate goals.

The project is not in alignment with Oregon's climate goals because it will have a cumulative negative effect on climate. The Oregon Global Warming Commission's 2018 Forest Carbon Accounting Report (OGWC 2018a) directly addresses forest harvest and fire as carbon sources and has identified the importance of intact forests as carbon sinks. Under ORS 468A.250(i), an accurate forest carbon accounting is required to meet the directive to the Oregon Global Warming Commission (OGWC) to *"track and evaluate the carbon sequestration potential of Oregon's forests, alternative methods of forest management that can increase carbon sequestration and reduce the loss of carbon sequestration to wildfire, changes in the mortality and distribution of tree and other plant species and the extent to which carbon is stored in tree-based building materials."*

Because the project effects are in opposition to Oregon's climate goals, the project should not be approved.

C. IPC has not addressed or quantified the amount of existing and potential future carbon sequestered above and below ground lost as a result of this project.

The project will release an unknown amount of carbon back into the atmosphere and decrease soil productivity in the disturbed areas. The loss of soil productivity will limit future carbon sequestration potential. Carbon sequestration in plants and in the soil is an important strategy for helping to address climate change (Ontl and Schulte 2012) and so needs to be maximized as a climate change strategy. Consequently, the project is counter to Oregon's climate goals as described in the Oregon Global Warming Commission's 2018 Biennial Report (OGWC 2018b). Because the application is incomplete (no carbon storage and loss analysis) and in opposition to Oregon's climate goals, the project should not be approved.

D. Restoring soil productivity

The information and language is deliberately vague. Absent in the application is any discussion of what soil factors will be quantified to determine pre and post disturbance productivity. Absent also is any discussion of who determines if the soil restoration is sufficient or how close is close enough. Will compensation be a one-time payment or ongoing to account for lost future potential?

IPC understands that restoring soil productivity to its prior condition after disturbance is not economically feasible. This understanding is evident in the language they use in Exhibit K/Attachment K-1 (see examples below), language that puts limits on what they are obligated to do to restore productivity. Phrases such as “as nearly as possible” and “reasonably restore” allow IPC to be in full compliance with what they said they would do (i.e. as nearly as possible; reasonably restore). Their frequent references to compensation suggests that this will be their chosen approach since restoration of soil productivity is costly, time consuming and difficult, if not impossible in some cases (e.g. loss of top soil due to erosion). Yet what does “reasonably restore” mean? Reasonable to whom and for what?

Attachment K-1, Section 7.0: Efforts to minimize impacts to agricultural lands

P. 28: Land used during construction of the transmission line will be restored, as nearly as possible, to former productivity (p. 28).

p. 36: IPC together with the landowner..., will strive to schedule activities to minimize impacts and identify reasonable measures to restore agricultural land to its original productivity.

Attachment K-1, Section 7.3: Mitigation Actions

P. 37: IPC will reasonably restore the land to its former condition or compensate each landowner, as appropriate, for damages and/or impacts to agricultural operations caused as a result of Project constructions (Attachment K-1, p. 37).

In Exhibit I, tables I-5 and I-9 identify 4347.6 acres of “temporary” disturbances and 756.9 acres of permanent disturbance for a total of 5704.5 acres. As the table below shows, the soils in the proposed disturbance area have a high erosion potential. A permanent loss of soil productivity can be expected with its corresponding loss of carbon sequestration potential. This is in addition to the permanent compaction impacts as a result of both permanent and temporary roads, despite restoration efforts of the temporary use roads.

Erosion Factors (from Tables I-5, I-9 in Exhibit I)	Total acres (temporary and permanent disturbance)	% of total area disturbed
Highly Wind Erodible	1265.5	22%
High K Factor (easily detached soil particles)	2918.6	51%
Low T Factor (soil loss tolerance)	2708	47%

Soil loss or reduced productivity is a long-term impact with financial and ecological costs. These long-term financial impacts include loss of the opportunity to benefit from any carbon sequestration program, loss of agricultural productivity, and an increase in soil and plant sensitivity to climate conditions such as drought. The loss of below ground organic matter due to the project will lead to a decrease in the water-holding capacity of the soil (important feature given climate change) and in nutrients. These losses in turn contribute to decreased soil

productivity, plant growth, and the ability of disturbed areas to sequester carbon. While separating out topsoil from subsurface soil may prevent mixing, topsoil key soil structure and organic matter will be lost in the process of removing and piling it. Soil permeability and porosity and organic matter are factors that influence the movement of water and nutrients needed for plant recovery. Therefore, the productivity of the top soil will have decreased considerably from its pre-disturbance condition.

The developer and ODOE attempt to emphasize the number of roads that will be defined as temporary. These roads are temporary only in the context of access and use, not in terms of its footprint and impact on the landscape. Years after “temporary” roads were closed with some attempted mitigation, many remain drivable in a personal vehicle and ATVs. Therefore, use of the word “temporary” in reference to roads or other construction related activities is incorrect. All of the soil mitigations proposed by IPC are used by the Forest Service (e.g. mulching, seeding, scarifying, ripping of roads) with very limited success at restoring the soil’s productivity and vegetation. The impacts have lasted.

Finally, while erosion and sediment control measures may meet local, county, state, and federal guidelines, what is important is their effectiveness. Top soil lost to erosion cannot be replaced and represents a permanent impact with long-term community impacts. Given the limitations of what is possible in terms of restoring soil productivity, the importance of protecting existing soils and the expected impacts of the project, the project should not be approved.

E. Carbon sequestration is a land use.

The application lacks an analysis of carbon sequestration as an important land use. It is not mentioned in either Exhibit K (Land Use) or Exhibit I (Soil Protection). Yet it has large economic benefits related to maintaining and improving agricultural yields and ecological benefits related to helping mitigate climate change impacts. Efforts to mitigate climate change means that there will be increased value in altering land use practices to improve the amount of above and below ground carbon stored. As such it represents an up and coming land use. **The project will negatively impact over 4000 acres of potential carbon sequestration area and therefore should not be approved.**

F. The Economic Impacts to Agricultural Operations (Attachment K-1, Section 6.0)

IPC undervalues the economic impacts and future losses to agricultural operations because the economic analysis is based only on current use types, not future use types. It ignores the lost future economic benefits of carbon sequestration to agricultural operations where the potential to become quality trade areas in Carbon cap and trade efforts is high. The value of sequestering carbon is expected to become a priority as Oregon works to meet its climate change goals. Therefore, the economic analysis is incomplete and the project should not be approved.

G. IPC has incorrectly limited the analysis area to the 20,750.5 acres and ignores the project’s cumulative effect on climate change.

The analysis area is too small for the project's impact on climate change and must be expanded to an appropriate scale for a proper cumulative effects analysis to occur. The expansion of scale is required because the impacts of lost existing and future above and below ground carbon sequestration, lost soil and soil productivity, and carbon dioxide emissions have a cumulative effect when added to other existing actions influencing greenhouse gas emissions and carbon sequestration potential (i.e. deforestation, loss of wetlands.)

IPC has expanded the analysis area in other places and should do so related to the project's impacts and contribution to climate change. For example, when assessing the significance of impacting high value soils in the project area, they expanded their comparison area from the site boundary to the County-scale to make the point that only 0.05% of high value County soils would be impacted due to construction (Exhibit I, table 1-7). However, while the overall value may be small when compared at the County or State scale, it ignores the cumulative effects of the loss of high value farm land from other actions within the state and worldwide. It incorrectly treats these impacts as separate, unconnected activities and incorrectly infers that the project has no cumulative effect on soil productivity, agricultural yields, and carbon sequestration potential.

They need to take a similar scale increase approach when presenting the permanent (or foreseeable future) loss of forest and its carbon sequestration and cooling properties. While the amount of forest lost due to the project is small when assessed at the County or State scale, the loss is additive to the other ongoing effects of forest loss. There are already die offs of trees occurring due to climate change which increase in scale with each passing year. These die offs will release additional carbon into the atmosphere, exacerbate the tendency towards larger, more frequent and higher intensity wildfires, and increase the potential for soil erosion and loss of soil productivity. The impacts of increased tree mortality are already being seen due to insects and disease which thrive in hotter temperatures and longer growing seasons.

In summary, IPC has inadequately analyzed the effects of their project because they have too narrowly defined the area and nature of the impacts and their cumulative effect. Any cumulative effects analysis must include the impacts of decreased existing carbon sequestration and future potential carbon sequestration, because the effects of decreased soil productivity and carbon sequestration related to the project overlap in time and space with the impacts of other human land uses changes and interact synergistically with them.

H. Mitigation Measures (Exhibit I, Section 3.6) and Soil Monitoring (Exhibit I, Section 3.7)

As many have seen firsthand, promises made in project decision documents are rarely met regarding monitoring of effects and reclamation or restoration efforts. Money dries up, priorities change, funds are not sufficient to the work needed, staff are not allowed time to monitor, staff changes and historical knowledge of monitoring and reclamation commitments end up on a shelf gathering dust and forgotten. While IPC may have the best intentions now, we can expect a pattern similar to that observed in many government land use agencies. They include monitoring in their documents with the best of intentions. However, in many cases it is simply a box they must check with the unspoken intent to mislead the public and legal system.

As power demands and power generation technologies change, the transmission line, already an obsolete approach, will only become more so. As a result, IPC can expect its revenue to change, likely decreasing, and with that reduction or change in priorities, reclamation and monitoring of the project will decrease or be dropped. The result will be impacts that exceed what they predict for the project.

I. Conclusion

Climate change makes the project's centralized power grid approach and old outdated technology vulnerable to climate and human disruptions with regional economic and ecological consequences. IPC has ignored emerging issues and new science related to climate change and the importance of carbon sequestration. They are overly optimistic about their ability to restore lost soil productivity and maintain a monitoring and rapid response effort over the long-term. They have minimized the difficulty of restoring soil productivity once organic matter has decomposed and soil structure lost, and ignored the carbon dioxide emissions related to the project.

One has only to look at the Forest Service for examples of what is really going to happen if this project goes forth. In the case of the Forest Service, roads that are supposed to be maintained become rutted and impassable and livestock range monitoring becomes every 5, 10, or 50 years despite documents saying there will be annual monitoring with appropriate management changes. Prescribed burns targets designed to decrease wildfire intensity and spread are not met because of weather, budget or wildfires that take the needed personnel away to fight wildfires. IPC and this project will be no different. It is time for Oregon to move forward and address its energy needs and climate change concerns in a more proactive, ecologically and economically sound way. Denying the Site Certificate is an essential step. If Oregon is to meet its climate change goals, then the Energy Facilities Siting Council Must Deny the Site Certificate.

References:

OGWC (2018a). Forest Carbon Accounting Project Report

OGWC (2018b). 2018 Biennial Report to the Legislature for the 2019 legislative session.

Ontl, T. A. and Schulte, L. A. (2012) Soil Carbon Storage. Nature Education Knowledge 3 (10):35 <https://www.nature.com/scitable/knowledge/library/soil-carbon-storage-84223790/>

7. Fish & Wildlife Habitats and Threatened & Endangered Species (T&E)

Because the project cannot fully comply with state standards for protection of Fish and Wildlife Habitats or Threatened and Endangered Species in a manner that will support the life-cycles of native fish and wildlife and the habitats that they depend on for survival.

And because, citizens live in the communities surrounding the Wallowa-Whitman National Forest (WWNF) and habitually use the forest, including the B2H transmission project area, extensively for recreation, viewing wildlife and wildflowers, hunting, fishing, overall aesthetic enjoyment, and other vital purposes, including a source municipal water, these habitats must be protected.

The following rules and statutes directly relate to the narrative in this section:

The Draft Proposed Order, beginning on p. 275, explains that the State of Oregon, under its rules (OAR 345-022-0060) that the Council “...*must find that the design, construction and operation of the facility, taking into account mitigation, are consistent with: (1) The general fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025 (1) through (6) in effect as of February 24, 2017...*” It also, under (2) addresses impact sage-grouse habitat and the sage-grouse specific habitat mitigation requirements of the Greater Sage-Grouse Conservation Strategy will be addressed later in this section.

OAR 635-415-0005 defines habitat as, “*the physical and biological conditions within the geographic range of occurrence of a species, extending over time, that affect the welfare of the species or any sub-population or members of the species.*” OAR 635-415-0005 defines habitat quality as, “*the relative importance of a habitat with regard to its ability to influence species presence and support the life-cycle requirements of the fish and wildlife species that use it.*” (emphasis added.)

OAR 345-022-0070, Threatened and Endangered Species, says that “to issue a site certificate, the Council, after consultation with appropriate state agencies, must find that:

(1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction and operation of the proposed facility, taking into account mitigation:

(a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or

(b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and

(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction and operation of the proposed

facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.”

For the purposes of the narrative that follows we do not distinguish between state and federal laws when it comes to compliance. Rather, we present information related to the resource and species and let ODOE decide if it fits with their general fish and wildlife habitat protection standards or their threatened and endangered species standard. Either way,¹⁵ we will make it clear that Idaho Power and the B2H project cannot comply with the above statutes and standards nor the federal ones (cited below.)

1. Riparian Habitat, Category-1 Watershed/Habitat and T&E species

Idaho Power’s application for the Boardman to Hemingway Transmission Line project (B2H), ODOE’s Draft Proposed Order, and the project’s fish passage plan, do not adequately protect wild and threatened fish or their habitats. Therefore, the project does not comply with the statutes and rules outlined above.

Both of the proposed routes in Union County for the Boardman to Hemingway Transmission Line project include a crossing of the Ladd Creek and/or its tributaries. Ladd Creek flows approximately 14 miles through the Wallowa Whitman National Forest and private land on the east side of the Blue Mountains, into the Ladd Marsh Wildlife area, connecting with Catherine Creek and the Grande Ronde, Snake, and Columbia Rivers.

Historically, there were anadromous fish (steelhead and salmon returning from the ocean) in Ladd Creek. ODFW has documented that steelhead and salmon used Ladd Creek for spawning. However, construction of Interstate 84 in the 1970’s stopped the passage of these fish above the interstate due to a vertical culvert being installed (see [Power Point “Ladd Creek Fish Passage Project - ODOT FTP”](#)).

The Oregon Department of Fish and Wildlife’s Mission is to protect and enhance Oregon’s fish and wildlife and their habitats for use and enjoyment by present and future generations. The department is the only state agency charged exclusively with protecting Oregon’s fish and wildlife resources. The state Wildlife Policy (ORS 496.012) and Food Fish Management Policy (ORS 506.109) are the primary statutes that govern management of fish and wildlife resources.

The B2H Draft Proposed Order (page 9-10 of *draft Fish Passage Plan in ASC Exhibit BB, Attachment BB-2*), states that Ladd Creek and its tributaries contain only local fish (trout), but **that status has changed** due to major culvert work along and under the I-84 interstate in the last 4 years. As a result, the information contained in the B2H Draft Proposed Order is incorrect and out of compliance with Oregon and Federal statutes.

¹⁵ And while ODOE and EFSC have stated that they are not required to address federally listed species under **345-022-0070, according to legislative council per memo: [Barreto](#), they are still required under OAR 345-022-0060** to identify and protect those species.

In 2015, ODOT completed a 2-year project to replace culverts that previously had blocked fish passage in the creek and at the I-84 crossing of Ladd Creek (see <https://www.lagrandeobserver.com/csp/mediapool/sites/LaGrandeObserver/LocalState/story.csp?cid=4108250&sid=824&fid=151>).

According to ODFW Fish biologist Tim Bailey, in the year after completion of the fish passage project (2016) a steelhead redd was documented above the culvert, upstream from the freeway.

ODOT has continued this fish passage project in 2019 along with plans for freeway reconstruction and additional traffic lanes (see <https://www.constructionequipmentguide.com/odot-works-to-improve-i-84-fish-passage-in-ladd-canyon/45648>). Construction has resulted in costs over 32 million dollars, and the list of agencies and individuals in support of this costly fish passage project include ODFW, Union County Board of Commissioners, The Grande Ronde Model Watershed, the US Army Corps of Engineers, Senator Jeff Merkley, Senator Ron Wyden, and the National Marine Fisheries Service (see <https://www.oregon.gov/odot/projects/pages/project-details.aspx?project=20381>) and attached ([PPT] Ladd Creek Fish Passage Project - ODOT FTP).

An entire watershed is protected when it is determined that it contains federally threatened or endangered fish species. Idaho Power in its application and the B2H Draft Proposed Order have failed to incorporate information regarding identification of the habitat category or locations which will be impacted by the proposed B2H powerline development. Critical habitat is specifically identified in the federal law recording the listing of threatened species (ESA). The current application and site certificate fails to include requirements that would assure that the state is complying with federal laws in providing habitat protection for listed species (salmon and steelhead).

Idaho Power has two proposed line routes across and through Ladd Canyon, a preferred and an alternative. Idaho power has also stated that because there are only resident fish in Ladd Creek that “No new fish passage plan anticipated” (page 9-11 of *draft Fish Passage Plan in ASC Exhibit BB, Attachment BB-2*).

Because the alternative route through Ladd Canyon would necessitate a 3a/3b design change for a bridge crossing on Ladd Creek and there are threatened anadromous fish in Ladd Creek, an ODFW fish passage plan will need to be implemented (OAR 17 412-0035) based on (OAR) 635-412-0020 for this route for Ladd Creek and its tributaries.

The B2H Draft Proposed Order contains the following outdated information:

1. In *Table 1. Road-Stream Crossing Ownership, Risk Summaries, Proposed Crossing Types, and Fish Passage Information* Idaho Power names 5 waters in the Ladd Creek area (page 9-11 of *draft Fish Passage Plan in ASC Exhibit BB, Attachment BB-2*) with stream crossings. The report states that the only fish in these waters are resident fish. This information is incorrect.

2. The B2H Draft Proposed Order states that for all of Ladd Creek and its tributary streams that “No new ODFW fish plan anticipated.” (page 9-11 of Attachment BB-2). It cannot be overemphasized that this information is incorrect.
3. The alternative route Idaho Power has chosen will necessitate a 3a/3b (page 11 BB-2) design change for a bridge crossing on Ladd Creek. If this route is chosen, this will trigger an ODFW fish passage plan to be implemented (OAR 17 412-0035) based on Oregon Administrative Rules (OAR) 635-412-0020. Again, the B2H Draft Proposed Order information is incorrect.

Because of the change of status of the fish population in Ladd Creek, the B2H Draft Proposed Order is out of compliance with several Federal and State laws including:

1. *ORS 509.580 through 509.910: Fish Passage; Fishways; Screening Devices; Hatcheries Near Dams*
2. *OAR 635-41-0005 through 635-412-0040: Fish Passage*
3. *Oregon Forest Practice Administrative Rules and Forest Practices Act, OAR Chapter 629 (ODF 2014)*
4. *Forest Practices Technical Note Number 4, Fish Passage Guidelines for New and Replacement Structures (ODF 2002)*
5. *Fish and Wildlife Mitigation Policy (OAR 635-415-0000), which states that :*

- (a) The mitigation goal if impacts are unavoidable, is no net loss of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality.
- (b) The Department shall act to achieve the mitigation goal for Category 2 habitat by recommending or requiring:
 - (A) Avoidance of impacts through alternatives to the proposed development action;
or
 - (B) Mitigation of impacts, if unavoidable, through reliable in-kind, in-proximity habitat mitigation to achieve no net loss of either pre-development habitat quantity or quality. In addition, a net benefit of habitat quantity or quality must be provided. Progress towards achieving the mitigation goals and standards shall be reported on a schedule agreed to in the mitigation plan performance measures. The fish and wildlife mitigation measures shall be implemented and completed either prior to or concurrent with the development action.
- (c) If neither 635-415-0025(2)(b)(A) or (B) can be achieved, the Department shall recommend against or shall not authorize the proposed development action.

The B2H Draft Proposed Order contains an improper evaluation of the potential long term negative impacts to the fish habitat in the Ladd Creek drainage, including surrounding creeks, given the fact that species listed as threatened under the Endangered Species Act which requires identification and address of the effects of the proposed action through ESA section 7(a)(2) consultation with the NMFS (anadromous fish species) are in Ladd Creek and its tributaries.

Hence, the applicant has **failed to meet the requirements for issuance of a Site Certificate contained in OAR-345-022-0060 and 354-022-0070, and the Idaho Power's B2H proposed action's permit, being not in compliance with state or federal protected species laws, should be denied.**

The applicant has also failed to identify and address the effects of the proposed action on, not only the listed species, but the Category-1, and Federal Designated Critical Habitat. A co-sponsor of the project, Bonneville Power administration, is also a party to the Federal Columbia River Power System (FCRPS) Biological Opinion, requiring them to promote conservation and recovery of Federally-listed, under the Endangered Species Act, salmon and steelhead in the interior Columbia Basin.

The Draft Proposed Order (DPO), p. 304, lines 20-26, fails to list Bull Trout, a listed State-Sensitive Threatened Species, also listed as Threatened by USFWS. Similarly, the DPO only gives brief identification of federally listed Mid-Columbia River and Snake River steelhead, and Snake River spring/summer and fall Chinook salmon. OAR-345-021-0010 (1)(p) requires identification of all fish and wildlife at the proposed location, and identification of habitat classification categories, as set forth in OAR-635-415-0025, in order to comply with OAR-345-022-0060, requiring identification of habitat categories and required mitigation.

Compliance with the federal Endangered Species Act (ESA) requires identification and address of the effects of the proposed action through ESA section 7(a)(2) consultation with the NMFS (anadromous fish species) or USFWS (resident fish species.) ODOE is required to consult with ODFW, who consult regularly with their federal counter-parts regarding these matters. The DPO does not make this clear, hence fails this requirement.

Additionally, the DPO does not adequately address the adverse impacts to federally designated critical habitats (DCH.) DCH for Snake River spring/summer Chinook salmon is identified as "all areas with historical presence", and is NOT found only where they exist today. DCH ESA determinations of 'may effect' are linked to the standing PACFISH riparian habitat conservation areas (buffers) on both BLM and USFS lands. This equates to a 300-foot buffer on main rivers, and a 150-foot buffer on perennial tributaries (100-foot buffer on intermittent streams). The DPO speaks to only stating there will be no roads below 'ordinary high-water mark.' This in no uncertain terms addresses the Primary Constituent elements of the DCH for salmon OR steelhead.

The U.S. Fish and Wildlife Service maintains that conservation of bull trout and other salmonids depends upon the PACFISH and INFISH programs. The applicant has failed to comply with both federal and state requirements to address adverse effects of the proposed action on identified threatened (state or federal designation) fish species and their habitats!

The Grande Ronde River watershed contains a well-documented population of Bull Trout, Snake River steelhead, and Snake River spring/summer Chinook salmon. By state statute, wherever a portion of a watershed contains a Threatened or Endangered species, the entire watershed is reviewed for its potential impacts to those species under federal protection. The Grande Ronde River watershed encompasses the entirety of Union County and the majority of Wallowa County. As evaluated in the DPO, ASC Exhibit P, suitable habitat used by state-listed Threatened and Endangered species is designated pursuant to ODFW's Habitat Mitigation Policy, and EFSC's Fish and Wildlife Habitat standards, as Category-1 Habitat, where any impact, direct or indirect is prohibited. There is NO mitigation for Category-1 Habitat! And given the DPO does not address federal ESA consultation requirements, it too, is out of compliance and undercutting the purpose of this federal law.

All of the alternatives for the B2H Project being evaluated have the potential to adversely affect the region's sensitive aquatic resources, particularly the most northern segments which cross important habitat for federally and state protected salmonids, including bull trout and bull trout critical habitat. Although developed originally as interim measures, PACFISH and INFISH were extended administratively to have indefinite effect and remain the accepted standard for best practices in the conservation and restoration of aquatic ecosystems. These aquatic conservation strategies therefore must be applied wherever project activities intersect with the habitat of the region's native fish.

Responsible development should protect ecologically-significant natural communities and landscapes so that species and ecosystems retain the resilience and adaptive capacity necessary to persist in a rapidly changing environment. Kiesecker and others make the case for the integration of the "mitigation hierarchy" into the planning and siting of energy development projects (Kiesecker *et al.* 2010). The steps of the "mitigation hierarchy" are as follows: avoid, minimize, restore, and mitigate with the goal of "no net loss" of biodiversity from an infrastructure project. In applying the mitigation hierarchy every effort should be made to avoid impacts to the region's biodiversity. Conserving the integrity of natural communities by avoiding sensitive areas is more effective ecologically and economically than trying to restore a place after it has been degraded.

The B2H Project alternatives under review violate this common-sense approach to responsible development as the alignments all include multiple crossings of sensitive steelhead spawning habitat as well as alignments that run adjacent to spawning streams (*e.g.*, Grande Ronde River) (data from StreamNet downloaded 12/2016). Although the review and analysis conducted attempts to address these obvious adverse effects on state and federally protected species, it leaves an unacceptable amount of uncertainty regarding actual site-specific avoidance and mitigation strategies.

The DPO, p. 304, line 32, through p. 307, line 21, acknowledges that there will be impact, but is unable to quantify it. Since any impact is prohibited for Category-1 Habitats, the magnitude of impact becomes irrelevant, rather, not lawful. Hence, the applicant has failed to meet the requirements for issuance of a Site Certificate contained in OAR-345-022-0070 and OAR 345-022-0060. Idaho Power's B2H proposed project will not be in compliance with state nor federal protected species laws.

Climate Change Considerations for the B2H Project

It is well recognized within the scientific community that the Earth's climate has warmed steadily during the 20th century, a trend that is expected to continue and even accelerate well into the 21st century (Intergovernmental Panel on Climate Change 2007). The climate in the western United States has followed the global trend but at an accelerated rate (Saunders *et al.* 2008), driving a series of environmental changes that have far-reaching implications for all ecosystems, including aquatic. While the B2H Project cannot alter these climate trends, it must take into account the impact of climate change on the landscapes that will be affected by construction of the powerline. A more detail discussion of climate change and carbon sequestration was above in Section 6. Geology, Soils, Climate.

As cold-water dependent species, salmonids are particularly vulnerable to rising temperatures and changes in disturbance regimes (Williams *et al.* 2009). Although salmonids have been around for over 10,000 years and have survived glacial advances and retreats as well as countless natural disturbances, the life history strategies that gave them such resilience have been drastically compromised through the degradation, fragmentation, and conversion of their historical habitat. Their extraordinary migratory ability enabled them to take advantage of suitable habitats and move when a fire or drought rendered their habitat unsuitable. Now, however, barriers, non-native species, and degraded water quality have significantly limited their ability to move leaving them highly vulnerable to disturbance events.

The direct effects on aquatic systems from the B2H Project will be exacerbated by climate change and may potentially lead to greater adverse impacts on these natural systems. The four climate-driven environmental changes that are of particular concern to native salmonids are rising summer temperatures, increased winter flooding, increased wildfire risk, and protracted drought (Haak *et al.* 2010). The potential interactions between each of these factors and the B2H Project activities are discussed briefly below.

Rising summer temperatures: Loss of riparian cover will exacerbate thermal heating, particularly in the low water summer months. Alterations to the stream channel that increase the width-to-depth ratio will also increase warming while any loss of deep pools or other micro- habitats due to sedimentation or channel or streambank alterations will reduce available cold water refugia for local salmonids. As noted below, preserving large trees in the riparian area through application of the "Eastside Screens" can provide a source for large woody debris in the channel as well as an anchor for stream banks to prevent bank erosion and channel widening.

Increased winter flooding: As rain-on-snow events continue to increase in the Northwest, many rivers are experiencing a high frequency of extreme winter flood events. These events often result in channel scouring and degraded habitats since rivers have been disconnected from their floodplain and have no release valve for these high flows. Construction of roads and other infrastructure should not impede the movement of water from the stream channel to the floodplain during flood events. Culverts must be sized to accommodate flood flows so that they do not constrict high flows and contribute to further degradation of the stream channel during a flood event.

Increased wildfire risk: Healthy riparian areas and wet meadows are important to the protection of aquatic systems during wildfires. These moist areas often protect isolated populations of fish from direct mortality due to fire and help to diffuse the impacts of post-fire flood events. Removing riparian cover will increase the risk of direct mortality of fish as well as habitat loss when a wildfire occurs. As noted above, preserving large fire tolerant trees as required by the Eastside Screens can help to reduce the fuel load and reduce the intensity of wildfires.

Protracted drought: Widening of the stream channel, increased sedimentation, and degradation of wetlands and springs will accentuate the impacts of drought and low summer base flows. Culverts should be designed to allow for fish passage during low flow.

Watershed-scale Cumulative Effects

The ASC describes site-specific activities (*e.g.*, tower construction, roads) that may impact aquatic systems. However, it fails to take into account cumulative effects at the watershed-scale as well as the exacerbating effect of climate change on degraded habitats and altered ecosystems.

The USFS and BLM have each adopted macro-scale frameworks (Watershed Condition Framework and Rapid Ecological Assessments, respectively) to incorporate cumulative effects and climate change into their local and regional planning efforts. The B2H Project should also be required to take these factors into account in any environmental analysis of project impacts.

The proposed project and necessary amendments to the WWNF LRMP (Wallowa-Whitman National Forest Land and Resource Management Plan) to remove PACFISH and INFISH protections are unlawful because the design and mitigation measures for fish resources never account for cumulative impacts at the watershed scale. This is contrary to best practices for aquatic conservation where it has long been recognized that overall watershed health is directly related to the health of the fisheries it supports, regardless of whether or not they occupy all of the streams within the watershed (Williams et al 1997).

In analyzing cumulative effects on fisheries within a watershed, all construction related activities should be accounted for, not just those that directly intersect a stream segment. Road densities within a watershed have been found to have a strong correlation with the health of aquatic systems so all new and “improved” roads should be taken into account when assessing aquatic impacts. The same should be done for the construction of towers and other supporting infrastructure that results in a surface disturbance, regardless of where it is in the watershed.

In the Second Amended Project Order, Table 2, Analysis Areas, the department is only requiring the developer to analyze “the area within the site boundary” for Fish and Wildlife habitat (Exhibit P) and only within a half-mile of the site boundary for Threatened and Endangered Species (Exhibit Q.) This is completely unacceptable!

In view of the above discussion, especially the fact that **Category 1 habitat cannot be mitigated**; millions of federal, state and local resources have been spent in fish recovery, habitat mitigation and habitat restoration for the recovery of the area’s Bull Trout, SR-steelhead, and SR s/s Chinook salmon populations; and with the current and projected compounding effects of climate change, issuance of a **Site Certificate by the State of Oregon must be denied**.

2. Vegetation and Noxious Weeds

With regard to listed plant species, sensitive plant species, spread of noxious weeds, and traditional and ethnobotanical resources, the ASC and DPO rely on stale data and several unsubstantiated, underlying assumptions regarding future actions on private and public lands and under-estimates the eventual residual impacts of the project. It also reveals a lack of attention to under-studied groups, and an assumption of reliance on overly optimistic mitigation expectations.

Noxious weeds and their threat to native vegetation are grossly underestimated and an overreliance on herbicides for controlling these weeds (mitigation), leave other native species and invertebrates at an even greater risk. Global climate change and noxious weeds constitute significant threats to many native vegetation communities and the co-dependent species that they support. Further fragmentation and degradation of these already imperiled ecosystems likely will result in unrecoverable losses of biodiversity and valuable ecosystem functions across a wide area of eastern Oregon.

Idaho Power's faulty and illegal "Noxious Weed Plan" (DPO Attachment P 1-5) as well as their failure to take into account in any way, the Oregon Conservation Strategy, makes it difficult to see how ODOE can state that the developer has complied with the rules and statutes cited above.

The Oregon Conservation Strategy <http://oregonconservationstrategy.org/overview/> "*represents Oregon's first overarching state strategy for conserving fish and wildlife. It uses the best available science to create a broad vision and conceptual framework for long-term conservation of Oregon's native fish and wildlife, as well as various invertebrates, plants, and algae. The Conservation Strategy emphasizes proactively conserving declining species and habitats to reduce the possibility of future federal or state listings. It is not a regulatory document but instead presents issues, opportunities, and recommended voluntary actions that will improve the efficiency and effectiveness of conservation in Oregon.*"

Under the Oregon Conservation Strategy, IPC's B2H project is a Key Conservation Issue: "*(KCI)s are large-scale conservation issues or threats that affect or potentially affect many species and habitats over large landscapes throughout the state.*"

Despite being a Key Conservation Issue, the Oregon Conservation Strategy and its Goals, are not mentioned in IPC's Application at all! Consider Land Use Planning Goal 1: *Manage land use changes to conserve farm, forest, and range lands, open spaces, natural or scenic recreation areas, and fish and wildlife habitats.* Neither the current Proposed Route nor Morgan Lake Alternative of IPC's Application to EFSC takes these into account. Even if we ignore the fact that the B2H Project likely is not needed at all, given lowered demand and improved technology of energy storage batteries—IPC intends to disregard the "Proposed Route" considered in the BLM/USFS Records of Decision. That "Proposed Route" was chosen by the agencies as being the least harmful to the greatest list of resources—yet IPC has abandoned that in favor of two other routes imminently MORE harmful and despised by MOST residents of Union County. Is Goal 1 being met when the B2H line goes less than 100 feet from Twin Lake, a gem of a wetland that deserves protection? Is Goal 1 being met when B2H goes through Rice Glass Hill property, proposed as a State Natural Area? Is Goal 1 being met when noxious weeds are spread by B2H through Union County's finest wet meadows and elk wintering habitat?

No, Goal 1 one is not being met. Another very specific example is 5 State listed rare plant species (DPO Exhibit Q) within the B2H "analysis area." IPC claims "only" two of these rare species (Mulford's milkvetch and Snake River goldenweed) will suffer "direct impacts," by blading with heavy equipment. IPC claims that, "Avoidance and minimization measures ...described in Section 3.5.4" will "mitigate" impacts. Upon reading 3.5.4 we find that this consists of "minimum buffer of 33 feet between the disturbance and the edge of the T&E occurrence". Habitat for these plants will be completely fragmented and a buffer of 33 – or even a few hundred--feet will not stop invasion by noxious weeds! These species will suffer irreparable damage under B2H. The Oregon Conservation Strategy rightly recognizes, "Invasive species

are the second-largest contributing factor causing native species to become at-risk of extinction in the United States.”

To delve further into rare plants slated for damage by B2H, *Trifolium douglasii* is a USFWS “Species of Concern” <https://www.fws.gov/oregonfwo/Documents/OregonSpeciesStateList.pdf> yet not even considered in IPC’s 3.5 “Avoidance to Minimize Impacts”. Although List 1 under ORBIC’s latest ranking <https://inr.oregonstate.edu/orbic/rare-species/ranking-documentation/vascular-plant-ranks> it is not shown as State listed Threatened or Endangered, so is ignored by IPC. Species of Concern are “Taxa whose conservation status is of concern to the U.S. Fish and Wildlife Service (many previously known as Category 2 candidates), but for which further information is still needed.” Douglas clover has a global rank of G2 “*Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (extirpation), typically with 6-20 occurrences*”. DPO Exhibit P Part 2b Appendix 3A and 3B Figure 9 of 23 shows Douglas clover directly on the Morgan Lake alternative. This is not even taking into account that areas of private land where access was not granted for survey, likely contain additional occurrences of Douglas clover. The area is THE main place where this rare plant grows in Oregon, and B2H is set to permanently alter and compromise its main habitat with weeds!

Another very obvious lack is IPC’s failure to discuss Strategy Habitats, outlined in Oregon’s Conservation Strategy: <http://oregonconservationstrategy.org/strategy-habitats/strategy-habitats-summary-by-ecoregion/>.

In Union County alone, the Strategy Habitats of Grasslands, Late Successional Mixed Conifer Forest, and Ponderosa Pine Woodlands would very obviously be impacted by B2H as proposed in the Application.

The Application also neglects to address Strategy Species under OCS “*The Conservation Strategy identifies 294 Strategy Species, which are Oregon’s “Species of Greatest Conservation Need”. Strategy Species are defined as having small or declining populations, are at-risk, and/or are of management concern.*” This is completely unacceptable! How can an action set to devastate so many of Northeast Oregon’s Strategy Habitats and Species not even respond to our State Conservation Strategy?

Moving on to invasives, IPC’s “Noxious Weed Plan” is greatly lacking and is described in detail in the next section. As noted above, it is a threat to Oregon’s native plant communities.

Oregon’s Conservation Strategy states “*Invasive non-native species can have many negative consequences throughout Oregon. Depending on the species and location, invasive plants can:*

- *affect food chain dynamics*
- *change habitat composition*

- *increase wildfire risk*
- *reduce productivity of commercial forestlands, farmlands, and rangelands*
- *modify soil chemistry*
- *accelerate soil erosion*
- *reduce water quality”*

Chapter 569 of Oregon law covers weeds. Oregon statute 569.180 (Noxious weeds as public nuisance policy) states, “In recognition of the imminent and continuous threat to natural resources...noxious weeds are declared to be a public nuisance and shall be detected, controlled and, where feasible, eradicated on all lands in this state.”

Upon careful reading, “Noxious Weed Plan” breaks the law by exempting IPC from weed control after 5 years, denying responsibility for Class B and C Weed species (the vast majority of weeds), and holding IPC accountable for only the very limited area of ROW, despite the B2H project introducing and spreading weeds far and wide along a 300 mile stretch plus dozens of additional access roads and tensioning areas.

In summary, IPC’s Application does not take into account the Oregon Conservation Strategy. The Application clearly is breaks Goal 1 of the Strategy in many ways; additionally the Application imperils a Federal “Species of Concern”, and does not consider Strategy Habitats or Strategy Species. IPC’s Noxious Weed Plan does not comply with Chapter 569 of Oregon law. Our State Conservation Strategy and Goals and the integrity of our native plant habitats and rare plant occurrences cannot be sacrificed!

Noxious Weed Plan impacts on native species and wildlife habitats

With regards to Exhibit P, IPC’s “Noxious Weed Plan” (DPO Attachment P 1-5) is vastly inadequate and presents a threat to Oregon’s native plant communities/wildlife habitat, promotes risk from wildfire, and presents a public menace. Oregon statute 569.180 (Noxious weeds as public nuisance policy) states, “In recognition of the imminent and continuous threat to natural resources...noxious weeds are declared to be a public nuisance and shall be detected, controlled and, where feasible, eradicated on all lands in this state.” Chapter 569 of Oregon law covers weed control

https://www.oregonlegislature.gov/bills_laws/ors/ors569.html including obligation of land occupant:

569.390 Owner or occupant to eradicate weeds. Each person, firm or corporation owning or occupying land within the district shall destroy or prevent the seeding on such land of any noxious weed within the meaning of ORS 569.360 to 569.495 in accordance with the declaration of the county court and by the use of the best means at hand and within a time declared reasonable and set by the court, except that no weed declared noxious shall be permitted to produce seed.

Excellent Comments were provided in “B2H Noxious Weed Plan Comments” by a large group of weed professionals, submitted by Brian Clapp of Union County. The document states, “The County Weed Supervisors of Morrow, Umatilla, and Union counties met with the Oregon Dept. of Ag and Tri-County CWMA on August 22, 2017 to go over the B2H Attachment P1-5 Noxious Weed Plan. In conjunction with comments from previous meetings with Malheur and Baker county weed supervisors, the following list of concerns was developed...”. Upon comparing these comments with IPC’s Noxious Weed Plan of 2018 (Attachment P1-5), it is shocking to find that IPC’s Noxious Weed Plan does NOT include the suggestions made by the weed managers.

The foremost item cited by weed managers in 2017 was IPC’s excluding themselves from responsibility for the FULL list of weeds. In 2018, IPC’s Weed Plan still only obligates IPC to control weeds in Class A and Class T lists. It is widely recognized that these weed “Classes” are determined according to agricultural priorities, not according to which weeds are the biggest threats to natural areas. Treating only Class A and T, a shorter list of weeds which are not very common, is especially devastating for natural areas, i.e. the vast majority of the proposed B2H routes. Any invasive plant can devastate an area—regardless of which “list” it is on. In fact, Class B and C weeds are generally the worst weeds and tend to be those which are spreading most aggressively and to more areas, thus threatening and ultimately devastating the most native habitat. The Weed Managers Comments of 2017 state, “every landowner and land manager is responsible for the control of ALL state and county listed noxious weeds on their property/ ROW. Whether the weeds have been here for 50 years or don't show up till the 20th year of Operation, IPC will be held responsible for the control of noxious weeds in the areas they manage—the same as everyone else.” IPC has offered nothing in response.

As an example of serious weeds that would be excluded according to IPC, two of the worst weeds which occur in the vicinity of the Union County portion of Proposed and Alternate routes, *Leucanthemem vulgare* (ox eye daisy) and *Rosa rubiginosa* (sweet briar rose) are not included in Table 1 of the Weed Plan “Designated Noxious Weeds”. These species are listed in Union County Class B <http://union-county.org/wp-content/uploads/2017/04/Union-County-Weed-List-2019-and-cost-share-Ad.pdf>. Other “Class B” list weeds include sulphur cinquefoil, whitetop, diffuse and spotted knapweed – all present in the proposed areas of disturbance and certain to spread to currently intact native plant communities, should B2H construction proceed. These weeds, which are even now devastating thousands of acres of native plant communities, would not be treated under their Weed Plan – and neither would any of the other dozens of species on Class B and C lists, or new invasives, which may take some time to be added to a list. Union County Class “B” list alone includes 24 noxious weeds. Other landowners are required to follow County and State laws and control ALL noxious weeds. Why should Idaho Power be exempt?

Weed Surveys provided in Exhibit P-1 part 2a and b are misleading; many species which would not be controlled by IPC under their “Weed Plan” are included in the surveys. Surveys were done between 3-8 years ago, a very long time in terms of weed spread. Surveys done so long ago using an outdated list and in such an artificially limited area are not acceptable.

In addition to exempting themselves from the full list of weeds, IPC's Post Construction treatments is otherwise ridiculously limited and unacceptable. In fact it would be unbelievable the State Weed Program would sign off on it. Perhaps they did not. Here is an excerpt from their Plan (Monitoring 6.1):

As stated above, noxious weed monitoring and control will occur during the first 5-year period. When it is determined that an area of the Project has successfully controlled noxious weeds at any point during the first 5 years of control and monitoring, IPC will request concurrence from ODOE. If ODOE concurs, IPC will conclude that it has no further obligation to monitor and control noxious weeds in that area of the Project. If control of noxious weeds is deemed unsuccessful after 5 years of monitoring and noxious weed control actions, IPC will coordinate with ODOE regarding appropriate steps forward. At this point, IPC may suggest additional noxious weed control techniques or strategies, or may request a waiver from further noxious weed obligations at these sites.

Anyone who has tried to control weeds will realize that by treating weeds only once per year, many will be missed and weeds will spread. Noxious weeds cannot be "successfully controlled" in 5 years. IPC would appeal to ODOE to claim areas of the "Project" had "successfully controlled weeds", and then be exempted from further responsibility--- while invasives return later. The Plan further states "if control of noxious weeds is deemed unsuccessful...IPC will coordinate with ODOE regarding appropriate steps forward," including "request a waiver from further noxious weed obligations". Essentially IPC comes by once per year for 5 years at most, inevitably fails in weed control, and is ultimately not responsible. Landowners are burdened with more weed control, and our ever-shrinking valuable native plant communities are compromised or eliminated, leaving native animals without habitat.

IPC's Plan states they are not responsible for "areas outside of the ROW." Weed sites immediately outside areas of potential disturbance are highly likely to spread to the disturbed areas but would not be recorded. Noxious weeds spread quickly, often exploding exponentially in a single season. IPC is proposing a huge area of disturbance; their responsibility should not be limited to the ROW.

As IPC has proposed only annual treatments, one can surmise they would use primarily residual herbicides. Residual herbicides may seem like the answer to the dilemma of weeds constantly in seed production. Herbicides such as aminopyralid and imazapic have become the herbicides of choice for many species. Local residents have been using these herbicides for over 3 years now and have found they prevent germination for up to 3 years following application in eastern Oregon. This means germination of native plants as well as weeds. Bare spots are created where weeds once were. Revegetation by anything at all is prevented. After 2-3 years when the soil born chemical is reduced, weeds pioneer the site. In addition, native plants next to the weeds can die as a result of root uptake of the herbicide even though they were not sprayed directly. When using aminopyralid, willows, aspen, conifers (especially larch) and

desirable native forbs in certain families are often killed in this way. Successful revegetation very unlikely. Since IPC is proposing to treat weeds for only 5 years, it is very likely a couple of treatments using residual herbicides would suppress weeds for that time, only to explode on the – now bare—areas once occupied by valuable native plants.

In summary, IPC's Noxious Weed Plan does not comply with Chapter 569 of Oregon law. IPC denies responsibility for control of most weed species, denies responsibility for weed control after 5 years, controls weeds only annually, and even allows them a waiver when control has failed. This is unlawful and completely unacceptable. EFSC should reject the Weed Plan and Application. As a condition of re-applying, IPC should be required to post a bond to secure weed management for the lifetime of the project, which they claim is 45 years. Much is at stake, and there is no going back when thousands of acres of native plant communities are lost to invasives.

Noxious Weed Plan impacts and costs to farms and forest owners, county services and resulting degradation of fish and wildlife habitats

The applicant has not established a weed control plan that will protect the adjacent farm, wetlands, native habitats and forests from infestations due to the transmission line providing for noxious weed introduction and stimulation.

Failure to control noxious weeds will result in a failure to comply with OAR 345-022-0110 as it will result in significant adverse impacts to the ability of the county and private providers within the analysis area to provide those services as well as significantly increase the costs to private farm and forest owners to control noxious weeds.

The current plan fails to comply with the following general rules and statutes which apply to the entire siting process:

- Oregon Revised Statute 469.507 requires the site certificate holder to not only establish programs for monitoring the environmental and ecological effects of the construction and operation of the facilities, but also requires the certificate holder to perform testing and sampling necessary for the monitoring program per guidelines established by the EFSC or its designee.
- OAR 345-021-0010(l)(u)(E) Identifies the need for establishing a monitoring program to establish the identification of conditions which impact the providers ability to provide required services. (This statute and rule make it clear that the Department of Energy and EFSC have the authority and obligation to establish in site certificate conditions and requirements for monitoring of those programs.)

- Failure to comply with both OAR 345-022-0070 and OAR 345-022-0060 due to the negative impact invasive weeds have on the ability of the habitat to support wildlife species due to changes in the types of food available to species and the fact that invasive species clog waterways necessary for threatened and endangered fish.
- Fails to comply with OAR 345-022-0090 due to the fact that invasive weeds push out "first foods" species relied upon by Native Americans. Please refer to the comments submitted by the Shoshone-Bannock Tribes, pages 5 and 6 identifying concerns with noxious weeds and the need to address them at all locations impacted by the development, as well as the need for vehicle cleaning.

Comments provided by the Oregon Department of Fish and Wildlife state the need to address the introduction and spread of noxious weeds during the entire life of the project. OAR 345-025-0016 states, "In the site certificate, the council shall include conditions that address monitoring and mitigation to assure compliance with the standards contained in OAR Ch 35, Div. 22 and Div. 24. Given the speed with which invasive weeds can cause significant damage to surrounding habitat as well as agricultural and forest lands, the need exists to monitor and control noxious weeds on an annual basis during the life of the project.

The following examples identify shortcomings in the DPO and Noxious Weed Plan to meet the requirements of the above rules and statutes.

1. Construction and ongoing maintenance of the transmission line will introduce and stimulate the development of multiple noxious weed varieties which pose a threat to public and private property for many miles adjacent to the transmission line. Some seeds disperse for hundreds of miles. A failure to identify and treat noxious weeds prior to them dispersing seeds onto adjacent properties is a critical component of effective treatment to avoid these impacts. State law contained in ORS 569.390 requires the developer to treat weeds prior to seed dispersal; ORS 569.400 provides penalties for failure to do so.

ORS 569.445 requires developer to clean machinery prior to moving it over any public road or movement from one farm to another. The statute requires cleaning to occur at the locations where equipment leaves or enters a public road or moves across a property boundary. Utilizing washing facilities located at multi-use areas or public facilities, at a distance away from the work site, will not be consistent with the state statutes which the Oregon Department of Energy and Energy Facility Siting Council are required to adhere to.

2. The site certificate needs to include a monitoring schedule during the spring and summer periods of rapid growth that will address the actual invasive weeds along the right of way. Since different weeds go to seed from early spring through late fall, in order to meet the requirements of the

statute, the monitoring plan must address the life cycle of the weeds potentially present at different locations along the right of way to assure weeds are identified and treated prior to seed dispersal. This would require visual inspections to occur based upon the timeframes for specific weeds to develop.

Multiple examples are provided for Category A weeds which occur along the proposed transmission line. For example, flowering and seed production for the List A invasive weeds occurs as early as March for Scotch broom and extend into October for Purple loosestrife. These are both on List A. And yet, as discussed in the section above, some of the worst weeds are not on even on List A.

3. Section 1.3 of the Draft Plan indicates the following, “IPC will only be responsible for the control of noxious weeds that are within Project right-of-way (ROW) and that are a result of the company’s construction- or operation-related surface-disturbing activities. For EFSC purposes, IPC is not responsible for controlling noxious weeds that occur outside of the Project ROW’s, or for controlling or eradicating noxious weed species that were present prior to the Project. With respect to pre-existing weed infestations, IPC recognizes Oregon Revised State (ORS) Chapter 569 imposes onto occupiers of land within a weed district certain obligations to control and prevent weeds; if IPC identifies pre-existing weed infestations within a Project ROW, IPC will work with the relevant landowner or land management agency to address the same consistent with ORS Chapter 569.” As noted in the August 22, 2017 tri-county comments, mentioned in the section above, IPC is responsible for all weed infestations in the right of way, regardless of whether or not they existed at the time the transmission line right of way is assumed just as any person assuming a right of way would be responsible. This is the law.

4. Section 2.1, Page 4, last sentence in section, states counties were contacted to determine if each county requires specific noxious weed control methods or best management practices. “No specific best management practices were requested by any of the county weed management personnel contacted.” Contrary to this statement, Union County Weed Control submitted 31 comments and concerns developed by the weed supervisors of Morrow, Umatilla, Union County, Dept of Agriculture and Tri-County CWMA and incorporated comments from previous meetings with Malheur and Baker County weed supervisors.

Most of those requirements submitted on August 22nd, 2017 do not appear in the draft proposed order or the Draft Weed Management Plan. The site certificate needs to include a condition requiring the Weed Management Plan to include these 31 items. The Draft Proposed Order and Draft Weed Management Plan fail to assure that the counties and private landowners will not sustain significant and ongoing financial consequences due to the failure of Idaho Power to control the invasive weeds which will be introduced and the numbers increased due to the development of this transmission line. It is, therefore, imperative that the counties and private

landowners (farms and timberlands) receive the proposed final Weed Management and Habitat Restoration Plans for their approval prior to being implemented.

5. Section 5.0 repeats the limit of IPC's responsibility. It lists specific areas, which with existing roads, only includes areas involving ground-disturbing construction and/or improvements (e.g. new cutouts.) IPC is responsible for all noxious weeds within the site boundary as well as noxious weed infestations outside the site boundary if the development and/or use of the ROW contributed to the increase in noxious weeds. IPC is responsible for areas of overland travel which they indicate they will be using as well as any weed infestations occurring as a result of IPC use of other roads.
6. Section 5.0, Page 18, also states "IPC is not responsible for controlling noxious weeds that occur outside of the Project ROWs or for controlling or eradicating noxious weed species that were present prior to the Project." IPC states they will work with landowner to deal with pre-existing weeds consistent with ORS Chapter 569. IPC is responsible for all weeds inside the ROW which are there once they assume control of the transmission line corridor. In addition, they are responsible for any increased number or species of weeds that occur as a result of the development action they are proposing.
7. Section 5.2.1 Vehicle Cleaning: States construction contractors vehicles and equipment will be cleaned prior to arrival at the worksite. It fails to require vehicles and machinery to be cleaned prior to moving onto public road or require vehicle and machinery cleaning as construction progresses along ROW and moves from one property owner to another. The plan indicates that will be determined by land management agency and ODOE. The requirement is dictated by statute and the land management agency and ODOE do not have the authority to overrule the statute.
8. Section 5.2.3 " On BLM or USFS land the construction contractor may be required to provide additional treatments to prevent return of noxious weeds where topsoil is removed (i.e., pre-emergent pesticides.)" The Weed Management Plan for Private and State lands needs to include this option as determined by the local weed management supervisor.
9. Section 5.3.2, page 24, paragraph 1 states that Idaho Power will identify areas where preconstruction noxious weed control measures will be implemented. Preconstruction noxious weed control measures need to be implemented wherever noxious weeds exist—not only List A weeds, as mentioned in the above section.
10. 5.3.4 Page 24 states: "Noxious weed control efforts will occur on an Annual Basis for the first 5 years post-construction. When it is determined that an area of the Project has successfully

controlled noxious weeds at any point during the first 5 years of control and monitoring, IPC will request concurrence from ODOE. If ODOE concurs, IPC will consult with ODOE to design an appropriate plan for long-term weed control.

If control of noxious weeds is deemed unsuccessful after 5 years of monitoring and noxious weed control actions, IPC will coordinate with ODOE regarding appropriate steps forward. At this point, IPC may suggest additional noxious weed control techniques or strategies, or may request a waiver from further noxious weed obligations at these sites. If a waiver of noxious weed control is granted, it will include justification for how the waiver is consistent with the appropriate EFSC standards.”

This is repeated in Section 6.1, Page 25. This section does not support management of noxious weeds for multiple reasons including:

- i. During the first five years after construction, weed control needs to occur on a timeline that addresses the weeds present at the location as determined by Idaho Power and the local Weed Supervisor. Annual control does not account for the timing for noxious weed species going to seed.
 - ii. Following the initial 5 year period, noxious weed control needs to occur at least annually for the life of the project as IPC will be using the ROW on an ongoing basis for repairs, monitoring, inspection, vegetation management, etc. In addition, there may be unauthorized uses of the transmission line right of way by such things as ATV's, hunters, etc. that increase noxious weeds due to the access the developer is providing by building the transmission line. These impacts must be addressed by the developer.
 - iii. Noxious weed control efforts are planned to occur annually for the first 5 years post-construction and can end sooner if ODOE concurs that noxious weeds have been controlled. Noxious weeds will not be controlled absent ongoing monitoring and treatment for the life of the project.
 - iv. No waiver of annual control and monitoring of noxious weeds should occur due to the fact that in a single year, large numbers of plants can occur given that some of these plants disperse at least 900 to 1,500 seeds as the previously referenced plants on the A list confirm.
11. Section 6.2 The annual Noxious Weed Monitoring Report is only planned to be submitted to IPC and ODOE and land management agencies as required. These reports should also be submitted to the County Weed Control Supervisors and private landowners. Idaho Power needs to be designated as the responsible party for completion of things such as annual reports rather than “construction contractors.” If Idaho Power wants to contract with a construction contractor to

complete these for their approval and submission, they have the option of doing that. The contractors will change and there will be no continuity in terms of methodology, reporting, etc.

12. Section 6.3 Ongoing Monitoring and Control. “IPC will be responsible for monitoring and control of noxious weed infestations as set forth in the terms and conditions of the ODOE Site Certificate, BLM ROW grant, and USFS special-use authorization. The BLM, USFS, ODOE, and counties may contact IPC to report on the presence of noxious weed populations of concern within the ROW.” “IPC will control the weeds on a case-by-case basis in consultation with the land management agency and/or landowner, as appropriate.” Following a report of a noxious weed infestation, IPC needs to provide the information including the location of the noxious weed population and consult with the local weed management supervisor to identify an appropriate plan of action.
13. Section 8.0 places responsibility for development of Final Noxious Weed Plan, documentation of existing infestations adjacent to the survey area, documenting results of the preconstruction noxious weed inventories, mapping areas subject to preconstruction noxious weed treatment, and providing a detailed control methodology for each noxious species, etc. to “The Construction Contractors.” Is Idaho Power assuming no responsibility and the accompanying accountability for this program or the results? The developer needs to be listed as the responsible party.
14. Section 3.2 states “existing site-specific disturbances and land uses (e.g. grazing, grading, etc.) that could be contributing to the introduction, spread, or viability of weed populations were also recorded.” This information should only be used to identify areas where the opportunity provided by the construction and operation of the transmission line could provide an opportunity for an increased occurrence of noxious weeds. It should not be used to provide the developer an excuse for not meeting their responsibility for monitoring and controlling weed infestations which are going to be stimulated due to the existence of the transmission line.

The draft weed management plan provides ongoing references which indicate that IPC does not consider themselves responsible for noxious weeds when they are present in areas outside the ROW or when they result from things such as recreational use, grazing, other construction projects, natural occurrences, or when the developer did not physically disturb the area. It needs to be clear that the existence of the transmission line will increase the numbers and species of invasive weeds absent ongoing monitoring and treatment which the developer is required to provide.

15. Section 5.3.1.3, third paragraph, page 22 says herbicide and application rates will be approved by “County Weed Supervisors or Superintendents.” The top of page 23 says “Herbicide will not be applied prior to notification and receipt of written approval from the applicable land management agency, ODOE, or private landowner.” This section appears to allow ODOE to determine what

herbicides are used; and, it appears at least some landowners will have “landowner agreements.” The developer needs to be required to develop landowner agreements with willing landowners and provide written notice to any landowner whose property will be sprayed with chemicals so that the unless there is a landowner agreement, the impacted landowner can determine if chemicals should be used, and if there should be any restrictions based upon the conditions on their land or adjoining land such as organic gardening, necessary setbacks due to flowing water or wetlands, sensitive plant species, etc.

16. Page 23, final paragraph says, “Final species-specific noxious weed control methodologies will be included by the Construction Contractor(s) in the Final Noxious Weed Plan.” The noxious weed plan is the responsibility of Idaho Power and should involve the county weed control agency as well as the landowner.

A failure to manage noxious weeds would result in a significant financial burden being placed upon the county and landowners. Noxious weeds have been identified as the most significant threat to agriculture—and to natural areas as mentioned in the section above. In addition, introduction and increased numbers of noxious weeds in native plant communities and wildlife habitat would reduce the value of this habitat to wildlife dependent upon it and result in wildlife fatalities through starvation or displacement to less desirable habitat.

The application and site certificate lacks conditions that will keep noxious weeds from spreading within the counties and the state. This draft noxious weed plan is not a serious effort to provide mitigation for the negative impacts of the spread of weeds within habitat, native plant communities or on agricultural or forest land. Enhanced involvement of county weed control personnel, private landowners and applicable public interest organizations, in the final planning, may improve the likelihood that a mitigation plan could facilitate the protection of fish and wildlife habitats impacted by this extensive intrusion.

3. Forests: Eastside Screens

The proposed Boardman to Hemingway (B2H) Transmission project would damage rather than protect fish and wildlife habitat in eastern Oregon eco-systems, particularly around and near our Wallowa Whitman National Forest lands. The WWNF has approved plans for land use amendments to enable the project to move forward - which otherwise was not permissible because it violated the current forest management plans. However, the state must also review and make its determination of compliance with the general fish and wildlife habitat mitigation goals and standards as stated above. The dry, fragile, forest habitat will be irreparably damaged by the clearing of trees greater than 21 inches dbh from over 700 acres of the WWNF and allow logging in Late and Old Structure Stands (LOS). The “Eastside Screens” are designed to maintain *all* remnant late and old seral and/or structural live trees greater than 21

inches dbh that currently exist within stands proposed for harvest activities and move vegetative structure that does not meet late and old conditions towards a historic range of variability (HRV).

The Eastside Screens are meant to be a barrier to logging that eliminates the largest trees and related wildlife habitat on Oregon's eastside forests. This would be another project that amounts to a death-by-a-thousand-cuts of the protection for these old trees that would move the WWNF away from, rather than towards, its goal of achieving HRV. As the BLM and USFS's FEIS for the B2H indicates, the WWNF has already approved eleven site-specific amendments to the Eastside Screens. Previous EISs and USFS amendments have cited a specific number of trees greater than 21 inches dbh that have been removed, however the ASC for the B2H to the State of Oregon, provides no information about how many large old trees the logging associated with the B2H project would remove. This is an unacceptable failure to provide relevant information to the public that would allow more meaningful comment than simply providing the number of potentially affected acres.

Given the importance of retaining large, old trees, even the relatively small number of acres involved in the B2H Project's alternatives could result in a significant loss of trees larger than 21 inches dbh. Maintaining the standards for old growth retention as established in the Eastside Screens throughout the project area is important to the mitigation of project impacts on aquatic ecosystems. Although the screens alone will not restore altered ecosystems, the protection of large fire tolerant trees is a necessary step in mitigating the accelerating effects of climate change on natural systems. Preserving large trees in the riparian area through application of the Eastside Screens can provide a source for large woody debris in the channel as well as an anchor for stream banks to prevent bank erosion and channel widening. Preserving large fire tolerant trees as required by the Eastside Screens can help to reduce the fuel load and reduce the intensity of wildfires. The exacerbating effect of climate change on aquatic ecosystems in the project area is discussed in more detail above and in Section 6.

The removal of *any* such trees is inconsistent with current management of the WWNF, and thus inconsistent with the National Forest Management Act (NFMA), 16 U.S.C. §§ 1600–14. But without specific information regarding how many of such trees are likely to be lost, the necessary analysis is incomplete. The project should not be approved or mitigation authorized until the state has confirmed that there are no detrimental impacts to the health of the forest and wildlife that depend on mature stands of older timber.

A similarly narrow analysis and the associated conclusion on the proposed Snow Basin Project in the Wallowa-Whitman National Forest was recently challenged and found to be deficient by a U.S. District Court in *League of Wilderness Defenders, et al. v. Connaughton, et al.*, No. 3:12-cv-02271-HZ (D. Or. Dec. 9, 2014). Plaintiffs challenged the Forest Service's choice to limit its cumulative impacts analysis of a proposed Eastside Screens amendment to only the project area, rather than analyzing the impacts of the project's amendments with all other past, present, and reasonably foreseeable Eastside Screens

amendments allowing logging of large trees within old growth forests across the Wallowa-Whitman. The Court agreed with Plaintiffs and held that the Forest Service's failure to analyze other site-specific amendments throughout the Wallowa-Whitman violated the requirement to take a "hard look" under NEPA. Id. at 17-18. The cumulative effects analysis needs to look at all past, present and reasonable foreseeable amendments to the Eastside Screens. This gives the agency and the public an accurate understanding of the scope and effects of these amendments. Any modeling relevant to total large trees numbers on the forest should disclose what methodology and data are being used to determine the number of large trees that exist on the forest.

4. Invertebrates: Lack of attention to insect species and populations

No specific data were collected for invertebrate species or population numbers. Native pollinators, which often are obligate foragers on specific native plants, comprise an increasingly important group for urgent conservation. However, many lesser-known insect species share the same risks to their survival. Dr. Karen Antell, Professor of Biology, Eastern Oregon University, La Grande, Oregon, has been conducting an inventory of moth species in Union County since 2013. Through the course of this study, which includes several research sites on Glass Hill, she has documented many species previously unknown to occur in northeast Oregon, and several new records for the State of Oregon. She has provided two specific examples below from recent and ongoing research that serve to demonstrate how little we know about insect populations in eastern Oregon.

Tetragma gei is a moth species that was previously known from only six widely scattered locations in Washington, Idaho, and Wyoming. In 2015, Dr. Antell discovered and documented several individuals of this species on private land on Glass Hill, in Union County. This species is obligate on *Geum triflorum* (Prairie smoke), a native forb inhabiting grasslands of the Palouse

Prairie ecosystem. It likely warrants special species status.

Dr. Antell also has collected and documented a species of *Eucosma* (moth) on Glass Hill that likely is an undescribed species new to science. No published records of this species exist, and the extent of its range is entirely unknown.

These are just two examples to illustrate how little we know about invertebrate species and populations in Union County. This lack of information is especially critical for the lands and habitat that the proposed B2H line would traverse. The proposed B2H line would put at risk many species that we have yet to document or develop understanding of their habitat requirements.

In addition to consulting local academics such as Dr Antell, the project developer should be required to collaborate (or at a minimum, consult) its efforts with the Oregon Bee Project. In response to major declines in pollinator populations, the Oregon State House Bill 3362 (<https://olis.leg.state.or.us/liz/2015R1/Downloads/MeasureDocument/HB3362/Enrolled>) was initiated in 2017. The Oregon Bee Project was one result of that House Bill and is a cooperative effort between the Oregon Department of Agriculture (ODA), the Oregon State University (OSU) Extension Service, the Oregon Department of Forestry (ODF), and a diverse set of stakeholders who are actively engaged in caring for our bees.

Together these collaborators and supporters are launching several initiatives to maintain and enhance bee health in Oregon. The Oregon Bee Project has a mission of: “Bringing together Oregonians around a science-based strategy for protecting and promoting wild and managed bees through education, pollinator-friendly practices, and research.” It is essential that the B2H Project include pollinators in their scope of impacts. The B2H Project would result in a loss of pollinator habitat. If the B2H Project should proceed, the project has a responsibility to mitigate the loss of pollinator habitat by including habitat restoration that includes careful selection and planting of plants known to be habitat, nesting sites and floral resources included for pollinating insects. ODOE and EFSC must require the developer to monitor insect populations and the impacts of the B2H Project via pollinator surveys no matter which alternative is chosen. This is especially important as it relates to improving pollinator insect habitat and reducing pesticide exposure to pollinating insects. Given the amount of chemicals proposed for mitigation of noxious weeds, this must be a priority and a condition for EFSC’s recommended mitigation for fish and wildlife habitats under OAR 345-022-0060.

5. Over-Reliance on Mitigation and Lack of Mitigation Planning

EFSC Fish and Wildlife Habitat standard requires the Council to find that the design, construction and operation of a proposed facility is consistent with the Oregon Department of Fish and Wildlife’s (ODFW) habitat mitigation policy, goals, and standards, as set forth in OAR 635-415-0025.

As more and more landscape-altering projects are permitted and constructed, we have come to rely on mitigation for protection of at-risk species and communities. However, mounting scientific evidence shows that mitigation projects cannot guarantee a reasonable level of protection for at- risk native communities.

In their “Washington State Wetland Mitigation Evaluation Study,” the Washington State Department of Ecology concluded that “[o]verall, three projects (13 percent) were found to be fully successful; eight projects (33 percent) were moderately successful; eight (33 percent) were minimally successful; and five

(21 percent) were not successful” and that “[n]o enhancement projects were fully successful, while eight out of nine (89 percent) enhancement projects were minimally or not successful”(Wetland Mitigation Evaluation Study Phase 2: Executive summary, February 2002).

Even with adequate funding and the best intentions, mitigation efforts are subject to vagaries of weather, planning competency, and dedication to long-term control of noxious weeds. In the face of changing climate and habitat fragmentation, reliance on mitigation is nothing more than a last best hope. It should not be relied on as heavily as it appears to be in the DPO.

State goals specify that there should be “no net loss of either habitat quantity or quality” through “avoidance of impacts through alternatives to the proposed development action” or through mitigation. Avoidance of impact is always preferable to mitigation.

OAR 635-415-0025 states the following:

(b) The Department shall act to achieve the mitigation goal for Category 2 habitat by recommending or requiring:

(A) Avoidance of impacts through alternatives to the proposed development action; or

(B) Mitigation of impacts, if unavoidable, through reliable in-kind, in-proximity habitat

mitigation to achieve no net loss of either pre-development habitat quantity or quality. In addition, a net benefit of habitat quantity or quality must be provided. Progress towards achieving the mitigation goals and standards shall be reported on a schedule agreed to in the mitigation plan performance measures. The fish and wildlife mitigation measures shall be implemented and completed either prior to or concurrent with the development action.

(c) If neither 635-415-0025(2)(b)(A) or (B) can be achieved, the Department shall recommend against or shall not authorize the proposed development action.

Neither 635-415-0025(2)(b)(A) or (B) can be achieved. Both of the proposed routes in Union County, as an example, contain several areas with habitat qualities that do not occur elsewhere in the region. The unique qualities of this area preclude the possibility that “reliable in-kind, in-proximity habitat mitigation” can be accomplished successfully.

With the heavy reliance on mitigation throughout the ASC and DPO, leaving mitigation planning to the future and not including a thorough evaluation and plan for mitigation within the EFSC evaluation process, is not adequate for protection of our fish and wildlife habitats.

6. Birds, Raptors, Bats

Although trees or structures with raptor nests are managed as Category 1 habitat and therefore must be avoided, they are not included in the habitat categorization calculations due to their relatively small size on the landscape (p278 DPO; Fn # 258.) This is completely unacceptable, as the size is not relevant in this instance; and if it were, there would even be more justification to avoid or mitigate. The developer is not in compliance with ODFW rules within OARs chapter 635.

7. Mule Deer, Rocky Mountain Elk, and Critical Big Game Habitat

Significant stretches of the proposed route would be constructed on critical big game winter range. It's difficult or impossible for a member of the public to obtain permission to build a home in critical big game winter range. Yet the B2H project proposes to build large powerline towers and a significant road network in critical big game winter range. Mule deer populations are in decline in Oregon. Winter range for deer and elk is currently reduced in size and acreage compared to historic levels because of existing human development. Further degradation of critical big game winter range for B2H would result in an unacceptable negative impact to these important wildlife species.

Powerline construction over the proposed route would negatively impact high quality elk habitat. The roads associated with B2H construction would negatively affect elk. Elk research science based in northeast Oregon shows the negative impacts of roads on elk habitat. (*M. M. Rowland, M. J. Wisdom, B. K. Johnson, and M. A. Penninger. 2005. Effects of Roads on Elk: Implications for Management in Forested Ecosystems. Pages 42-52 in Wisdom, M. J., technical editor, The Starkey Project: a synthesis of long-term studies of elk and mule deer. Reprinted from the 2004 Transactions of the North American Wildlife and Natural Resources Conference, Alliance Communications Group, Lawrence, Kansas, USA*).

8. Habitat Connectivity

Wildlife of all kinds depend on quality habitat. Quality habitat must be connected across the landscape. Connectivity is becoming increasingly important as the effects of climate change are impacted on plants and animals. They must migrate across the landscape as environmental conditions change. Construction of the B2H powerline would create a barrier to the connectivity of habitats. Connectivity is essential for the Greater Sage Grouse discussed below.

9. Greater Sage Grouse

The future of Greater Sage-Grouse survival is unknown at this time for a number of reasons. Clearly conditions have changed since the filing of the application which already makes the biological surveys conducted and the mitigation plans outdated. Also it is likely that the Greater Sage-Grouse Comprehensive Conservation Strategy, 2006, ODFW's OAR 635-415-0025(7) and OAR 635-140-0000 to 0025 will need to be revised.

Climate change and planetary warming are driving rapid environmental change and destabilizing ecosystems creating additional enormous strains and stressors on the habitat of the greater sage-grouse. ([Haak, conservation-portfolio-04172019.pdf](#)) IPC's B2H transmission line construction and maintenance, with its 250' wide clear cut of sage brush under the line, will add additional threats to their survival. As noted in the DPO, page 314, lines 4-9: The proposed facility would include the following facility components within sage-grouse core area habitat: 20.77-line miles of transmission line; 12.85 miles of new access roads; and 12.34 miles of substantially modified existing roads. Habitat fragmentation and loss is a big concern for the overall survival of the species ([Haak, conservation-portfolio-04172019.pdf](#)). The Baker and Cow Creek Priority Areas of Concern (PACs), in particular, face extirpation (extinction) as this project creates another nail in their coffin.

There are additional threats to sage-grouse, a threatened species, from the B2H project.

1. Transmission lines and transmission towers cause sage-grouse mortality via bird collisions with the lines and facilitate raptor predation of sage-grouse ([Wisdom et al. Sage-Grouse SAB Monograph 18.pdf Page 17.](#))
2. The 250' clearance of vegetation under the transmission lines will create loss of habitat and the introduction of invasive weeds. Building new roads and substantially modifying existing roads exacerbates the spread of cheat grass. Cheat grass is taking over sage brush habitat which in turns threatens the sage-grouse because the sage-grouse needs large healthy expanses of sage brush to survive. Cheat grass also dries out early in the season and is thus more fire prone, also endangering the sage-grouse. ([Haak, conservation-portfolio-04172019.pdf page 7](#))
3. The main direct threat to sage-grouse from transmission lines is the tendency of sage-grouse to avoid tall, and especially tall linear, structures -- they recognize these are potential locations of predators. (<https://pubs.usgs.gov/of/2014/1239/pdf/ofr2014-1239.pdf>, pg 8-9) The application, and the DPO, do not adequately account for the likely avoidance effects.
4. In its annual monitoring report in 2018, the ODFW concluded that sage-grouse populations throughout Oregon continue to decline

https://www.dfw.state.or.us/wildlife/sagegrouse/docs/ODFW_2018_Sage-Grouse_Population_Report.pdf at p. 1, hereinafter "ODFW 2018"). The state agency estimated that the 2018 spring population in Oregon was 18,421 individuals. This was a 10% decline from 2017 (population estimated at 20,510 birds), following a 7.7% decline from 2016. The 2018 population had now dropped to 37% below the 2003 baseline population estimate of 29,237 individuals (ODFW 2018). We expect ODFW to announce ever more severe declines in its 2019 report later this year. Other states have reported similar declines.[1] The Baker PAC, which will be affected by the B2H transmission line, has seen its population drop by 75.4% between 2003 and 2018, with a 10.9% decline from 2017 to 2018 alone. (ODFW 2018 at 32, 5).

The Draft Proposed Order and the application do not adequately address the enhanced danger that the B2H transmission line poses in light of the rapidly-decreasing populations. Neither the application nor the DPO actually cite the number of birds that will be affected, nor do they indicate that the sage-grouse populations in Oregon generally, and the Baker and Cow Valley PACs that will be affected by the B2H transmission line, are in serious and significant decline -- and that the addition of a significant habitat disruptor such as a linear transmission line could mark the death knell for these populations. Approval of a site certificate without considering the actual numbers of birds affected and the plummeting populations would be unlawful.

[1] See, e.g., IdahoNews, Idaho male sage-grouse counts decline 25% in one year, available at <https://idahonews.com/news/local/idaho-male-sage-grouse-counts-decline-25-in-one-year> (last visited Aug. 1, 2019) (Idaho Fish & Game reporting 25% decline in male sage-grouse since 2018); Angus M. Thuermer Jr., WyoFile, Greater sage grouse counts show 3-year downward trend, available at <https://www.wyofile.com/greater-sage-grouse-counts-show-3-year-downward-trend/> (last visited Aug. 6, 2019); Wyo. Game & Fish Dep't, Sage grouse counts likely to decline in coming year, available at <https://wgfd.wyo.gov/News/Sage-grouse-chick-production-likely-to-decline-in> (last visited Aug. 6, 2019) (Wyoming Game & Fish Department expected decline in 2018 based on an analysis of sage grouse wings provided by hunters); Nevada Department of Wildlife, Nevada Sage-grouse Lek Counts: Effort and Trends (2017), available at http://sagebrushco.nv.gov/uploadedFiles/sagebrushconvgov/content/Meetings/2017/2017_GS_G_Lek_Counts.pdf (last visited Aug. 6, 2019) (reporting 10% decline in male lek attendance between 2016 and 2017).

8. Historic Cultural Pioneer Resources

The following comments are limited to the National Historical Oregon Trail. Archaeological resources are addressed by private landowners and Tribes. Stop B2H is not qualified to address those resource impacts.

OAR 345-022-0090 on Historic, Cultural and Archaeological Resources, states:

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

(a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;

(b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in 358.905(1)(c); and

(c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).

1. Oregon Trail

The scenic, historical, and cultural values of the Oregon Trail would be severely compromised by this transmission line. The transmission line will threaten some of the last remaining intact segments of trail on the Mill Creek route in Union County, according to the Oregon California Trail Association. The Trail is crossed eight times by the proposed power line.

Four property owners in Union County have been accepted by Oregon State Historic Preservation Office (SHPO) to list their properties on the National Register of Historic Places along the La Grande to Hilgard segment. These properties offer unique glimpses into our past with swales and grave sites and one property on its initial assessment appears to have been a campsite. The disgrace is that Idaho Power wants to put a tower adjacent to it.

The transmission line will also violate the scenic values of the Blue Mountain Crossing Interpretive Center as transmission towers to the south will be able to be seen from it. The Travel Oregon web site describes the site this way, "A paved, easily accessible trail follows some of the best preserved and most scenic traces of the Oregon Trail. Interpretive panels depict the pioneers

struggle through the tall trees and over the rugged Blues.” The view of towers from this site needs to be mitigated, the route relocated, or line terminated.

At the National Historic Oregon Trail Interpretive Center (NHOTIC) in Baker County, Idaho Power did not do any noise studies, in violation of the noise standard under Recreation OAR 345-022-0100 and ODEQ OAR 340-035-0100, so the snap crackle and pop and the sight of ugly transmission towers, in violation of the scenic view standard, will be the impression that visitors will now come away with. Idaho Power should be embarrassed for desecrating a piece of American history this way. The visitors’ view, the sounds they hear, and the ground they walk on will be forever changed and not for the better. This is why so many are insisting that a class 3 estimate be done regarding undergrounding the transmission at the Interpretive Center location.

A class 1 swale located within the Area of Critical Environmental Concern (ACEC) at 44° 48’ 48.26”N 117° 75’ 57.97”W is to have a new road located very close to it. What else can Idaho Power do to permanently degrade this site? Oregon’s state shield contains an image of a covered wagon, representing the struggle and pride of the pioneers who settled the Oregon territory. One cannot put a cost on preserving the value of Oregon’s (and many Americans’) cultural heritage.

By reference, a member’s [Comment 3](#).

2. Undergrounding

Idaho Power’s Exhibit BB on undergrounding is incomplete, inaccurate and misleading. A class 3 study need to be conducted using specifications to meet Baker County’s need to protect the viewshed of the National Historic Oregon Trail Interpretive Center and agricultural operations by placing the overhead transition stations on BLM land.

Starting at section 3.4 Options for Undergrounding the Transmission Line (pdf p 10) and continuing throughout the section the distance of the actual stretch proposed for burial is misrepresented and by extension the costs. Only a 2 to 2 ½ mile section is being proposed for study. This section discusses the costs related to a transmission line for long length installations (Section 3.4.1 pdf p 10). This comparison is inaccurate and misleading. In section 3.4.2 it again talks of unproven technology over long distances for 500 kV lines.

In section BB-3 in the discussion of the five basic technologies to consider for 500-kV AC underground circuits needs clarification. The Solid Dielectric Cable discussion is a perfect example of this confusion. It states that it is considered only for distances of up to a few miles at

the 500-kV voltage level. However, the last sentence states, “While the technology is progressively emerging, lack of practical experience results in major reliability concerns for operating larger scale 500-kV underground systems.” This is not a large scale 500 kV underground system and one has to ask why the confusion on distance?

The High Pressure Fluid-Filled Cable also talks of pumping plants being required every 7 to 10 miles. This is not the analysis being asked for. The link to the footnote at the bottom of the page is broken so cannot review the technical study mentioned. The Self-Contained Fluid Filled Cable section also references the same distribution of pumping plants that would be required as in the HPFF system.

The Design of Cable Systems section states that the “Concrete encased duct banks would be installed at a minimum cover depth of 3 feet, or as required by routing design, and would be backfilled with specially engineered thermally favorable backfill to assist in heat dissipation.” This would allow the line to be buried at a depth that would allow agricultural operations to occur above the buried line. This is a concern that the Baker County Commissioners have but Idaho Power has told them that the top of the concrete bunkers would be above ground level thus disallowing agricultural operations and this just is not true.

The section continues, “Depending on the terrain characteristics, burial depths may need to be increased to avoid heating the soil and changing the conditions of the vegetation and wildlife habitat above the duct bank or pipe type cables.” Since the depth can be adjusted to compensate for heat it can be adjusted for agricultural operations.

The underground to overhead transition stations mentioned can be placed on BLM land out of view of the interpretive center and avoid impacts to agricultural lands.

The last 2 bullet points in this section again talk of pumping plants every 7-10 miles for HPFF and SCFF options and reactive compensation would be required every 7 to 20 miles along the route depending on the cable technology.

We are not talking about burying the line for distances anywhere as long as this analysis contemplates. Therefore this analysis is incorrect and must be re-done. IPC and Baker County need to come together, develop specifications that satisfy Baker County’s desire to protect agriculture lands and their viewshed to calculate a class 3 estimate of the cost to underground the line in front of the precious Oregon Trail Interpretive Center. To not “cost-out” this option is blasphemy.

In the Reliability and Maintenance section IPC again confused the reader as it states, “In conjunction with their limited use, all installations to date have been relatively short compared to the Project, raising concern about the reliability of an extensive cross-country cable system. This is not an extensive cross-country cable system but the applicant wishes us to think this way with their consistent reference to long-distance system cost.

IPC must work with Baker County to develop specifications to bury this line on private land and put the overhead transition stations on BLM land. The BLM gave Baker County one million dollars in the 90's to protect the viewshed from the interpretive center. Idaho Power can pass the cost on to its ratepayers to protect this investment from the American people. **Idaho Power is desecrating an American piece of historical pioneer heritage.** It must not be allowed!

By reference we are incorporating the comments below to support this position:

[Comment 1](#)

[Comment 2](#)

Idaho Power cannot comply with OAR 345-022-0090(1)(a); their application should be denied.

EFSC cannot allow Oregon's historical pioneer heritage to be desecrated by trampling swales, tearing up wagon-wheel ruts, and marring the views that hold the dreams and spirits of our pioneer ancestors.

9. Wildfire and Public Safety

Idaho Power cannot protect the citizens of Eastern Oregon from the risk of a catastrophic fire; but they could avoid adding to the risks by not constructing the line and investing instead in the current infrastructures.

Idaho Power could choose access routes that would adversely put the public's safety at risk.

While nature plays the big role in fire, we know that the risk gets greater and greater as we get hotter and drier. Why would we allow an additional risk?

The California Fires have states and utilities rethinking how they manage a transmission system that has not been well maintained. What is curious is we have not seen any updated information about how the applicant and its partners intend to learn from the California disaster to better protect eastern Oregon from fires created from transmission lines. This included those older lines currently in operation (where investments should be made), as well as, new proposed lines, like the B2H.

Many members of our coalition members have written to ODOE about the California fires and by reference at the conclusion of this section we reference them for inclusion in the section.



Paradise, California 2018

The governor's office and OPUC have been developing policies to protect Oregonians from transmission line fires and we expect that ODOE will require the applicant and partners to submit more robust plans on the methods they will use to prevent fire from occurring due to their activities.

The Governor created the Wildfire Response Council in January 2019 and the OPUC shortly afterwards had a Wildfire Mitigation workshop¹⁶. In this workshop the chair of the Governor's Council on Wildfire Response, Matt Donegan, gave an overview of the council's charge¹⁷. In this overview a potential Utility Wildfire Mitigation Plan covering the below was discussed.

GOVERNOR'S WILDFIRE RESPONSE COUNCIL



WILDFIRE MITIGATION PLAN

Summary	<ul style="list-style-type: none"> • State requires plans of all electric utilities • PUC reviews and approves investor-owned utilities
Purpose	<ul style="list-style-type: none"> • Ensure adequate, consistent systems and plans across Oregon
Precedents	<ul style="list-style-type: none"> • California, Nevada, Other
Key Elements	<ul style="list-style-type: none"> • Broad-based plan encompassing public-private partnership • Mitigation of community impacts • Reduction of fire risk (e.g., hazardous fuel reduction, power shutdowns) • Financial plan • Regulatory authorities • Frequency of updates, maintenance

After this presentation an ODF Wildfire Risk Mapping Tool was presented to the commission¹⁸. This is a useful tool for enabling communities and utilities to conduct Wildfire Risk Assessments, assess High Value Infrastructure, compare Wildfire Risk vs Wildfire Danger, and present an Oregon Wildfire Risk Explorer Demo. Then PGE and Pacific Power gave Presentations of their Wildfire Mitigation Plans.

The applicant is not in full compliance with OAR 345-021-0010(1)(u). The Council MUST insist that Idaho Power and partners develop a detailed Wildfire Mitigation Plan and present to EFSC before a site certificate is issued. We cannot wait for the applicant to develop a plan after the site certificate, as this is too important! Risks to the economies, livelihoods, environment, way of life and LIFE is at stake!

¹⁶ http://oregonpuc.granicus.com/GeneratedAgendaViewer.php?view_id=1&event_id=366

¹⁷ https://oregonpuc.granicus.com/MetaViewer.php?view_id=1&event_id=366&meta_id=21149

¹⁸ https://oregonpuc.granicus.com/MetaViewer.php?view_id=1&event_id=366&meta_id=21151

It seems the EFSC is too comfortable to issue a site certificate then let the applicant submit detailed plans that only the utility, ODOE, and connected state agencies review. This needs to be done in an open, transparent, and public process. These are our lives and property you are talking about--and we cannot trust an agency that receives the majority of its income from utilities/developers that it is trying to regulate. Sorry but true.

The development of this mitigation is especially important in the Morgan Lake area of Union County; but really everywhere in the five counties of Eastern Oregon! The households in the Morgan Lake area are not in any rural fire protection district. ODFW is the only agency that will respond to a call. However, they will only put out grassland and timber fires. They will not protect structures. In Union Counties 2005 Community Wildfire Protection Plan¹⁹ it says this about the Morgan Lake area. None of the specific projects have been completed. So this area has no fire evacuation plan and no rural fire protection.

A transmission line should not be built in this area as the risks are too high!

¹⁹ Plan <https://www.oregon.gov/ODF/Documents/Fire/CWPP/UnionCounty.pdf>

WUI Name: Morgan Lake / Looking Glass Hill

Priority Category: High

Risk Assessment Factors						
Wildfire Hazard, including: Fire Occurrence, Topography & Total Fuels	Overall Fire Protection & Structural Vulnerability	Values At-Risk	Weather Hazard	Opportunity for Fuels Reduction	Score	Rank
60	37	22.5	10	5	134.5	1

Communities at Risk: Morgan Lake, City of La Grande

Structural Fire Protection Agency: La Grande Fire Department protects to the City Limit; otherwise it is wildland fire protection only.

Projects: Many projects identified in this plan apply to all wildland-urban interface areas because they are broader in scope or represent general outreach messages or educational opportunities. Those listed here are specific to individual interface areas in Union County.

WUI – Specific Projects	Timeframe	Lead Agency/Cooperators
Morgan Lake Private Lands	• 1-2 years	• ODF; Landowners, LGFD; LGRFPD
Prepare Morgan Lake Evacuation Plan	• 1-2 years	• UCES; UCPW; UCSO
Reconstruct Morgan Lake Road	• 3 + years	• UCPW; ODOT
Establish RFPD for Morgan Lake	• 3 + years	• Landowners; UC; Structural Agencies

The governor’s Wildfire Response Council and OPUC are working to develop plans to protect people and property from transmission lines and the county has identified the Morgan Lake area as its highest risk area. Why then do we only have this skimpy Fire and Suppression plan in Attachment U? Have we learned nothing from California?

A robust analysis needs to be done for each county using the ODF Wildfire Risk Mapping Tool in coordination with county emergency managers and fire chiefs of all districts and jurisdictions.

A review of ATTACHMENT U-3 FIRE PREVENTION AND SUPPRESSION PLAN in the DPO brings up many shortfalls. We detail them below; however it should be stated: overall, this plan as written is inadequate and unacceptable!

In 1.0 Introduction it states, “This preliminary Fire Prevention and Suppression Plan (Plan) describes the framework for measures to be taken by IPC and its contractors (Contractor) to ensure fire prevention and suppression measures are carried out in accordance with federal, state, and local regulations.” However at 1.3 it states, “Restrict operations on federal lands during conditions of high fire danger as described in Section 2.2, Restricted Operations.”

What happened to the state and county fire regulations? Or is the applicant asking for an exception to state and county fire ordinances? Please include all agencies responsible for fire preventions and suppression.

The majority of this work will be done in high fire season so the comment in 3.1 that, "Fire risk is anticipated to be low during Project operations, and therefore the fire prevention and suppression measures described in this Plan will be in effect from pre-construction to the end of restoration."

This statement continues to show the applicant's unfamiliarity with the fire dangers in eastern Oregon and starts us to thinking that they should contract out this work to regionally licensed professionals. We do appreciate IPC and the contractor staying on site until the restoration of the project. As outlined in Exhibit W Retirement, 3.1 Estimated Useful Life, the company states that it will exist into perpetuity and we in Eastern Oregon will appreciate the additional fire coverage.

At 2.1.1 Training it states that the contractor and IPC will do the training.

A condition needs to be inserted that they will hire a licensed wildland fire training provider to train all employees before they can work anywhere on the project site.

2.1.5 Equipment

We support Union County's position that Type 6 or 4 engine and crew from a qualified wildlands firefighting contractor be on site all the time until the end of restoration.

2.1.6 Road Closures

The Contractor and IPC will notify the appropriate fire-suppression agency of the scheduled closures prior to the open-cut crossing of a road.

The appropriate fire-suppression agencies as well as the public works directors of the municipalities and the neighborhoods need to be notified at least 48 hours prior to scheduled closure. In addition the local print, radio, and social media outlets need to be notified of these closures 48 hours in advance.

2.1.10 Communications

It is our understanding that private companies do not have access to two way communications on governmental frequencies. And if they did all communication systems are challenged to give coverage in eastern Oregon.

Therefore satellite phones need to be on site and with all the responsible company representatives at the various operational sites for fire control.

2.2 Restricted Operations

We find the first sentence unacceptable. It states that the company will only answer to land management agencies. “The Contractor and IPC will restrict or cease operations in specified locations during periods of high fire danger at the direction of the land-management agency’s closure order.”

In Eastern Oregon, off of federal lands, the counties regulate fire restrictions outside of cities and cities regulate them inside their boundaries. This section needs to be changed to include all governmental agencies that have the authority to regulate land use to control for fire protection.

Idaho Power talks about obtaining approval, to continue some or all operations, if acceptable precautions are implemented. This needs to be clarified.

This needs to state that these approvals WILL be obtained from all agencies responsible for the area they are asking for the exception.

3.2 Maintenance

This first sentence needs to include satellite phones for notification purposes as discussed above.

During maintenance operations, IPC or its Contractor will equip personnel with basic fire-fighting equipment, including fire extinguishers and shovels as described in Section 2.1.5, Equipment. Maintenance crews will also carry emergency response/fire control phone numbers.

During BLM's Stage II Fire Restrictions, obtain an appropriate waiver and take appropriate precautions when conducting routine maintenance activities that involve an internal combustion engine, involve generating a flame, involve driving over or parking on dry grass, involve the possibility of dropping a line to the ground, or involve explosives. Precautions include a Fire Prevention Watch

This bullet point needs to cover obeying other agencies’ fire restrictions. Why does it seem that only BLM or “federal agencies” matter?

Coalition Member letters on wildfires included by reference.

Fuji Kreider -- <https://drive.google.com/open?id=1e-10FrmMmAMUMiC6CE558VxQnj4nAF5V>

Gail Carbiener -- <https://drive.google.com/open?id=1ajCIIQati6HwPw6mVeaF-ISmcKvSPYI>

Attachment 9.1

Public Safety

In the matters of Public Safety, in and around La Grande and Union County, we include by reference the concerns of the Modelaire/Hawthorne neighborhood, under the submission of Virginia Mammen, as [Attachment 9.1](#).

10. Conclusion

With limited time and resources our Stop B2H Coalition, concerned with protecting our environment, heritage and lifestyle from massive disruption by an Idaho Corporation, have done our best to inform and involve our neighbors while reading, researching and writing responses to the ASC and DPO. EFSC's requirement to cite relevant rules, standards and regulations as essential to validating Comments is daunting to the average citizen and discourages public participation. And we wonder is this by design?

The ASC and DPO were unnecessarily cumbersome, finding many attachments or exhibits referenced in the DPO or in cross referenced documents was painful and the presentation of the documentation had layer upon layer of information on top of each other that was often repetitive and distracting. This process needs to be revamped as public participation is impeded and only those with large amounts of money to hire experts can participate. Or dedicated group of retired people with the skills to organize their communities, which are an exception and not the norm. ODOE needs an advocate's office to help people participate in the process that is funded in the same manner that SAG's can ask for consultants fees to help them prepare comments.

It's evident that much of this "public comment" opportunity is window dressing appearing to fulfill the letter of the law, but certainly not the spirit of active public participation. Applicant's initial efforts to overwhelm rural county planning offices with a deadline of 30 days to respond to 240 lbs. of documentation (lacking both indices and pagination) should say it all.

Conclusions based on inadequate monitoring, invalid assumptions, omissions and misrepresentations are not acceptable. This practice is so frequent that it seems applicant has reason to believe only a perfunctory effort is necessary because EFSC route approval is assured. The Council must make Idaho Power prove their assertions and support their conclusions. As a part of evaluating route applications, ODOE has a responsibility to the citizens of Oregon to protect the environment and public safety.

In the documentation and in the process we have identified:

- *noise monitoring without appropriately located sensors*
- *archeological analysis without on-the-ground surveys*
- *an overabundance of the statement "no significant impact" by Idaho Power when in fact there is significant impacts where they saw none*
- *incomplete geological analysis neglecting to call out the cumulative impacts of known slide and fault areas on route integrity*
- *pushing all mitigation plans out until after a site certificate is issued so these plans can be developed away from public oversight*
- *meaningless maps without landmarks or streets labeled*
- *denial by Idaho Power of GIS maps, that were in existence, for overlay on google earth to help in informing landowners about landslide, fault, earthquake, and blasting impacts to their land*
- *inadequate notice to individuals whose properties will be affected*
- *excessive reliance on small public service agencies to fight fire*
- *failure to evaluate impacts on protected areas*

Numerous Oregon regulations cited in the ASC contain this phrase: *to issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact.* The “significant adverse impacts” of the B2H as we have outlined them would be massive, destructive, and potentially dangerous.

We believe we have made the case that this analysis is incomplete and not in the best interest of Oregonians and urge the Council to deny this application for a site certificate.




Respectfully Submitted on behalf of the Stop B2H Coalition,

Jim Kreider, Co-Chairperson
60366 Marvin Road
La Grande, Oregon 97850



Protect Our Land; Preserve Our Heritage


Connie Struck
91 2nd St
LA Grande, OR 97850

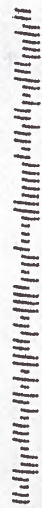
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AUG 21 2019
Department of Energy

Oregon Energy Facility Siting Council
% Helen Jansbeuter, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, Oregon 97301

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Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Email: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project (B2H) 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

This letter is a public comment for the above referenced project. Specifically, this letter will discuss Idaho Power's compliance with Standard 345-022-0110 - Public Services, in Exhibit U (3.5.6.2 and 3.5.6.5) of the EFSC application for B2H to ODOE. The letter will discuss the impact potential wildfires caused by the B2H transmission line will have on the ability of public and private providers within the analysis area to provide fire protection.

The effect of transmission lines on wildfire impact in western states has been well documented. In California, PG&E lines have caused 5 of the 10 most destructive fires since 2015, producing a liability of over 30 billion for PG&E. When considering the impact of B2H's operation, residents of Union County find the similarities between La Grande and Paradise California, where the infamous Camp Fire struck in 2018, deeply concerning. La Grande and Paradise share similar elevations and populations, however, La Grande has several characteristics that make it significantly more vulnerable to the ravages of wildfire than Paradise. For instance, La Grande averages 18 inches of rain yearly while Paradise enjoys 55 inches. Additionally, the proposed line runs adjacent to La Grande, while the line causing the Camp Fire was 7 miles from Paradise. *Oregon's 2006 Communities at Risk Assessment* by the Oregon Department of Forestry cites a startling fact: **The fire risk of the wildland urban interface (WUI) in La Grande has been rated the #1 WUI fire risk in Oregon!**

There is no doubt that construction of the proposed B2H transmission line would significantly increase the risk of wildfire in our area. From Idaho Power's own Draft Protection Order (Exhibit U-3.5.6.2, p. U-24): "Most activities will occur during summer when the weather is hot and dry. Much of the proposed construction will occur in grassland and shrub-dominated landscapes where the potential for naturally occurring fire is high. Project construction-related activities, including the use of vehicles, chainsaws, and other motorized equipment, will likely increase this potential risk in some areas within the Site Boundary. Fire hazards can also be related to workers smoking, refueling, and operating vehicles and other equipment off roadways. Welding on broken construction equipment could also potentially result in the combustion of native materials near the welding site." Idaho Power recognizes this hazard but makes no consideration of it in its application.

There are several specifics to examine in an analysis of the proposed B2H line's effects on Union County's ability to provide fire protection services. Firstly, firefighting crews in our region are

limited and volunteer. In their application, Idaho Power avers, "Most of the fire districts within the analysis area comprise volunteers, and in some cases, it takes considerable time to collect and mobilize an entire fire crew." As well, JB Brock, Union County emergency Manager states in Idaho Power's application "volunteer fire departments (rural fire protection districts) have a hard time finding volunteers due to budget constraints, similarly to budget constraints at the state and federal level. The wildland fires are getting bigger and cost more to fight" (U-1C-6). Fire crews in Union County are not equipped to handle potential wildfires generated by the proposed B2H transmission line.

The fact that fire crews are unstable, small and volunteer affects many aspects of their ability to respond to wildfires. Delayed response times, as noted in the quote from the previous paragraph, is one effect. Estimates of response time in the EFSC application are best-case scenarios. The estimate of 4 to 8 minutes as the response time in Union County (Table U-10) is far from even a best-case scenario (p. U-17). Residents that live on Morgan Lake Road concur that driving time is at least 10-15 minutes to the most accessible areas of the line from the base of Morgan Lake Road. Add to this estimate travel time from the La Grande Fire Station (approximately 7 minutes) and the time needed for individual fire fighters to travel to the Fire Station for a more realistic best-case scenario response time. The Paradise Camp Fire burned at a rate of over 1 acre per second!

Another factor in transmission line fires particularly impactful for small volunteer fire departments is the complications to firefighting introduced by the transmission lines themselves. According to Marvin Vetter, ODOF's Rangeland Coordinator, "local crews have no training in this scenario and will wait for the lines to be de-energized." JB Brock, Union County Emergency Manager, states, "The project (transmission line) could limit the ability on initial attack if fire fighters have to wait for power lines to be de-energized." (U-1C-6) These delays allow fires to grow even more.

How can communities struggling to maintain volunteer fire crews hope to address the overwhelming additional challenges and risks imposed by a project such as the B2H transmission line? Where is this addressed in Idaho Power's application and how can Idaho Power conclude that the proposed B2H transmission line is "not expected to have significant adverse impacts on fire protections services" (Exhibit U 3.5.6.2)? Considering the current capacities of fire protection services in Union County and the additional risks of wildfire imposed by the B2H transmission line, I urge you to act in accordance with state statute OAR 345-022-0110 and reject Idaho Power's application to construct the Boardman to Hemingway transmission line.

Sincerely,

Connie J. Struck
91 2nd St.
LaGrande, OR 97850
Name
Address

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:53 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019
Attachments: Scan 2019-8-15 17.38.19.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter signed by me and 54 other residents of La Grande expressing our concerns regarding the B2H Project and we request that EFSC deny the Site Certificate.

I have also sent a bound copy of this material by the US Postal Service.

Sincerely,

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the usage of the "Local Streets" ¹ specifically the Modelaire-Hawthorne Loop) ², hereafter referred to as the "loop", of La Grande to access the site entrance. This residential "loop" was constructed without sidewalks for a new development around the early 1960s.

According to OAR 345-022-0110, Public Services (pg. 5. April 2017) "The applicant...must address all permanent and temporary impacts of the facility on housing, traffic, safety, police and fire protection, health care and schools." ³

My impression from reviewing the application Page 17 ⁴ is that the applicant has not fully examined the final portion of the intended route nor does it fully recognize or address the need for traffic mitigation. This "loop" is the only access to/from thirty-six houses to the rest of the city. The area to the north of the "loop" is occupied by the Grande Ronde Hospital and Medical Clinic. Two blocks to the east is located the local high school and a grade school. ²

In June of 2016, the Grande Ronde Hospital petitioned the City to have a conditional use for a parking lot expansion project next to Hawthorne. The Conditional Use Permit was approved subject to the Condition of Approval that "No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is developed to residential standards and is not designed to support commercial traffic." ⁵

The La Grande Director of Public Works, Kyle Carpenter, provided information regarding the widths for the streets in question. The two streets range from 33 feet to 37 feet in width with no sidewalks. I personally measured the area where the unpaved stem of Hawthorne leaves the "loop" to go up the hill. At the junction it measures 32 feet curb cut to curb cut and narrows to 18-21 feet in width as it goes around the corner up the hill. 6 The Public Works Director also provided pictures of the mapping system showing the existing utilities located in the "loop". 7-8. It should also be noted that from the entrance to the "loop" at Sunset Drive to the entrance of the site the road has a 16% grade.

Attachment U2 9 from the application shows an "Aerial Lift Crane to be Used During Construction" and the Transportation and Traffic Plan on page 19 10 lists a number of other vehicles anticipated to be used. Article 6.6 — Public Street Standards for the City of La Grande Section 6.6.002 states that "Collector Streets are designed to withstand normal trucks of an HS20 loading. Larger trucks are to utilize Arterial Streets where at all possible." 11 The majority of vehicles listed on page 19 exceed that limit and would be using a Local Street in addition to Arterial and Collector Streets. According to the Public Works Director the two streets in the "loop" were designed as Local Streets for residential use, able to accept the pressures of HS20 for the purpose of an occasional need such as a weekly garbage truck or an emergency vehicle but for no more than 5% of the time. The paving construction of these over 50 year old streets in the "loop" was not designed for repetitive use by vehicles heavier than a normal car. These streets in the "loop" have not been repaved, only patched when necessary, since they were first constructed.

The application does not address the "loop" specifically, but 3.1.2 (pg. 19) 10 and Table 6 (pg.17) 12 of the Transportation and Traffic Plan indicate there would be numerous vehicles using this route. Not knowing exactly just which vehicles would be on the "loop" daily but making a conservative estimate of 50 round trips (100 single) it would be a constant parade with one truck every 7.2 minutes. This is unacceptable for numerous reasons including constant excessive noise.

Not only would weight of the vehicles be a problem but the narrowness of the "loop" streets and the ninety degree blind curves that would have to be executed would be either impossible or extremely dangerous considering the turning radius for many of these large vehicles. The

already dangerous situation for a number of driveways that exit onto these "loop" streets at blind curves would be exacerbated. 13-14

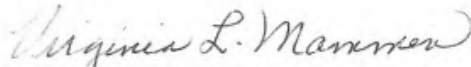
When considering only the traffic and safety issues listed above, the use of the "loop" as a part of the route for Idaho Power seems to be not only dangerous for the residents but unconscionable and irresponsible for Idaho Power to use such streets that are currently primarily for the neighborhood for walking (children to school, all ages for physical training), driving, or biking. I fear there are standards that are either not being considered or they are intentionally being ignored. There should be some common sense, courtesy and respect for the impact this project would impose on any neighborhood.

Finally, La Grande Ordinance Number 3077, which adopted Oregon State Traffic Laws by reference, states in Section 17 page 8 "It shall be unlawful for any person, firm or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes." Neither Modelaire/Hawthorne Loop nor Sunset Drive are posted as truck routes. 15-16

A site review and traffic plan must be completed prior to the cite certificate being issued and not 90 days prior to construction as stated.

For the above reasons I oppose the usage of the proposed route for the construction of the B2H transmission line.

Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon. 97850

gmammen@eoni.com

Exhibit 1

City of La Grande Ordinance Number 3242,
 Series 2018
 Page 236 of 312

**TABLE 1
 STREET STANDARDS**

Functional Classification	ADT Volume	Speed (mph)	# of Travel Lanes	Travel Lane Width	Turn Lane or Median Width	Bike Lanes	Min. Bike Lane Width	On-Street parking
Downtown Arterial	10,000	20	2-3	11'	11'			both sides
Arterial	10,000	40-55	2-5	12'	4-14'	optional ⁴	5'	none
Major Collector	2,000 - 10,000	25-45	2-3	11'	12'	required	5'	one or both sides
Minor Collector	1,000 - 2,000	25-35	2	11'	none	Optional ⁵	5'	one or both sides
Local Street	0 - 1,000	15-25	2	10'	none	none	none	one or both sides

Functional Classification	Sidewalks	Min. Sidewalk Width	Planting Strip Width ¹	Total Paved Width ²	Total ROW Width ³	Private Access Spacing
Downtown Arterial	required	12'	3'6" ⁶	49'	80'	200'
Arterial	required	5'	8'	36'-72'	80'-102'	200' - 400'
Major Collector	required	5'	8'	52'-60'	62'-90'	150' - 300'
Minor Collector	required	5'	8'	30'-48'	60'-78'	75' - 150'
Local Street	required	5'	8'	28'-36'	40'-66'	Each Lot

¹A portion of the required planting strip width may be used instead as additional sidewalk width or reduced right of way, as appropriate.

²The minimum of the paved width was calculated with the following assumptions:

Arterials: Two (2) travel lanes, four foot (4') median divider, no center turn lane, no bike lanes.

Major Collectors: Two (2) travel lanes, two (2) bike lanes, no center turn lane, parking on one (1) side.

Minor Collectors: Two (2) travel lanes, parking on one (1) side of street, no bike lanes.

Local Streets: Two (2) travel lanes, parking on one (1) side of street.

The maximum paved width for each street was calculated assuming the inclusion of all required and optional facilities. Minimum paved widths for each street are as required in Section 6.2.005 of this Code.

³These right-of-way width ranges are for new streets.

⁴Bike lanes should be provided on Arterials unless more desirable parallel facilities are designated and designed to accommodate bicycles.

⁵ Bike lanes should be provided on Minor Collectors where traffic volumes or other factors warrant. Otherwise, Minor Collectors should be designed and designated as shared roadway facilities with wide outside travel lanes of 14' on important bike routes.

Exhibit 2

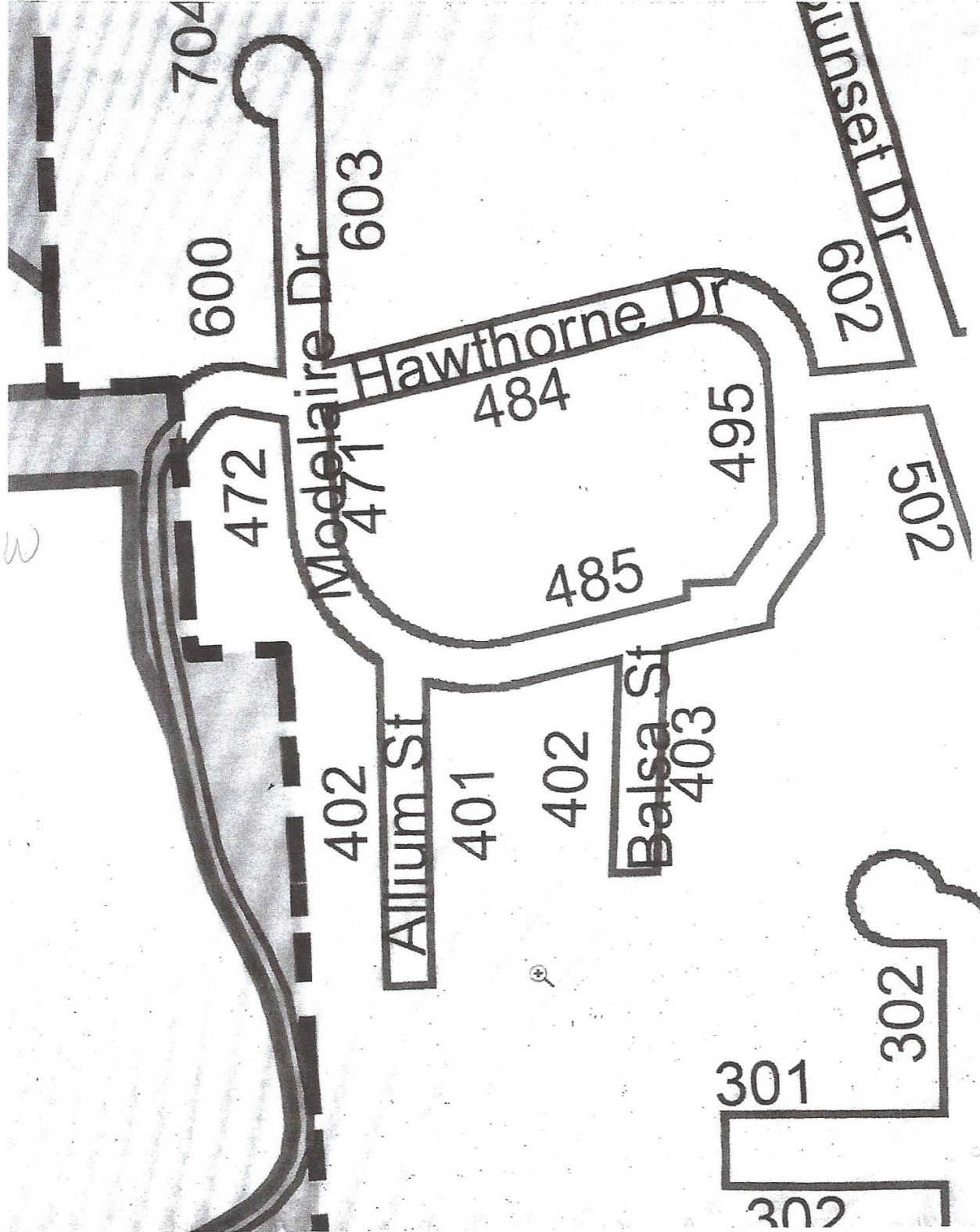


Exhibit 3

Public Services

ORAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

ORAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

ORAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (ORAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (ORAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

ORAR 345-024-0010 and 345-024-0015

This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety. Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

ORAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4

Idaho Power Responses to Comments and Requests for Additional Information on the B2H ApASC
 from the City of La Grande
 Compiled by ODOE. RAI's from the City of La Grande and Responses from IPC

U	U-Public Services include utilities such as road systems, water, sanitation services, power, and other amenities necessary for the construction.	Ordinance #2912, Series 1997 gives the City jurisdiction and control on all City street rights-of-way and Ordinance #3077, Series 2009, establishes the process and requirements for permits and licenses for uses of the streets that are not normal uses and may result in damages.	The project construction has two major road systems through La Grande that are proposed for this project – Morgan Lake Road via Gekeler Lane, 'C' Avenue, Walnut Street, and on up Morgan Lake Road. Roads along these routes are used by the ambulance service for accessing the hospital, the public transit system on its normal daily route, citizens to access locations within and outside this area and also for the school busing system for transporting kids to the La Grande Middle School, La Grande High School and Central Elementary School. In addition to the vehicular modes of travel, those routes are heavily used by bicyclists and pedestrians. The other route that would be utilized is the same route with the exception of turning onto Sunset Drive and up Hawthorne Street to a private gravel road that heads up the area above Deal Canyon. Two other routes that are not addressed but that would be obvious access routes for construction would be South 12th Street and South 20th Street. As a general rule, City streets are built with ninety degree angles, which may restrict some	To address the City's concerns regarding traffic and road use within the city's limits, Idaho Power has added the following proposed conditions to Exhibit K: <i>Land Use Condition 9: Prior to construction in Union County, the site certificate holder shall complete the following to address traffic impacts in the county:</i> <i>a. The site certificate holder shall finalize, and submit to the department for its approval, a final county-specific transportation and traffic plan. The protective measures described in the draft Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be included and implemented as part of the final county-specific plan, unless otherwise approved by the department;</i> <i>b. The site certificate holder shall work with the Union County Road Department and the City of La Grande Public Works Department to identify concerns related to Project construction traffic; and</i> <i>c. The site certificate holder shall develop traffic control measures to mitigate the effects of Project construction traffic.</i> <i>Land Use Condition 26: During construction in Union County, the site certificate holder shall conduct all work in compliance with the Union County-specific</i>
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Exhibit 5

103

IV. CONCLUSIONS

104 Based on the Findings of Fact above, the Planning Commission concludes that the application meets the
105 requirements established in LDC Articles 8.5 and other applicable codes and Ordinances.

106

107

V. ORDER AND CONDITIONS OF APPROVAL

108 Based on the conclusions above, the Planning Commission approves the Conditional Use Permit as
109 requested, subject to the following Conditions of Approval:

- 110 1. No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is
111 developed to a residential standards and is not designed to support commercial traffic.
- 112 2. Any existing driveway curb cuts along Hawthorn Drive bordering GRH's property, that are not used for
113 residential purposes, shall be removed and replaced with City standard improvements that exists
114 adjacent to such areas.
- 115 3. There is a storm sewer line extending through the project area that shall to be protected. Any
116 improvements that may affect the storm sewer line shall be reviewed and approved by the Public Works
117 Director.

118

119

VI. STANDARD CONDITIONS OF APPROVAL FOR LAND USE APPLICATIONS

- 120 1. **Revisions to a Valid Conditional Use Permit:** Any variations, alterations, or changes in a valid
121 Conditional Use Permit requested by the deed holder shall be considered in accordance with the
122 procedures of the Land Development Code as though a new Conditional Use Permit were being applied
123 for.
- 124 2. **Public Works Standards:** Where a development involves work within the public right-of-way, a Right-
125 of-Way Permit shall be obtained from the Public Works Department in advance of commencing with any
126 work in the right-of-way. All improvements within the public right-of-way shall be in conformance with the
127 most recent adopted City of La Grande "Engineering Standard Drawings and Specifications for
128 Construction Manual."
- 129 3. **Building Permits:** The City of La Grande Building Department shall be contacted early in the process
130 and in advance of development to coordinate and obtain required building, plumbing, electrical and/or
131 mechanical permits. All required permits shall be acquired in advance of construction.

132

133

VI. OTHER PERMITS AND RESTRICTIONS

134 The applicant and property owner is herein advised that the use of the property involved in this application
135 may require additional permits from the City of La Grande or other local, State or Federal Agencies.

136 The City of La Grande land use review, approval process and any decision issued does not take the place of,
137 or relieve the applicant of responsibility for acquiring such other permits, or satisfy any restrictions or
138 conditions thereon. The land use decision herein does not remove, alter, or impair in any way the covenants
139 or restrictions imposed on this property by deed or other instrument.

140 The land use approvals granted by this decision shall be effective only when the rights granted herein have
141 been exercised and commenced within one (1) year of the effective date of the decision. In case such right
142 has not been exercised and commenced or an extension obtained, the approvals granted by this decision
143 shall become null and void. A written request for an extension of time shall be filed with the Planning
144 Department at least thirty (30) days prior to the expiration date of the approval.

145

146

7/25/2019

Gmail - Modelaire Roadway Specifications

Exhibit 6



Virginia Mammen <4gmammen@gmail.com>

Modelaire Roadway Specifications

3 messages

Kyle Carpenter <KCarpenter@cityoflagrande.org>
To: "gmammen@eoni.com" <gmammen@eoni.com>

Fri, Jul 12, 2019 at 1:51 PM

I have attached a couple pictures of our mapping system that will give you a sense of where existing utilities are in Modelaire and Hawthorne. As for the widths of the roadways, I took measurements in multiple places, and found the following:

- Modelaire Drive (F Avenue) between Sunset Blvd and Hawthorne Drive is approximately 33 feet wide with a grade of about 5 Percent.
- Hawthorne Drive is approximately 32 feet wide at the bottom near the intersection of Modelaire/F Avenue and widens to about 34 feet where it intersects Modelaire at the top of the hill. The grade heading up hill is approximately 15.5 Percent.
- Modelaire Drive is generally 36 feet wide with some minor variability generally less than a foot (35' to 37'). On the southernmost segment of the roadway where the majority of the elevation gain is observed the grade is approximately 16 Percent.

Let me know if there are any other specifications of these roadways that you are interested in that I have missed. Have a great weekend and thanks for the treats, the guys were very appreciative.

Kyle Carpenter, PE

Public Works Director

City of La Grande

Public Works

Ph: (541) 962-1325

Fax: (541) 963-4844

2 attachments



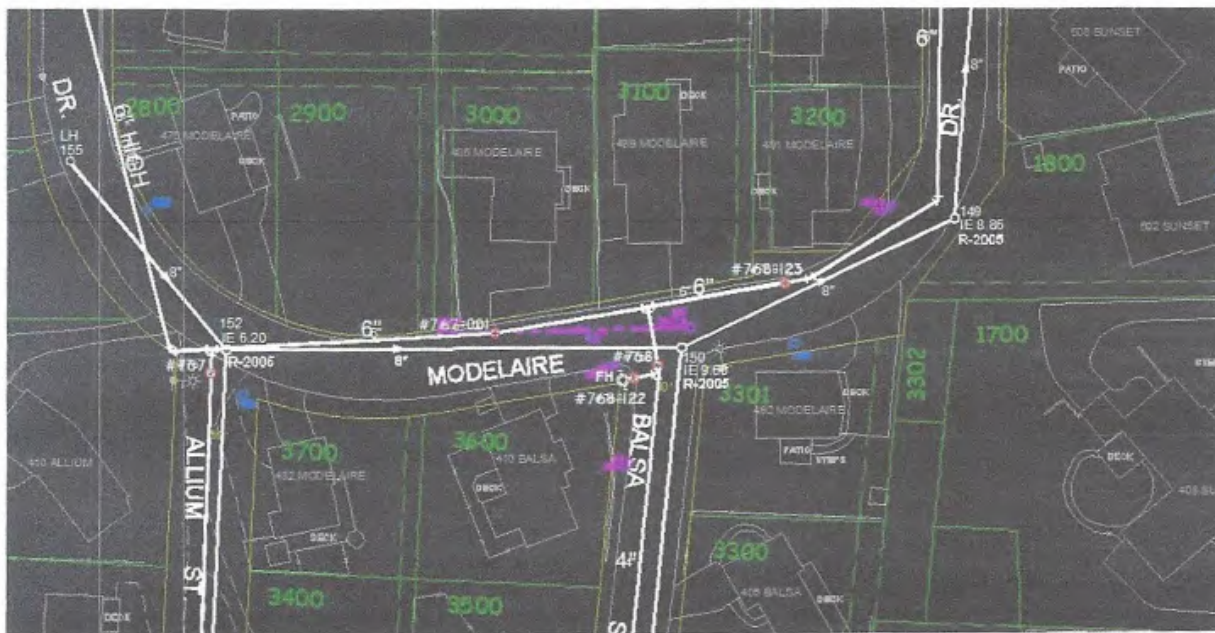
Hawthorne.jpg
150K

Modelaire.jpg
120K

7/25/2019

0 (1067x555)

Exhibit 7



7/25/2019

0 (1397x451)

Exhibit 8



Exhibit 9

attachment U2

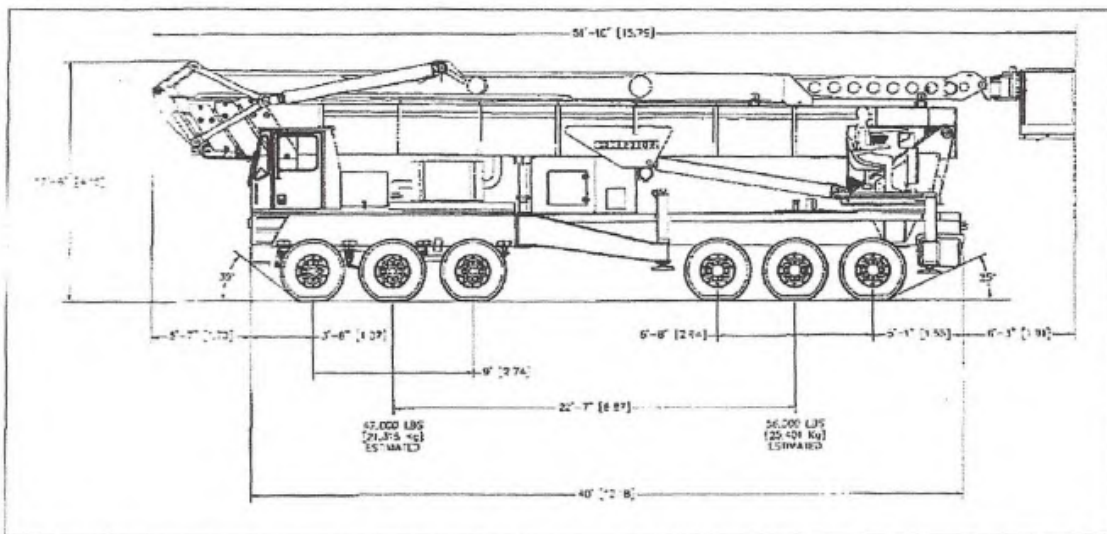


Figure 2. Example Aerial Lift Crane to be Used During Construction (Roadable Length 52 Feet; Width 8 Feet 6 Inches)

Exhibit 10

The following is a summary of anticipated equipment to be used for each transmission-line construction activity.

- Survey work: pickup trucks or ATVs.
- Timber removal: pickup trucks, feller bunchers, dump trucks, wood chippers.
- Road construction: pickup trucks, bulldozers, motor graders, and water trucks.
- Hole digging, installation of directly embedded structures, or foundation installation: pickup trucks, 2-ton trucks, digger derrick trucks, hole diggers, bulldozers, concrete trucks, water trucks, cranes, hydro cranes, wagon rock drills, dump trucks, and front-end loaders.
- Hauling lattice steel members, tubular poles, braces, and hardware to the structure sites: steel haul trucks, carry alls, cranes, and forklifts.
- Assembly and erection of structures: pickup trucks, 2-ton trucks, carry alls, cranes, and a heavy lift helicopter.
- Wire installation: pickups, wire reel trailers, diesel tractors, cranes, 5-ton boom trucks, splicing trucks, three drum pullers, single drum pullers, tensioner, sagging dozers, carry-alls, static wire reel trailers, bucket trucks, and a light duty helicopter.
- Final cleanup, reclamation, and restoration: pickup trucks, 2-ton trucks, bulldozers, motor graders, dump trucks, front-end loaders, hydro-seed truck, and water trucks.

The highest level of traffic will be when the wire stringing operations begin while several other operations are occurring at the same time, which will likely include ROW clearing, installing foundations, hauling steel, and assembling and erecting structures. For the station work, the highest level of traffic will be during site grading and foundation installation. For the communication station sites, the highest level of traffic will be during grading and site preparation.

Detailed estimates of trips generated by transporting Project construction equipment will be provided by the construction contractor prior to construction.

3.1.3 Traffic Related to Timber Removal

In forested areas, the Project will require removal of timber from the Project ROW and for construction and improvement of access roads. Specific timber harvest plans have not been finalized. Logs from timber clearing may be transported to nearby sawmills. Decisions regarding transportation routes for harvested timber will be made following completion of a timber harvest plan, and the number of log truck tips will be estimated when the timber harvest plan has been finalized. Logging slash will remain onsite if possible. For additional discussion regarding removal of timber in forested areas, see Exhibit K, Attachment K-2, ROW Clearing Assessment.

3.1.4 Impacts to V/C Ratios

Based on the estimated trip generation numbers in Tables 4 and 6, a maximum of approximately 1,294 daily one-way vehicle trips are expected within any one construction spread. To facilitate traffic and other analyses, the two construction spreads are divided into smaller sections based on similar construction windows and seasonal weather restrictions. Not all construction sections will have the same number of concurrent construction activities, depending on how the construction contractor sequences and executes the Project. Some sections will have fewer daily vehicle trips. For the purposes of the traffic analysis, the spreads are divided into five sections with multi-use areas that could have additive traffic impacts. The sections are assumed to have approximately equal levels of activity. The 1,294 daily one-way trips per spread divided over five sections of more concentrated traffic results in 259 daily one-

Exhibit 11

City of La Grande Ordinance Number 3242,
Series 2018
Page 252 of 312

ARTICLE 6.6 – PUBLIC STREET STANDARDS

SECTION 6.6.001 - PURPOSE

Upon the request of the La Grande City Council, a variety of street design standards have been reviewed and are now incorporated in the Land Development Code.

SECTION 6.6.002 - CLASS I IMPROVEMENT STANDARDS

This classification will cover those streets that are designed to meet the standards for an expected life of twenty (20) years or more. The attached drawings shall be the minimum standard for those streets in this classification. All streets designated as Federal Aid Urban Streets (F.A.U.) shall be constructed under these design standards. Streets in this designation shall be constructed with sidewalks when at all possible in an effort to increase pedestrian safety. Collector streets are designed to withstand normal trucks of an HS 20 loading. Larger trucks are to utilize Arterial streets where at all possible. This level of development shall be the ultimate goal for all streets within the City of La Grande.

Possible means of financing available for this Class shall be methods A, B, C, D, E, F, G, and H in Section 6.6.006.

A. Advantages

1. The construction life is extended to a period above other City standards.
2. The visible aesthetics in relationship to having curbs and a blacktop surface with landscaping or concrete driveways and a sidewalk is generally appealing to the public.
3. Easy maintenance for the Public Works Department for cleaning and minor repair.
4. Storm sewer drainage is confined within the bounds of the curbs during minor flooding periods.
5. Parking is restricted to a solid barrier, that being the curb; this restricts parking in the area on the back side of the curb and confines travel to the street surface.
6. Defined areas for possible cross walks, signs, power poles, and other utilities that are restricted to the outside areas behind the curbs.
7. It allows for a wide range of financing methods and is to City standards for a ten (10) year Bancroft bonding.
8. Provides a dust free surface.

B. Disadvantages

1. The extreme high level of cost that is incurred with this type of development.

SECTION 6.6.003 - CLASS II IMPROVEMENT LEVEL

Streets constructed in this classification shall be constructed to the same standards as Class I Streets with the exception of the form of drainage system. These streets shall meet the standards as shown on the attached drawing. This level of construction shall be only utilized in substitution for Class I Streets when it is determined by the City Council at the recommendation of the City Engineer or Engineering Superintendent, that an adequate drainage system cannot be installed for a Class I Street.

Exhibit 12

Transportation and Traffic Plan

Boardman to Hemingway Transmission Line Project

Table 6. Construction Vehicle Trips per Day per Construction Spread

Construction Crew Type	Construction Vehicles					
	Light Construction Vehicles			Heavy Construction Vehicles		
	Number of Pickups/ Mechanic Trucks (per day)	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)	Number of Other Vehicles	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)
Substation Construction	20	2	40	5	2	10
ROW Clearing	9	4	36	5	4	20
Roads/ Pad Grading	9	4	36	9	2	18
Foundations	9	2	18	5	8	40
Tower Lacing (assembly)	27	2	54	0	0	0
Tower Setting (erection)	20	2	40	0	0	0
Wire Stringing	9	4	36	9	4	36
Restoration	3	2	6	0	0	0
Blasting	5	4	20	0	0	0
Material Delivery	20	8	160	12	2	24
Mechanic and Equipment Mgmt.	5	6	30	0	0	0
Refueling	0	0	0	5	4	20
Dust Control	0	0	0	5	4	20
Construction Inspection	5	8	40	0	0	0
Concrete Testing	5	4	20	0	0	0
Environmental Compliance	9	6	54	0	0	0
Surveyors	5	3	30	0	0	0
Totals	—	—	620	—	—	188

Exhibit 13

7/24/2019

Roadway Design Manual: Minimum Designs for Truck and Bus Turns

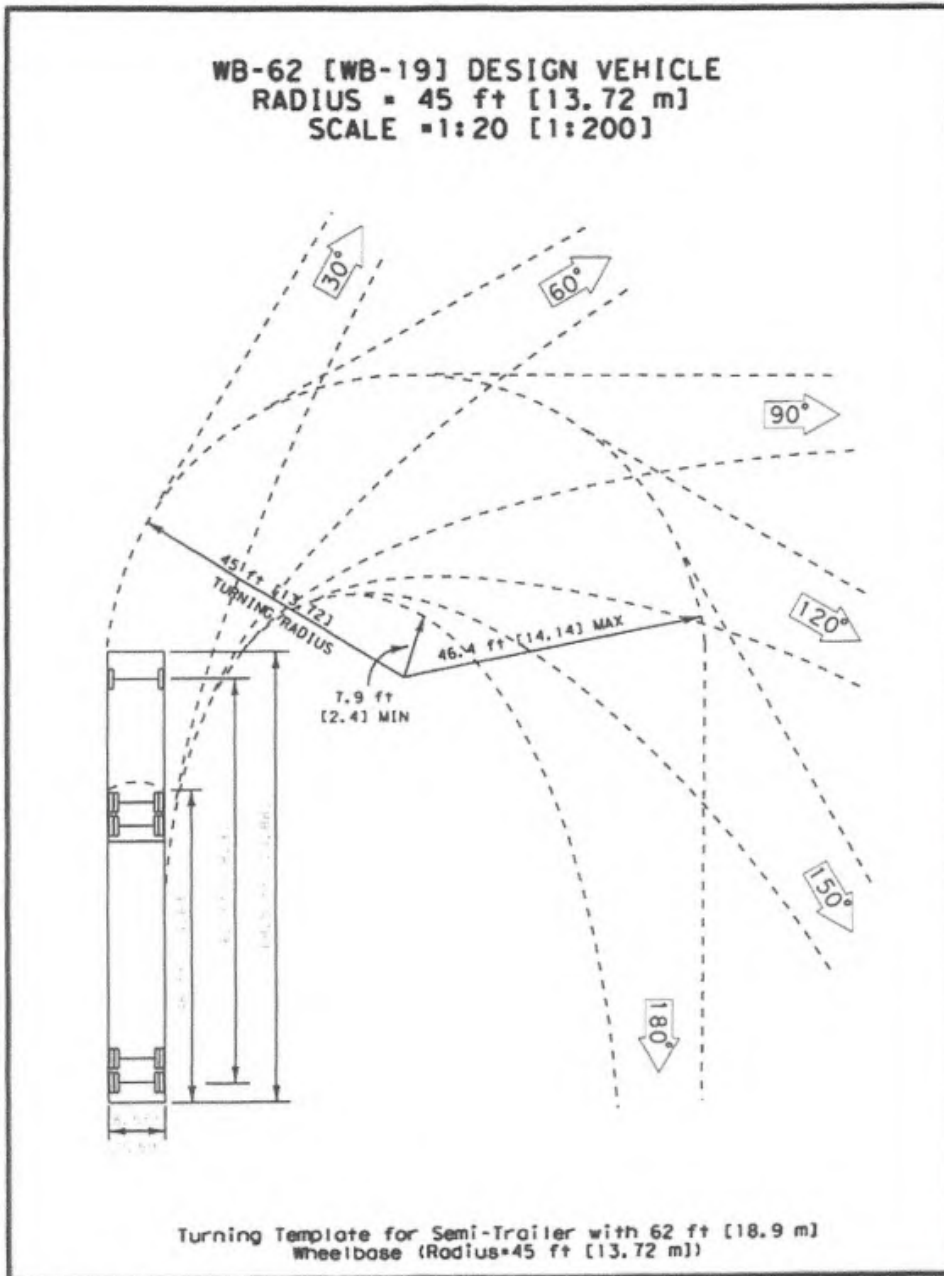


Figure 7-4. Turning Template for Semi-Trailer with 62 ft [18.9 m] Wheelbase, (not to scale). Click [here](#) to see a PDF of the image.

7/24/2019

7-1.png (596x805)

Exhibit 14

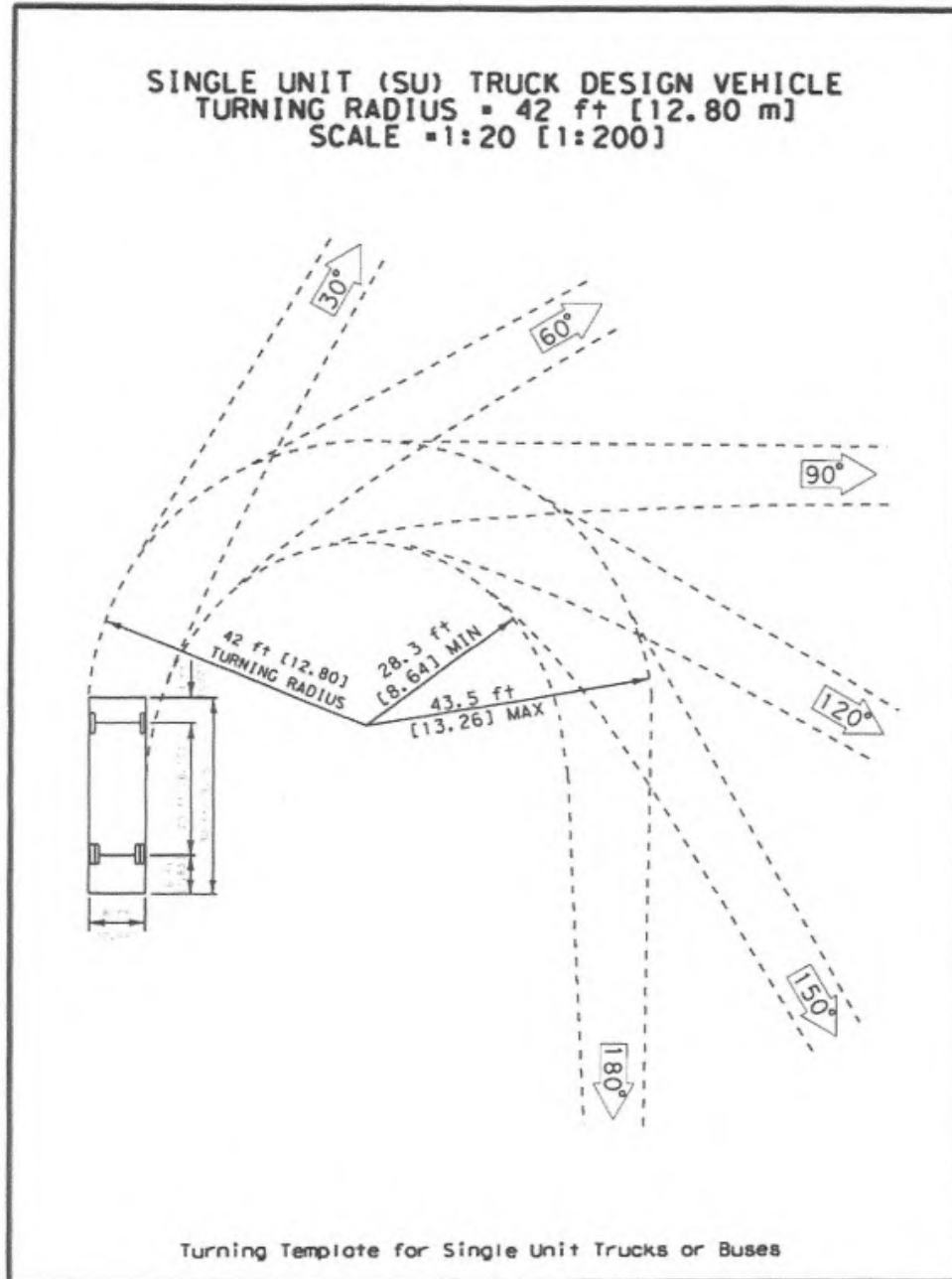


Exhibit 15

**CITY OF LA GRANDE
ORDINANCE NUMBER 3077
SERIES 2009**

**AN ORDINANCE CONTROLLING VEHICULAR AND PEDESTRIAN TRAFFIC, PARADES
AND PROCESSIONS AND ISSUANCE OF PERMITS; PROVIDING PENALTIES; AND
REPEALING ORDINANCE NUMBER 2845, SERIES 1993; ALL AMENDING ORDINANCES
AND ALL OTHER ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH;
AND DECLARING AN EFFECTIVE DATE**

THE CITY OF LA GRANDE ORDAINS AS FOLLOWS:

Section 1. This Ordinance may be cited as the City of La Grande Uniform Traffic Ordinance.

Section 2. APPLICABILITY OF STATE TRAFFIC LAWS.

Oregon Revised Statutes, Chapter 153, and the Oregon Vehicle Code, ORS Chapter 801 and 822, as now constituted, are adopted by reference. Violation of an adopted provision of those chapters is an offense against the City.

Section 3. DEFINITIONS

In addition to those definitions contained in the Oregon state Motor Vehicle Code, the following words or phrases, except where the context clearly indicates a different meaning, shall mean:

a. Alley

A street or highway primarily intended to provide access to the rear or side of lots or buildings in urban areas and not intended for through vehicular traffic.

b. Bicycle

A bicycle is a vehicle that:

1. Is designed to be operated on the ground on wheels;
2. has a seat or saddle for use of the rider;
3. is designed to travel with not more than three (3) wheels in contact with the ground;
4. is propelled exclusively by human power; and,
5. has every wheel more than fourteen inches (14") in diameter or two (2) tandem wheels, either of which is more than fourteen inches (14") in diameter.

c. Bicycle Lane

That part of the highway, adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

d. Bicycle Path

A public way, not part of a highway, which is designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

e. Block

The part of one side of a street lying between the two (2) nearest cross streets.

f. Central Business District

Exhibit 16

ORDINANCE NUMBER 3077
SERIES 2009
Page (8)

a. City Regulation of Special Movement of Oversized Load

The applicant shall submit an application to the City Manager or designee, showing the terminal points of the purported movement; the proposed route; the nature of the movement requested, including the weight and dimensions of the vehicle, load, machine, building, or structure to be moved; the time, date and duration of the proposed movement.

b. Special Movement Permit

A permit shall be required to move any vehicle, structure, or load on, or to access a street when, after preparation for movement, the vehicle, structure or load exceeds fourteen feet (14') in height, requires the use of guy wires, or could result in the blockage of a street. An approved application may serve as a permit, and a copy of the approved application shall be provided to the applicant.

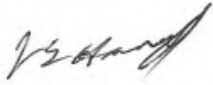
Section 17. TRUCK ROUTES

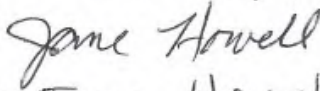
- a. It shall be unlawful for any person, firm, or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes.
- b. Any vehicle with a gross weight over 26,000, pounds specifically picking up deliveries or making deliveries to any business or residence located on a street that is not a truck route will be exempted if the vehicle is driven from the truck route to the destination in the shortest, most direct, and safest route.
- c. The use of Jacob brakes shall not be allowed within the city limits of La Grande, Oregon.
- d. Truck routes will be posted as follows:
 1. Walnut street north from the city limits to C Avenue;
 2. C Avenue east from Walnut Street to Gekeler Avenue;
 3. Gekeler Avenue east to the city limits;
 4. 12th street south from Gekeler Avenue to the city limits;
 5. 2nd Street south from the city limits to Adams Avenue;
 6. Monroe Avenue east from Spruce Street to Highway 82;
 7. Jackson Avenue east from Spruce Street, and
 8. Spruce Street south from the city limits to Monroe.

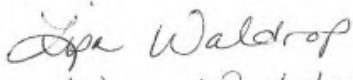
Section 18. IMPOUNDMENT AND DETENTION OF VEHICLES

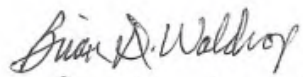
- a. Whenever a vehicle is placed in a manner or location that constitutes an obstruction to traffic or a hazard to public safety, a police officer or enforcement officer shall order the owner or operator of the vehicle to remove said vehicle. If the vehicle is unattended, the officer or enforcement officer may cause the vehicle to be towed and stored at the owner's expense. The owner shall be liable for the costs of towing and storing, notwithstanding that the vehicle was parked by another or that the vehicle was initially parked in a safe manner but subsequently became an obstruction or hazard.

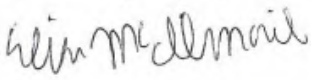
I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE 
PRINTED NAME James E. Howell II
ADDRESS 482 Modelaire Dr
EMAIL j.howell2@frontier.com

SIGNATURE 
PRINTED NAME Jane Howell
ADDRESS 482 Modelaire DR
EMAIL d.janehowell@gmail.com

SIGNATURE 
PRINTED NAME Lisa Waldrop
ADDRESS 475 Modelaire Dr.
EMAIL ldjw62@gmail.com

SIGNATURE 
PRINTED NAME BRIAN D. WALDROP
ADDRESS 475 MODELAIRE DR.
EMAIL bdwaldrop58@gmail.com

SIGNATURE 
PRINTED NAME EUSE McILMAIL
ADDRESS 476 MODELAIRE DR.
EMAIL mcilmail154@hotmail.com


I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL

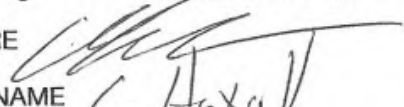

Jessie Huxell
472 Modelaire Dr. LaGrande OR 97850

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL

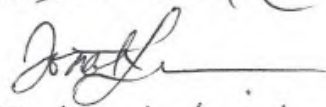

C. Huxell
472 Modelaire Dr. LG, OR 97850
CHRIS Huxell @ EMAIL.COM

SIGNATURE

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Jonah Lindeman
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EMAIL


Blake Bars
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1101 G Ave La Grande
blakebars@gmail.com

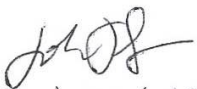
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SIGNATURE 
PRINTED NAME D. Dale Mammox
ADDRESS 405 Balsa, La Grande, Or
EMAIL d.mammox@conl.com


SIGNATURE 
PRINTED NAME Jim Kreider
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SIGNATURE 
PRINTED NAME Judie Arritola
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EMAIL jtol@charter.net


SIGNATURE 
PRINTED NAME Pasco Arritola
ADDRESS 603 Modelaire La Grande, OR
EMAIL PSTOLA@CHARTER.NET


SIGNATURE 
PRINTED NAME JOHN BALUTE
ADDRESS 484 HAWTHORNE LG, OR 97850
EMAIL


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SIGNATURE 
PRINTED NAME Andrea Galzow
ADDRESS 486 Hawthorne DR, LA Grande
EMAIL foreverfamily33@aol.com

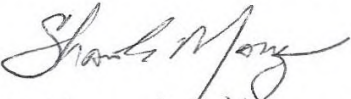
SIGNATURE 
PRINTED NAME Frances E. Lillard
ADDRESS 471 madelaire Dr. L.G.
EMAIL

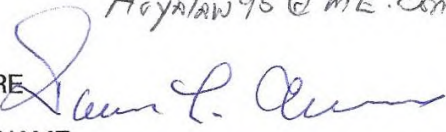
SIGNATURE 
PRINTED NAME Brent H. Smith
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EMAIL smith brent@gmail.com


SIGNATURE 
PRINTED NAME M. Jeannette Smith
ADDRESS 410 Allium Street
EMAIL jeannetterampson@gmail.com

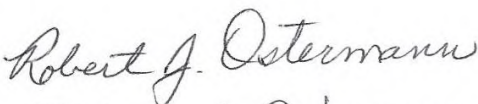
SIGNATURE 
PRINTED NAME KIMBERLEY HEITSTUMAN
ADDRESS 2409 CENTURY LP, LA GRANDE, OR 97850
EMAIL kimheitstuman@hotmail.com


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SIGNATURE: 
PRINTED NAME Shawn K. Mangum
ADDRESS 2909 E. M. Ave,
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SIGNATURE 
PRINTED NAME
ADDRESS Dennis L. AUER 541-9637720
410 BALSA STREET LAGRANDE, OREGON 97858
EMAIL N/A

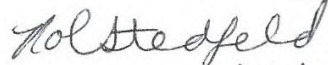
SIGNATURE 
PRINTED NAME Linda Snyder
ADDRESS 491 Modelaire
EMAIL


SIGNATURE 
PRINTED NAME Robert J. Ostermann
ADDRESS 495 Modelaire Dr. La Grande, OR 97850
EMAIL

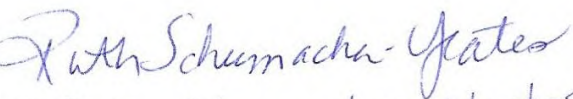
SIGNATURE 
PRINTED NAME Robin J. Ostermann
ADDRESS 495 Modelaire Dr La Grande, OR 97850
EMAIL

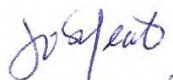
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SIGNATURE 
PRINTED NAME Jonathan D. White
ADDRESS 485 Modelaire Dr
EMAIL jondwhite418@gmail.com


SIGNATURE 
PRINTED NAME Robin Stedfeld
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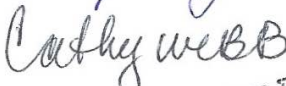
SIGNATURE 
PRINTED NAME Rita Allen
ADDRESS 410 Balsa St. La Grande Or.
EMAIL

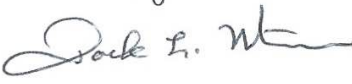
SIGNATURE 
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SIGNATURE 
PRINTED NAME JOHN YEATES
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EMAIL jyeates52@gmail.com


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SIGNATURE 
PRINTED NAME LOIS BARRY
ADDRESS P.O. Box 566, La Grande, OR 97850
EMAIL loisbarry31@gmail.com

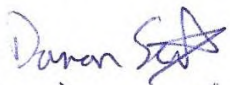
SIGNATURE 
PRINTED NAME CATHY WEBB
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EMAIL hunkski@gmail.com


SIGNATURE 
PRINTED NAME Jack L. Martin
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EMAIL Buff Martin 27 @ @ G Mail . com

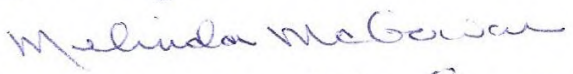
SIGNATURE 
PRINTED NAME GERALDINE BRASETH-PALMER
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EMAIL 


SIGNATURE 
PRINTED NAME Jean BAPH
ADDRESS 1509 MADISON AVE LaGrande, OR 97850
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I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE 
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SIGNATURE 
PRINTED NAME Cory Sexton
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SIGNATURE 
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SIGNATURE 
PRINTED NAME Laura Elly Hudson
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EMAIL ellyhudson@gmail.com

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SIGNATURE *Gary D. Pierson*
PRINTED NAME Gary D. Pierson
ADDRESS 489 Modelaire Drive, La Grande OR 97850
EMAIL -

SIGNATURE *Lynn Wheeler Duncan*
PRINTED NAME LYNN WHEELER DUNCAN
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EMAIL rlvw1910@gmail.com

SIGNATURE *Anne G. Cavinato*
PRINTED NAME Anne G. Cavinato
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EMAIL acavinat@ecu.edu

SIGNATURE *Joe Horst*
PRINTED NAME JOE HORST
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EMAIL joehorst@ecni.com

SIGNATURE *Angela Sherer*
PRINTED NAME ANGELA Sherer
ADDRESS 91 - W. Hawthorne Dr. LaGrande, OR 97850
EMAIL asherer@frontier.com.

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Robert J. Sherer*
PRINTED NAME Robert J. Sherer
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SIGNATURE *Heather M. Null*
PRINTED NAME Heather M. Null
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EMAIL hnull@comi.com

SIGNATURE *Bert R. Frewing*
PRINTED NAME Bert R. Frewing
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EMAIL jeanfrewing@gmail.com

SIGNATURE *Lindsay McCullough*
PRINTED NAME Lindsay McCullough
ADDRESS 406 Balsa St., La Grande, OR 97850
EMAIL lindz_mm91@hotmail.com

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

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SIGNATURE *Merle E. Comfort*
PRINTED NAME MERLE E. COMFORT
ADDRESS 2009 SCORPIO DRIVE LA GRANDE OR 97850
EMAIL MERLECOMFORT@GMAIL.COM

SIGNATURE *Robin L. Maille*
PRINTED NAME Robin Maille
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EMAIL r.maille@icloud.com

SIGNATURE *Bruce C Kevan*
PRINTED NAME *Bruce C*
ADDRESS 1511 W Ave LG
EMAIL bruce.kevan@lagrandesd.org

SIGNATURE *Carol S. Summers*
PRINTED NAME CAROL S. SUMMERS
ADDRESS 2811 Belketer Ln - La Grande, OR
EMAIL carolsummers1935@gmail.com

SIGNATURE *Caroline Kaye Juniper*
PRINTED NAME Caroline Kaye Juniper
ADDRESS 406 NTH St. LaGrande - OR 97850
EMAIL

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SIGNATURE *Gerald D. Juniper*
PRINTED NAME *Gerald Darwin Juniper*
ADDRESS *406 4th St. LaGrande OR. 97850*
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:28 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposal Order 5/23/2019
Attachments: Scan 2019-8-15 17.14.06.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter sign by me and 46 other residents of La Grande expressing our concerns regarding the B2H Project and requesting that EFSC Deny the Site Certificate.

I have also sent a bound copy of this material by US Postal Service.

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, Oregon. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the predicted noise levels resulting from construction and operation of the proposed Boardman to Hemingway Transmission Line Project. I would like to address the noise coming from the blasting and rock breaking specifically above the area at the top of Modelaire Drive 1 both to the north and the south of that area and also the construction traffic noise that that will impact the west hills and the area below.

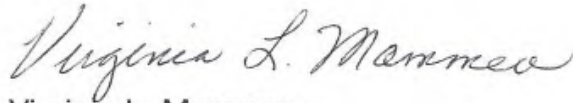
In Exhibit X page X-9 3.3.1.1 2 blasting and rock breaking is mentioned saying that "Modern blasting techniques include the electronically controlled ignition of multiple small explosive charges in an area of rock that are delayed fractions of second, resulting in a total event that is generally less than a second. Impulse (instantaneous) noise from blasts could reach up to 140dBA at the blast location or over 90 dBA within 500 feet." This sounds oh so "don't worry about it, it will be OK just over in a split second." Living in this area off Modelaire Drive, I don't find this at all comforting. And the fact that this will be overseen by properly licensed personnel and all of the necessary authorizations doesn't help anything either.

The area in question, which for such inordinate construction is extremely close to many residents, has been my home for over 50 years and during

related medical problems and exhibit various reactions to loud noises.¹⁰
These children also live in the neighborhoods to be affected by the noise
so they would be impacted coming and going to school, at home and also
while at school. To impose the constant possibility of loud noises is cruel,
disrespectful and totally unacceptable. ¹¹

For a project like this involving blasting and heavy machinery noise so
close to homes, schools, and medical facilities impacting hundreds of
peoples' daily lives, the day to day agitation, wondering what is coming
next, fear and being on constant alert are not just addressed by some type
of mitigation but must be addressed by a route that is much less impactful
to peoples' safety, sanity, and health.

Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

gmammen@eoni.com

Exhibit 1

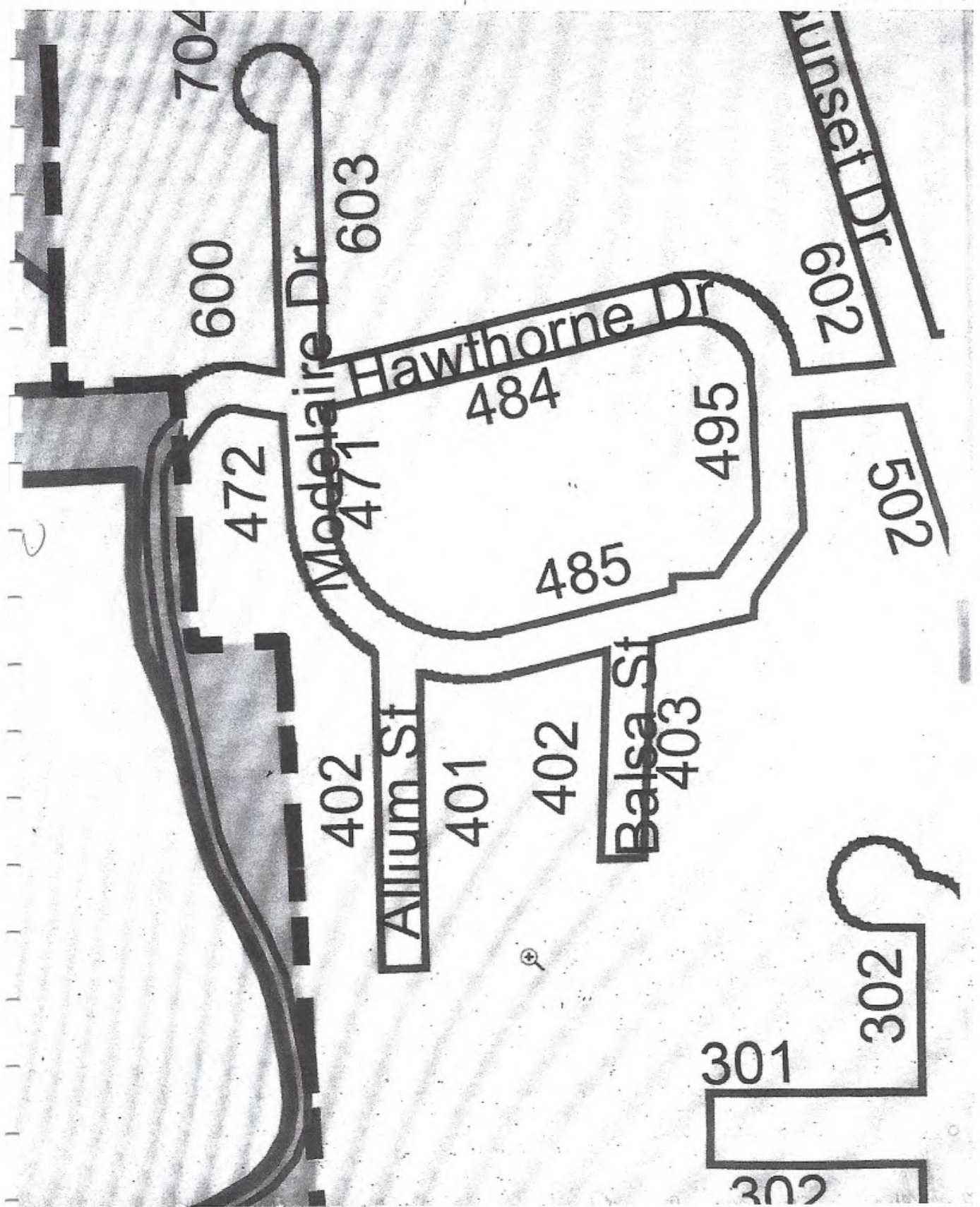


Exhibit 2

Boardman to Hemingway Transmission Line Project

Exhibit X

1 **3.3 Predicted Noise Levels**

2 OAR 345-021-0010(1)(x)(A): Predicted noise levels resulting from construction and operation
3 of the proposed facility.

4 **3.3.1 Construction Noise**

5 **3.3.1.1 Predicted Construction Noise Levels**

6 Project construction will occur sequentially, moving along the length of the Project route, or in
7 other areas such as near access roads, structure sites, conductor pulling sites, and staging and
8 maintenance areas. Overhead transmission line construction is typically completed in the
9 following stages, but various construction activities may overlap, with multiple construction
10 crews operating simultaneously:

- 11 • Site access and preparation
- 12 • Installation of structure foundations
- 13 • Erecting of support structures
- 14 • Stringing of conductors, shield wire, and fiber-optic ground wire

15 The following subsections discuss certain construction activities that will periodically generate
16 audible noise, including blasting and rock breaking, implosive devices used during conductor
17 stringing, helicopter operations, and vehicle traffic.

18 **Blasting and Rock Breaking**

19 Blasting is a short-duration event as compared to rock removal methods, such as using track rig
20 drills, rock breakers, jackhammers, rotary percussion drills, core barrels, or rotary rock drills.
21 Modern blasting techniques include the electronically controlled ignition of multiple small-
22 explosive charges in an area of rock that are delayed fractions of second, resulting in a total
23 event duration that is generally less than a second. Impulse (instantaneous) noise from blasts
24 could reach up to 140 dBA at the blast location or over 90 dBA within 500 feet.

25 Lattice tower foundations for the Project typically will be installed using drilled shafts or piers;
26 however, if hard rock is encountered within the planned drilling depth, blasting may be required
27 to loosen or fracture the rock to reach the required depth to install the structure foundations.
28 Final blasting locations will not be identified until an investigative geotechnical survey of the
29 analysis area is conducted during the detailed design.

30 The contracted blasting specialist will prepare a blasting plan that demonstrate compliance with
31 applicable state and local blasting regulations, including the use of properly licensed personnel
32 and the acquisition of necessary authorizations. The Framework Blasting Plan is set forth in
33 Exhibit G, Attachment G-5.

34 **Implosive Devices**

35 An implosive conductor splice consists of a split-second detonation with sound and flash.
36 Implosive splicing activities are anticipated to be limited to daytime hours. A blasting plan will be
37 developed by an individual certified and licensed to perform the work. The plan will
38 communicate all safety and technical requirements including, but not limited to, delineation of
39 the controlled access zone and distance away from residences.

Exhibit 3

Public Services

OAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

OAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

OAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (OAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (OAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

OAR 345-024-0010 and 345-024-0015

- This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety.
- Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

OAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4a

8/5/2019

Oregon Secretary of State Administrative Rules

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Chapter 340

Division 35

NOISE CONTROL REGULATIONS

340-035-0035

Noise Control Regulations for Industry and Commerce

(1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 7, except as otherwise provided in these rules. [Table not included. See ED. NOTE.]

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind energy facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies. [Table not included. See ED. NOTE.]

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b)-(f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind energy facility may conduct measurements to determine the actual ambient L10 and L50 background level.

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with wind speed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient background level" does not include noise generated or caused by the wind energy facility.

(III) The noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 8), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. The easement or covenant must authorize the wind energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

Exhibit 4b

8/5/2019

Oregon Secretary of State Administrative Rules

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

Exhibit 5a

Controlling the Adverse Effects of Blasting

This module addresses the control of offsite impacts that result from blasting, namely:

- vibrations,
- airblast, and
- flyrock.

Much of the information in the module is derived from the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The performance standards apply to all surface coal mines. Similar standards have been adopted on some State and local levels and applied to non-coal blasting operations such as quarrying and construction.

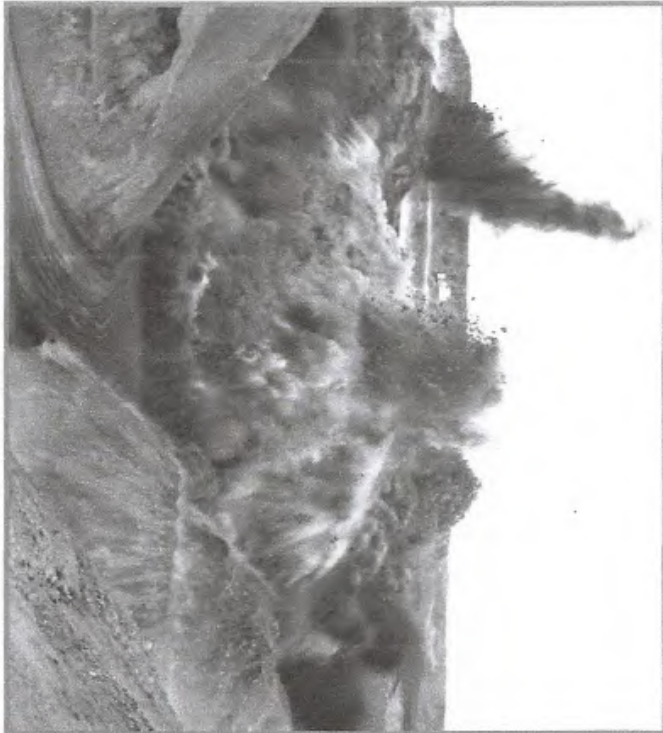
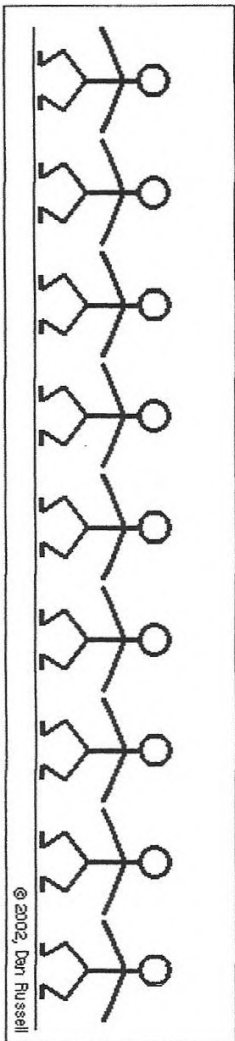


Exhibit 5b

Part I: Ground Vibrations, Airblast, and Flyrock

Explosive energy is used to break rock. However, the use of this energy is not 100-percent efficient. Some of the energy escapes into the atmosphere to generate *airblast or air vibrations*. Some of the energy also leaves the blast site through the surface soil and bedrock in the form of *ground vibrations*.



Both air and ground vibrations create waves that disturb the material in which they travel. When these waves encounter a structure, they cause it to shake. Ground vibrations enter the house through the basement and airblast enters the house through the walls and roof.

Airblast may be audible (noise) or in-audible (concussion). When outside a house the blast may be heard because of the noise, however noise has little impact on the structure. The concussion wave causes the structure to shake and rattles objects hanging on walls or sitting on shelves. This "interior noise" will alarm and startle people living in the house.

Flyrock is debris ejected from the blast site that is traveling through the air or along the ground. Flyrock the single most dangerous adverse effect that can cause property damage and personal injury or death.

Exhibit 5g

Blasting Impacts on Structures

Both above-ground and below-ground structures are susceptible to vibration impacts. Structures can include onsite mine offices and buildings, as well as offsite residences, schools, churches, power-transmission lines, and buried pipelines. Some of these structures may include historic or cultural features sensitive to even low levels of vibrations.



It is important to understand:

1. the causes of ground vibrations and airblast, and
2. what practices can be followed to control and minimize the adverse effects

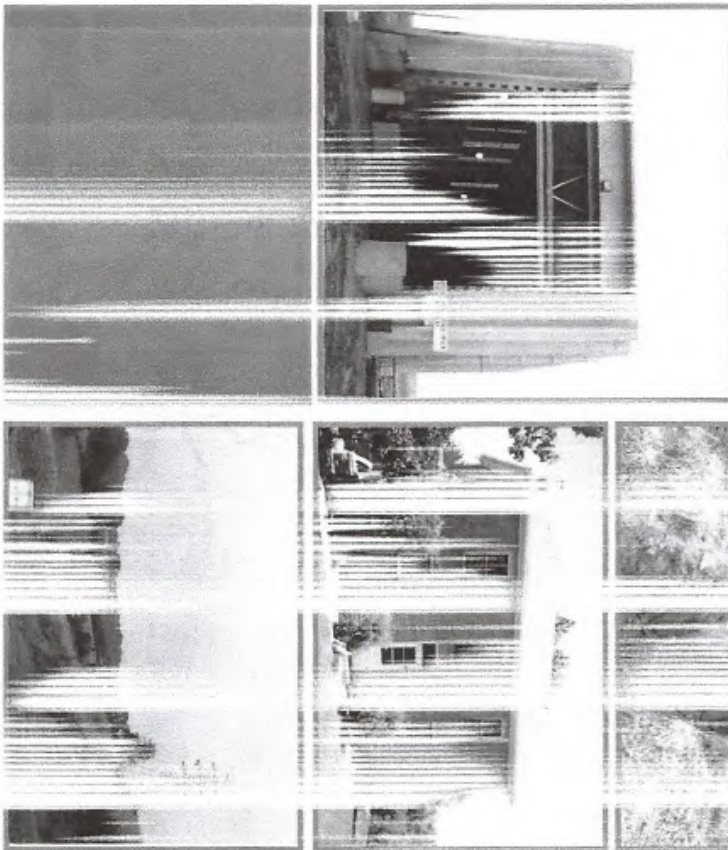
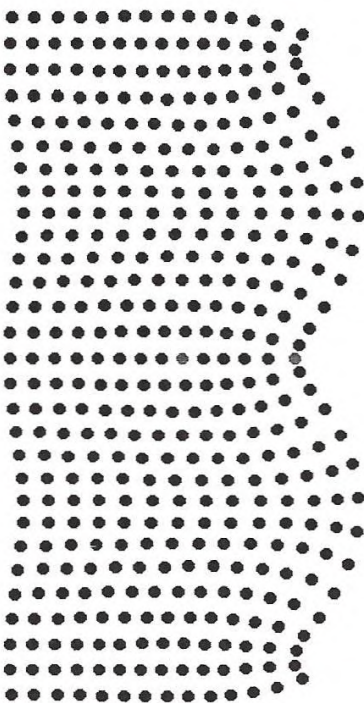


Exhibit 5d

Ground Vibrations

Ground vibrations propagate away from a blast site as Rayleigh (or surface) waves. These waves form a disturbance in the ground that displaces particles of soil or rock as they pass by. Particle motions are quite complicated. At the ground surface (free boundary), measured particle motions have the greatest displacements, and displacements decrease with depth (see the illustration below). At a depth of between 20 to 50 feet below ground surface, particle displacements are barely detectable. Structures that are well coupled to the ground tend to move with this motion; structures buried in the ground are less affected by surface motions.



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Ground vibrations are measured in terms of **particle velocity** and are reported in inches per second (ips) or the speed at which a particle of soil or rock moves.

At typical blasting distances from residential structures, the ground only moves with displacements equal to the thickness of a piece of writing paper. In terms of displacement, this equates to hundredths of an inch; visually, such movement cannot be detected.

Structure Response

Exhibit 5 F

As ground and air vibrations reach a structure, each will cause it to shake. Structure response is dependant on the vibration characteristics (frequency and amplitude) and structure type.

Ground Vibrations enter the house through the basement. This is like shaking the bottom of a flag pole. Movement at the top of the pole depends on how (frequency) and how hard (amplitude) the bottom of the pole is shaken. If shaken at just the right pace, or at the pole's natural frequency, the top will move significantly compared to the bottom. Motion at the top is amplified from the bottom motion.

All blast damage studies have measured incoming ground vibrations at the ground surface. The observed structure amplifications were typically between 1 to 4 times the ground vibration. Structure response below ground level is the same or less than the incoming vibrations

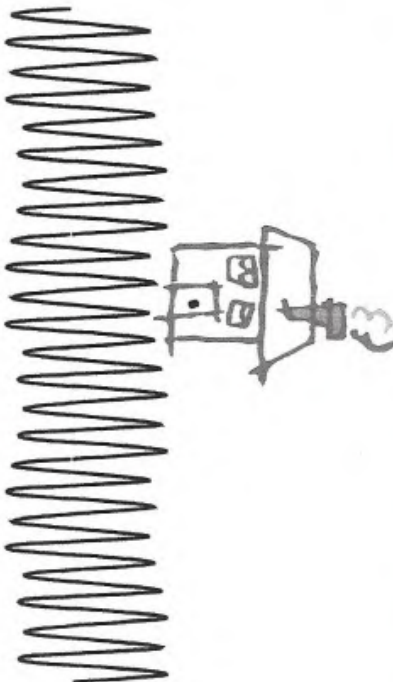
Airblast enters the house through the roof and walls. Like ground vibrations, the frequency and amplitude of the vibrations affect structure response. However the low frequency events (concussion) that most strongly affect structures is normally only a one or two cycle event.

Due to the different arrival times of ground and air vibrations, occupants may feel two distinct impacts on the house.

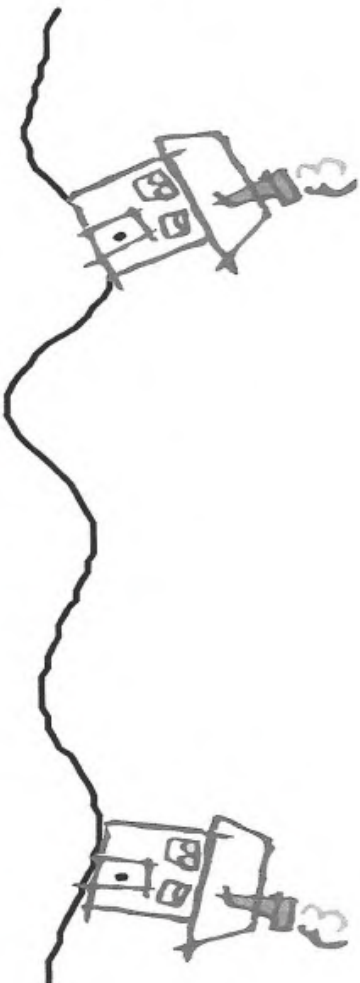


Ground Vibration Structure Response

Exhibit 5g



On the other hand, low-frequency wave cycles are long as compared with the dimensions of structures. Accordingly, low frequencies tend to efficiently couple energy into structures and to promote higher-amplitude, long-duration shaking.



High frequencies do not promote structure shaking. The length of a single high-frequency wave cycle is short as compared with the dimension of a structure. A structure does not significantly respond to high frequencies.

8/4/2019



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A noisy problem - Harvard Health

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A noisy problem

People often become more sensitive to noise as they age, which can affect their mental and physical health.

Published: March, 2019



Image: © Juanmonino/Getty Images

Are you more sensitive to noises than you used to be? Do certain sounds now feel too loud and jarring? Don't worry; it's actually quite normal.

Age-related hearing loss is common among older adults and affects about two-thirds of men in their 70s and 85% of men ages 80 and older. Although it's not clear why, this can also make people hypersensitive to sounds that they used to tolerate easily, which in turn can affect their well-being.

"Exposure to noises from crowds, traffic, and other everyday sounds can become harder to tolerate and increase stress levels, leading to anxiety and a reduction in overall quality of life," says Dr. Stephanie Tompkins, an audiologist with Harvard-affiliated Massachusetts Eye and Ear. "As your sensitivity to noises increases, this can lead to greater isolation, too, as you may try to avoid potentially noisy places and situations."

Exhibit 7a

8/4/2019

Hospital Noise: How Noise Reduction Helps Patients Heal



UVM Medical Center Blog (<https://medcenterblog.uvmhealth.org>) » Blog (<https://medcenterblog.uvmhealth.org/blog/>) »
Quiet in the Hospital: How Noise...

Quiet in the Hospital: How Noise Reduction Helps Patients Heal

on June 7, 2018 (<https://medcenterblog.uvmhealth.org/innovations/hospital-noise-reduction/>) in Innovation (<https://medcenterblog.uvmhealth.org/category/innovations/>) by UVM Medical Center (<https://medcenterblog.uvmhealth.org/author/uvmmedcenter/>)

Noise. It is present in almost every aspect of our lives. From the traffic in the streets, to the fan that provides us white noise in the background to sleep, noise exists. Unfortunately, like stress, too much of it can have a negative impact on a person's health and rest. Some sounds we do like to hear, such as birds chirping, signaling spring in Vermont, but what about sounds in a hospital?

Many of us get admitted to hospitals when we are too sick to take care of ourselves at home. We expect exceptional care from physicians and nurses and, of course, to rest in order to help our bodies heal. We understand that some noises in a hospital are necessary for care; however, others simply aren't.

The Sounds of a Hospital

Many organizations, including the UVM Medical Center, have high tech equipment, which greatly assists in the delivery of care to our patients, but can also be noisy. Sometimes, healthcare providers are the source of the noise as we interact and communicate with our patients and other health team members.

Another factor is visits from families and friends during visiting hours. It is difficult when one's roommate is trying to rest in the opposite bed. Yet, we need to be cognizant of noise in patient care areas as sounds can be magnified and misinterpreted, increasing agitation and even confusion for some patients.

We become accustomed to the noise; our patients are not.

The Research on Noise, Quiet, and Healing

8/4/2019

Hospital Noise: How Noise Reduction Helps Patients Heal

Exhibit 76

Research has shown that noise plays a negative role in healing and that decreasing noise in patient care areas aids in healing processes and helps facilitate speedier recoveries for patients. Patients are able to heal, sleep better and recover more quickly when able to rest. A quieter environment can also help decrease burnout for hospital staff.

Studies show that patients are more likely to develop negative side effects from a noisy hospital, such as sleep disturbances, elevated blood pressure and heart rate, and increased use of pain medications.

Noise can also increase annoyance levels for staff. One study indicated noise, such as talking inside and outside patient rooms, is the most common source of noise as well as visitors' voices, TVs, and behaviors of other patients.

Research concluded that best practices to eliminate noise from talking included staff education about noise reduction, public indicators such as sound monitors, a quiet time protocol, and lower cost environmental fixes, such as fixing noisy doors and squeaky wheels. Lastly, by introducing scripting with routine monitoring, patients' perception of quietness increased and the perception of noise decreased.

How We Address Noise at the UVM Medical Center

We introduced the "Culture of Quiet" Organizational initiative. The Nursing Professional Governance Patient and Family Experience Global council continued this work. After convening a small task force of nurses and assessing current quiet strategies, we introduced the following tactics:

- Many hospital units have designated 'quiet hours' with automatically dimming of lights at quiet hour intervals.
- Signage is visible in most patient care areas to help keep patients, family, and visitors aware. Throughout the hospital, you will see signs with a relaxing pair of Adirondack chairs and the sun setting with details on when a unit has quiet hours.
- Many semi-private rooms have windows in doors, so doors can be closed allowing for patient rest.
- We offer headphones for TVs and earplugs to help minimize sounds.
- In-patient kits contain a sleeping mask and other comfort items that can be provided at time of admission. Each kit contains a card and explains, 'the best healing occurs in a quiet environment.'
- New education material is available for staff, patients and visitors-just ask to review the next time visiting.
- Some units offer white noise machines, others have this built in.
- Noisy equipment such as wheels and doors can be tagged and replaced.
- Our facility and distribution staff have changed their cleaning and supply delivery schedules to accommodate patient care.
- Healthcare teams within the hospital are focusing efforts to cluster patient care to minimize interruptions to provide restful moments.

How you can help us.

We ask patients and visitors to hold us accountable when sounds are too loud. We want our community to alert us when noise levels are high and we will do what we can to minimize sound. In turn, we ask that all members of the healthcare team, patients, family, and friends be aware to keep voices soft, cell phones on vibrate, and hold each other accountable for these are the times of the day when our patients take pause to rest and positively impact their healing.

8/4/2019

Dangerous Decibels: Hospital Noise More Than a Nuisance | RN.com

Exhibit 8a

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Dangerous Decibels: Hospital Noise More Than a Nuisance

By Diane Sparacino, Staff Writer

Imagine a world where hospitals have become so noisy that the annoyance has topped hospital complaints, even more than for the tasteless, Jell-O-laden hospital food (Deardorff, 2011). If you're a nurse, you know that we're already there – with noise levels reaching nearly that of a chainsaw (Garcia, 2012). In fact, for more than five decades, hospital noise has seen a steady rise (ScienceDaily, 2005).

But it wasn't always that way. At one time, hospitals were virtually noise-free like libraries – respected spaces, preserved as quiet zones. The culture was such that a loud visitor might be silenced by a nurse's purposeful glare or sharply delivered "Shhh!" As early as 1859, the importance of maintaining a quiet environment for patients was a topic for discussion. In Florence Nightingale's book, "Notes on Nursing," she described needless noise as "the most cruel absence of care" (Deardorff, 2011).

Fast forward to 1995, when the World Health Organization (WHO) outlined its hospital noise guidelines, suggesting that patient room sound levels not exceed 35 decibels (dB). Yet since 1960, the average daytime hospital noise levels around the world have steadily risen to more than double the



Exhibit 8b

8/4/2019

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acceptable level (from 57 to 72 dB), with nighttime levels increasing from 42 to 60 dB. WHO found that the issue was not only pervasive, but high noise levels remained fairly consistent across the board, despite the type of hospital (ScienceDaily, 2005).

Researchers at Johns Hopkins University began to look into the noise problem in 2003. They maintained that excessive noise not only hindered the ability for patients to rest, but raised the risk for medical errors. Other studies blamed hospital noise for a possible increase in healing time and a contributing factor in stress-related burnout among healthcare workers (ScienceDaily, 2005).

Technology is, of course, partly to blame. State-of-the-art machines, banks of useful alarms, respirators, generators, powerful ventilation systems and intercoms all add up to a lot of unwanted racket. When human voices are added to the mix, (i.e., staff members being forced to speak loudly over the steady din of medical equipment), it's anything but a restful environment. For the recovering patient in need of sleep, that can be a real issue (Deardorff, 2011).

Contributing to the problem, experts say, are the materials used in hospitals. Because they must be easily sanitized, surfaces cannot be porous where they could harbor disease-causing organisms. Rather than using noise-muffling materials like carpet, acoustic tiles and other soft surfaces, hospitals have traditionally been outfitted using smooth, hard surfaces – especially in patient rooms. Good for cleanliness – not so great for dampening sounds, which tend to bounce around the typical hospital (Deardorff, 2011).

Which brings us to the most recent research, published January 2012 in the *Archives of Internal Medicine*. In the report, Jordan Yoder, BSE, from the Pritzker School of Medicine, University of Chicago, and his colleagues associated elevated noise levels with "clinically significant sleep loss among hospitalized patients," perhaps causing a delay in their recovery time (Garcia, 2012). During the 155-day study period, researchers examined hospital sound levels. The numbers far exceeded (WHO) recommendations for average hospital-room noise levels, with the peak noise at an average 80.3 dB – nearly as loud as a chainsaw or electric sander (85 dB), and well over the recommended maximum of 40 dB. And while nights tended to be quieter, they were still noisier than recommended allowances, with "a mean maximum sound level of 69.7 dB" (Garcia, 2012).

Perhaps most interestingly, the researchers broke down the sources of noise into categories: "Staff conversation (65%), roommates (54%), alarms (42%), intercoms (39%), and pagers (38%) were the most common sources of noise disruptive reported by patients" (Garcia, 2012). "Despite the importance of sleep for recovery, hospital noise may put patients at risk for sleep loss and its associated negative effects," they wrote. In addition, researchers found that the intensive care and surgical wards had some work to do in dampening noise levels, with ICU peaking at 67 dB and 42 dB for surgical areas. Both far exceeded WHO's 30 dB patient room recommendation (Garcia, 2012).

Besides patient sleep deprivation, which itself can lead to a multitude of health problems including high blood sugar, high blood pressure and fatigue, studies have reported that elevated noise levels can increase heart and respiratory rates, blood pressure and cortisol levels. Recovery room noise causes patients to request more pain medication, and preterm infants "are at increased risk for hearing loss, abnormal brain and sensory development, and speech and language problems when exposed to prolonged and excessive noise" (Deardorff, 2011).

There is still more research to be done, of course, but Yoder and his colleagues had good news, as well; much of the hospital noise they identified is modifiable, suggesting that hospitals can take steps to successfully create a quieter environment for both patients and healthcare providers (Garcia, 2012).

Exhibit 3

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Around the country, "quiet campaigns" have been launched by hospitals in an attempt to dampen nighttime noise. Besides dimming lights and asking staff to keep their voices down at night, they are working to eliminate overhead paging systems, replace wall and/or floor coverings – even the clang of metal trashcans. Northwestern's Prentice Women's Hospital in Chicago was built with noise reduction in mind, replacing the idea of centralized nursing stations with the advent of smaller, multiple stations (Deardorff, 2011)

Billed as "one of the nation's largest hospital construction projects," Palomar Medical Center in North San Diego County a state-of-the-art facility that has been designed "to encourage quietness," according to Tina Pope, Palomar Health Service Excellence Manager. Slated to open its doors this August, the hospital will feature a new nursing call system to route calls directly to staff and help eliminate the need for overhead paging, de-centralized nursing stations and clear sig lines, allowing staff to check on patients without having to leave unit doors open. With measures already in place including "Quiet Hospital" badges on staff and posters at the entrance of every unit, a "Quiet at Night" campaign (9 p.m. – 6 a.m.), and a "Quiet Champions" program that encourages staff to report noise problems, Palomar is one of a growing number of hospitals working toward a new era of quiet.

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8/6/2019

<https://knops.co/magazine/noise-and-ptsd/>

Exhibit 9
a



Noises Are Truly Horrible For People Who Have PTSD

20 Mar '2018 [Sound](#)

Noise is a really big issue for PTSD survivors: people who have mental health problems because of their traumas. How are they connected?

Almost everybody has experienced a trauma. But some traumas are more scarring than others and can even result in long-lasting mental disorders like **PTSD**, which can have an extreme impact on someone's life. It's a disorder that can develop in the brain after a horrifying experience, like war or a car crash.

Symptoms

The symptoms of PTSD are, to say the least, not pleasant. They range from nightmares about the traumatic events, disturbing thoughts and feelings, anxiety, trying to avoid anything that has something to do with the traumatic event, and an increase in the fight-or-flight response.

Around ten percent of the population suffers from PTSD, according to data from **NCBI**, a part of the US National Library of Medicine. And, remarkably enough, that percentage is the same for people who suffer from tinnitus (the sound of a constant beep in your ears). The NCBI clearly sees a link between the two.

PTSD survivors also suffer from the Exaggerated Startle Syndrome, with anxiety and actions in an extreme and irrational way too loud noises and bangs. And then there are the sounds that remind them of the sounds during the traumatic events, which can trigger memories of the

Exhibit 9b

8/6/2010

trauma or flashbacks.



Fear

PTSD can also cause a general fear of sounds: phonophobia, or a fear of some specific sounds: misophonia. Survivors of the disorder also are generally much more sensitive to sounds and perceive them as much louder than other people would.

All of this makes the life of people with PTSD very hard. If you think you are suffering from this, consult your doctor. Really, please do it. For yourself, and for the ones you love.

Do you have PTSD and would you like to tell your experiences to us? We are always very open and interested to hear what you have to say. And again: if you haven't done it yet, visit your doctor, please. Thank you!

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8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

Exhibit 10a



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PMCID: PMC3757288

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PMID: [24009598](https://pubmed.ncbi.nlm.nih.gov/24009598/)

Does noise affect learning? A short review on noise effects on cognitive performance in children

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This article was submitted to *Developmental Psychology*, a section of the journal *Frontiers in Psychology*.

Received 2013 May 14; Accepted 2013 Aug 12.

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Abstract

The present paper provides an overview of research concerning both acute and chronic effects of exposure to noise on children's cognitive performance. Experimental studies addressing the impact of acute exposure showed negative effects on speech perception and listening comprehension. These effects are more pronounced in children as compared to adults. Children with language or attention disorders and second-language learners are still more impaired than age-matched controls. Noise-induced disruption was also found for non-auditory tasks, i.e., serial recall of visually presented lists and reading. The impact of chronic exposure to noise was examined in quasi-experimental studies. Indoor noise and reverberation in classroom settings were found to be associated with poorer performance of the children in verbal tasks. Regarding chronic exposure to aircraft noise, studies consistently found that high exposure is associated with lower reading performance. Even though the reported effects are usually small in magnitude, and confounding variables were not always sufficiently controlled, policy makers responsible for noise abatement should be aware of the potential impact of environmental noise on children's development.

Keywords: noise, cognitive performance, cognitive development, children, speech perception, listening comprehension, irrelevant sound effect, classroom acoustics

8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

EXHIBIT 1012

In everyday life, cognitive tasks are often performed in the presence of task-irrelevant environmental noise. Accordingly, numerous studies on noise effects on performance have been conducted since the middle of the 20th century (for reviews see Hellbrück and Liebl, 2007; Szalma and Hancock, 2011), showing that—depending on characteristics of sounds and tasks—noise of low to moderate intensity may in fact evoke substantial impairments in performance.

Most of these studies were conducted with adults. The present review, however, will focus on studies including children. Children are especially vulnerable to harmful effects of environmental noise, as cognitive functions are less automatized and thus more prone to disruption. We will report findings concerning effects of acute noise on performance in concurrent auditory and non-auditory tasks, as well as effects of chronic noise on children's cognitive development.

Effects of acute noise on children's performance in auditory tasks

Psychoacoustic studies have consistently shown that children's speech perception is more impaired than adults' by unfavorable listening conditions. The ability to recognize speech under conditions of noise or noise combined with reverberation improves until the teenage years (Johnson, 2000; Wightman and Kistler, 2005; Talarico et al., 2007; Neuman et al., 2010). With stationary noise makers, signal-to-noise ratios (SNRs) have to be 5–7 dB higher for young children when compared to adults in order to achieve comparable levels of identification of speech or nonspeech signals, with adult-like performance reached at about 6 years of age (Schneider et al., 1989; Fallon et al., 2000; Werner, 2007). However, with maskers that vary over time, i.e., with trial-by-trial variation of the maskers' spectral composition (Oh et al., 2001; Hall et al., 2005; Leibold and Neff, 2007) or with fluctuating maskers such as single-talker speech (Wightman and Kistler, 2005), adult-like performance is usually not reached before the age of 10 years. Furthermore, children are less able than adults to make use of spectro-temporal and spatial cues for separation of signal and noise (Wightman et al., 2003; Hall et al., 2005). These findings demonstrate that children are especially prone to *informational* masking, i.e., masking that goes beyond energetic masking predicted by filter models of the auditory periphery.

Studies identified a range of linguistic and cognitive factors to be responsible for children's difficulties with speech perception in noise: concerning the former, children are less able than adults to use stored phonological knowledge to reconstruct degraded speech input. This holds for the level of individual phonemes, as children's phoneme categories are less well specified than adults' (Hazan and Barrett, 2000), but also for the lexical level since children's phonological word representations are more holistic and less segmented into phoneme units. Therefore the probability of successfully matching incomplete speech input with stored long-term representations is reduced (Nittrouer, 1996; Metsala, 1997; Mayo et al., 2003). In addition, young children are less able than older children and adults to make use of contextual cues to reconstruct noise-masked words presented in sentential context (Elliott, 1979). Concerning attention, children's immature auditory selective attention skills contribute to their difficulties with speech-in-noise perception. Children's susceptibility to informational masking has been attributed to deficits in focusing attention on auditory channels centered on signal frequencies, while ignoring nonsignal channels (Wightman and Kistler, 2005). Behavioral and ERP measures from dichotic listening paradigms provide evidence that auditory selective attention improves throughout entire childhood (Doyle, 1973; Pearson and Lane, 1991; Coch et al., 2005; Wightman et al., 2010; Gomes et al., 2012).

Owing to the mediating role of linguistic competence and selective attention, children with language or attention disorders are still more impaired than normally developing children by noise in speech perception tasks (Geffner et al., 1996; Ziegler et al., 2005, 2009). A stronger noise effect is also evident for children tested in their second language when compared to native children (Crandell and Smaldino,

8/4/2018



Walk Donate Q

Exhibit 11a

Autism & Anxiety: Parents seek help for extreme reaction to loud noise

September 5, 2018

Our 12-year-old son has autism, mild intellectual disability and anxiety attacks so severe that we end up in the emergency room. Loud noises are the worst – for example the school fire alarm, thunderstorms, a balloon popping, fireworks. Any help would be greatly appreciated.



This week's "Got Questions?" answer is by Judy Reaven, a clinical psychologist and associate professor of psychiatry and pediatrics at the University of Colorado School of Medicine and Children's Hospital Colorado, in Denver. Dr. Reaven's conducted research on the effectiveness of cognitive-behavioral therapy for anxiety in adolescents with autism, with the support of an [Autism Speaks research grant](#).

Editor's note: The following information is not meant to diagnose or treat and should not take the place of personal consultation, as appropriate, with a qualified healthcare professional and/or behavioral therapist.

Thanks for the great question. It certainly sounds like your family is experiencing a very difficult situation. Anxiety symptoms and reactions are very common in individuals with autism spectrum disorder (ASD). They can interfere with functioning across home, community and school settings.

Although your son's reaction sounds more severe than most, many people with autism struggle with a range of fears, phobias and worries. These can range from a debilitating fear of, say, spiders or the dark to chronic anxiety about making mistakes or being late.

Fortunately, recent research suggests that anxiety in children and adults who have autism is quite treatable. Often, these individuals are helped by the same or similar strategies that work well in treating anxiety in the general population.

These approaches include cognitive behavior therapy, or CBT. Cognitive-behavioral approaches are well-established, evidenced-based treatments that have become the gold standard of psychosocial treatments for anxiety. [My own research](#) and that of my colleagues has demonstrated the helpfulness of modifying cognitive-behavioral approaches to address the special needs of those who have autism.

Where to begin?

You describe a number of fears that may be related to sensory sensitivities. I recommend that you begin by consulting an occupational therapist who can assess whether your son's extreme sensitivities to noises are part of a broader sensory processing disorder. If this is the case, and if your son's fears are exclusively triggered by sensory stimuli, then his symptoms may be best addressed by a sensory-focused intervention. Many occupational therapists who specialize in autism receive special training in this area.

It's common for children with ASD and anxiety to become extremely frightened in response to sensory stimuli. Perhaps – like many individuals with autism – your son also has difficulty telling you what's scaring him. Instead, he may show his fear with extreme avoidance of a situation.

8/4/2011

For example, he might refuse to go to school after a fire drill. He might become fearful of birthday parties after being frightened by a balloon that popped unexpectedly. Other signs of extreme distress can include yelling, crying, clinging and general agitation. Because your son may have difficulty communicating, it's important to observe his behavior for these signs of distress. This can help you determine what's triggering his fears.

Avoidance versus learning to cope

Many parents go to great pains to protect their children by avoiding agitating situations. This approach is sometimes appropriate and even necessary. However, it denies individuals the opportunity to learn how to manage anxiety-provoking situations on their own.

By helping your son learn to manage his fear, you can prepare him for an unpredictable world so that he can participate in it to the maximum extent possible.

Given the severity of your son's anxiety symptoms, I suggest that you seek professional support in addition to the strategies offered here. Families whose children have milder symptoms of anxiety can try these strategies on their own – seeking professional help if symptoms worsen.

Tackling one fear at a time

I suggest making a list of your child's major fears and worries. Try to rank order them from mild to severe. To encourage success, I'd start with a mild-to-moderate fear before taking on his extreme reaction to loud noises.

Key components of a cognitive behavioral approach include introducing coping strategies such as deep breathing and "helpful thoughts" that can help a person manage fearful reactions.

For example, you can teach your son to take deep slow breaths to help manage his body's physical anxiety reactions.

"Helpful thoughts" are statements that your son can say to himself when faced with a situation that makes him anxious. For example, you can coach to your son to say, "This is a loud noise. I don't like it, but I can handle it."

To help your son to learn these strategies, I suggest you model taking deep breaths while repeating a "helpful thought" out loud.

Graded exposure

The most important step is to help your son face his fears a little at a time. We call this "graded exposure." For example, explain to your son that the two of you are going to listen to a recording of thunder. The first time, you might play the recording at a soft volume, then gradually increase the volume over time as he demonstrates increased comfort with the sounds

Or you might try watching a video of a balloon pop – perhaps with the volume off the first time. Then he can watch a real balloon pop while standing some distance away. Over time, he can move closer and closer to the balloon.

After such exercises, you can present him with small rewards for being brave and "facing fears." Remember that even a small act of bravery – such as listening to a recording of thunder for 10 seconds – represents an important step toward handling fears. It deserves to be acknowledged.

Although graded exposure may seem counterintuitive, research indicates that this strategy is the single most effective strategy for getting over a particular fear.

I wish you and your son the very best. Please let us know how you're doing with an email to GotQuestions@autismspeaks.org.

60
Pages

Additional Resources & Tools

EXPERT
OPINION

[Help for Child with Autism & Recurring Behavioral Crises: Part 2](#)

EXPERT
OPINION

[Parents Seek Help for Son with Autism and Recurring Behavioral Crises](#)

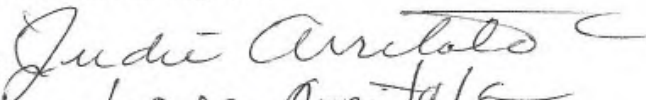


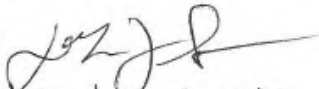
SCIENCE
NEWS


EXPERT
OPINION

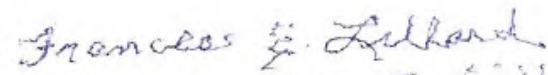
[Parents Seek Help: Child with Severe Autism Eats Only Sweets](#)


I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE 
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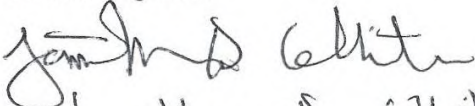
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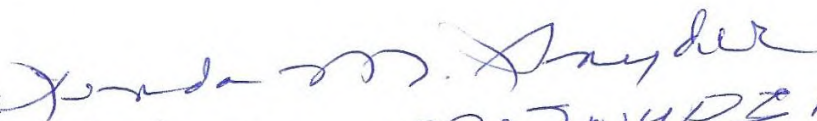
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PRINTED NAME Lonnie L. ALLEN 541-963-7720
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SIGNATURE 
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SIGNATURE 
PRINTED NAME LINDA M. SNYDER
ADDRESS 491 1770 DEHAIRE
EMAIL

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

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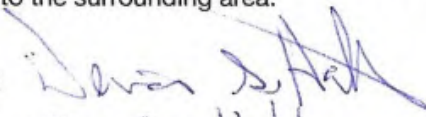
SIGNATURE *John Yeates*
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SIGNATURE *Ruth Schumacher Yeates*
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SIGNATURE *D. Dale Mammen*
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SIGNATURE



PRINTED NAME

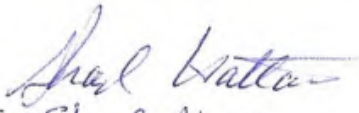
Denise Hattan

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Shad Hattan

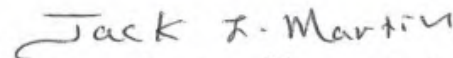
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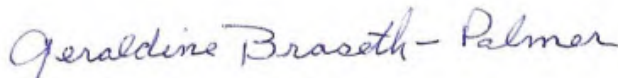
Jack L. Martin

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1412 Gildcrest Dr.

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GERALDINE BRASETH-PALMER

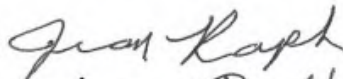
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jraph19@gmail.com

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SIGNATURE *Lynn Wheeler Duncan*
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EMAIL asherer@frontier.com

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Merle E Comfort*
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SIGNATURE *Caroline Kaye Juniper*
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ADDRESS 406 4th Street - LaGrande - OR 97850
EMAIL

SIGNATURE *Gerald D. Juniper*
PRINTED NAME Gerald Darwin Juniper
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EMAIL

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SIGNATURE *Robert J. Sherer*
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EMAIL jeanfrewing@gmail.com

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

TARDAEWETHER Kellen * ODOE

From: Zoë Symon <zesymon@gmail.com>
Sent: Saturday, June 22, 2019 5:16 PM
To: B2H DPOComments * ODOE
Subject: B2H Comment

Hello,

I'm writing today to publicly comment on the Boardman to Hemingway Transmission Line Project. As a homeowner in La Grande, Oregon, as an avid outdoors person, and as someone who cares about my community and the environment, this project concerns me greatly.

I moved to the area a few years ago and fell in love with the beauty of this valley, the local environment, and the people here. Immediately, I knew that this was a special place and that I wanted to live here. We purchased a house last year, and shortly thereafter began hearing about this thing called B2H. I looked into it and was appalled by the blatant lack of care for the rural communities, livelihoods of people in those communities, as well as the environment.

This effort, with the tagline "Clean Today, Cleaner Tomorrow" is so out of touch that it would be funny if it weren't so scary for me, my community, and the things we care about. We live in a stunningly beautiful area of the country, and all proposed routes of the line would irreparably mar the landscape and the viewshed. Not to mention, the multiple proposed routes pit neighbor against neighbor in a "anywhere but my land" type of dispute. Well, I don't want it to go anywhere near my community. I live in La Grande, I recreate at Morgan Lake, and I spend time at friends' property on Glass Hill. There is nowhere acceptable for this line to go.

This is to say nothing of the fact that no effort that damages the landscape and the environment this much should reasonable be called "clean". When fragile ecosystems and landscapes are impacted by clearcutting and more, we lose any potential benefit those areas could have brought for recreation, conservation, hunting, bird watching, and more. I also have yet to even mention hydropower. Yes, I am aware that hydropower supplies much of the energy of the Northwest, but to call this form of energy "clean" or "green" is misleading and dangerously out-of-touch. Many conservationists agree that hydroelectric dams are irreparably damaging to the ecosystems up and downstream of them, changing the environment, habitat, and wildlife. More and more consumers are also waking up to this fact, which is hard to ignore as renewable energy resources such as wind and solar are becoming increasingly affordable and cheaper than other traditional means of generating energy.

Given all this, could the need be so great to overcome such terrible obstacles? I think not. This is a lazy proposal that will provide little to no benefit to the communities through which it passes, doing much more harm than good. The listed pros are vague and non-specific, doing little to outweigh the obvious cons, and just a little research puts what "pros" there are onto shaky ground.

If I could vote on this, I would vote NO on the B2H project entirely.

Sincerely,
Zoë Symon

--
Zoë Symon



Oregon Department of Energy and the Energy Facility Siting Council

Public Hearing on the Draft Proposed Order
for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) Thomas Thompson

Mailing Address (mandatory) 2202 Gekolal Lane
La Grande, OR 97850

Phone Number (optional) 541 962 7776 Email Address (optional) thomasdalethompson@gmail.com

Today's Date: 6/20/19

Do you wish to make oral public testimony at this Hearing: Yes No

Written comments can also be submitted today.

All written comments must be received by the deadline, July 23, 2019, 5 p.m. PDT to:

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony
(Please print legibly – Use the back for additional space if needed. Additional written comments may be attached to this card.)

Page 102

1 We want you to consider the negative impact of
2 the project on the beautiful viewshed of the entire
3 La Grande valley and the entire route of this proposed
4 line throughout eastern Oregon. We want you to consider
5 the likely loss of property values that the viewshed
6 would bring with its massive towers that terribly impact
7 our enjoyment, our livelihood, our ability to bring in
8 tourists that provide very substantial amounts of money
9 to our community.

10 And we would like you to consider the impact
11 of B2H on Ladd Marsh, its watershed, its refuge for
12 waterfowl, and wildlife, and its water quality.

13 So we in Oregon Rural Action believe, and we
14 hope that you will come to agree with us, that Idaho
15 Power should abandon the B2H project and should instead
16 utilize the alternative sources of power that are
17 available to it.

18 Thank you.

19 HEARING OFFICER WEBSTER: Following
20 Mr. Thompson, we will hear from Norm Cimon.

21 MR. THOMAS THOMPSON: Good evening. My name
22 is Thomas Thompson. My address is 2202 Gekeler Lane,
23 La Grande, Oregon. I'm a landowner in the Ladd Canyon
24 area along the existing 240-line that is the proposed
25 action of the current plan.

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1 I'm not naive enough to know, I think, that
2 both proposals will be approved, and I'm unclear on the
3 decision on either/or how that decision which route to
4 take. If the line is to be built, I support the Morgan
5 Lake alternative for the following reasons:

6 My estimate is that it's shorter in its route,
7 and thus, by logic, less impact. It's located mostly
8 in, not all, but more in the proposed activity in a
9 mixed conifer forest where the moisture regimes are
10 higher. There is ability for lower seral vegetation to
11 re-establish, have to cut trees on. Hopefully most of
12 those will be native.

13 My concern on the proposed, along the existing
14 240, is the noxious weeds. I've heard testimony on the
15 threat of wildfire, but noxious weed invasion is just as
16 threatening as wildfire to landowners, especially if
17 they raise cows. When that conversion from a native
18 bunch grass to an introduced annual grass, everybody
19 knows what cheatgrass and medusa are. There is a new
20 invader on the scene called Ventenata dubia. I don't
21 see that addressed in the boilerplate vegetation
22 management plan. We have been fighting it on the
23 existing 240 with the poles that were replaced from wood
24 and steel.

25 So my fear is -- I'm retired from range and

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1 conifer forest. I managed grazing programs in the West,
2 the noxious weed programs in the West. If you don't
3 catch it right at the year or 2 years of knowing it's
4 coming with the right chemicals, the right seeded
5 grasses and follow-up, you are in trouble. And we are
6 in trouble on our land from those construction projects.

7 What was different on the construction of the
8 existing line was, in the 1960s, was they used smaller
9 machines. They crawled over the land, they dug those
10 with pneumatic drills, much like the drills they used on
11 the dams, in rock bedrock, and a lot of those holes were
12 handset by pretty tough guys. When we replaced our
13 existing poles, by worker safety standards, they added
14 those lines into every replaced pole site to get their
15 poles in, set, and with bucket trucks to prepare the
16 H-braces and stuff like that.

17 When I left, I left them with a terribly big
18 problem to deal with, and I'm losing with Ventenata
19 dubia. Please write that down, that grass.

20 In talking to Land Services, the contractor
21 for Idaho Power, it was not on the radar. They didn't
22 hear that. The guy I talked to, I think they were
23 inobservant. They do have a noxious weed manager in the
24 city of Boise, but my gut feeling is their hands are
25 filled with -- their time is dominated with southern

Page 105

1 Idaho issues.

2 The reason I support the Morgan Lake
3 alternative over the existing 240 is it avoids Ladd
4 Marsh. It avoids more designated elk winterage, the
5 county map. It avoids the viewshed of La Grande I think
6 more. For the portions that are in the county, from La
7 Grande or from the southern valley, from the viewpoints
8 of Ladd Marsh, and for those reasons -- what really
9 worries me, these last 2 minutes, is I know the problems
10 of noxious weeds, and I'm working with Idaho Power to
11 get it done.

12 But the mitigation plans, it's the landowner's
13 responsibility to determine that problem, design the
14 appropriate method to control it, monitor it to see if
15 it's working, and provide follow-up measures. They are
16 pretty much asking what do you need, if you can't do it,
17 get a contractor.

18 Once the decision is made, when, if, how, what
19 does a landowner have other than legal recourse, if they
20 are not following the plan set or they are not providing
21 the expertise and the information, or the contractors
22 they sent out to help you don't know what they are
23 doing?

24 So another issue I think with the landowners
25 is, once the power poles are in, right-of-ways are

Page 106

1 established, and let's say they put access roads down
 2 that right-of-way and use it.
 3 In eastern Oregon, trespass elk hunting is a
 4 big problem, and you want to lock your ground up so you
 5 don't spread weeds or vandals. And some of these guys
 6 are pretty ornery, to the point you need legal, just a
 7 pack of sheriffs to deal with your problems, with a
 8 person that is not going to cooperate if you ask them
 9 nicely.
 10 So I know OHV-ATV trails, they provide funding
 11 for enforcement. I think there will have to be some
 12 sort of follow-up in the mitigation plans to help
 13 landowners to enforce the promises that Idaho Power
 14 submits.
 15 HEARING OFFICER WEBSTER: Before you leave,
 16 can you repeat or spell the name of the invasive grass
 17 that you --
 18 MR. THOMAS THOMPSON: Ventenata dubia. If
 19 it's not an amoeba, if it's not in the vegetation
 20 management plan, it wasn't site specific enough. Not
 21 only the power line and poles, but the access roads.
 22 HEARING OFFICER WEBSTER: Thank you.
 23 MR. NORM CIMON: My name is Norm Cimon,
 24 C-i-m-o-n. I live at 1208 First Street. I'm a systems
 25 analyst. I'm retired but I still have my own company.

Page 107

1 I have acted as a consultant for the Stop B2H group.
 2 And I'm also a board member of the same organization
 3 that Mr. Whitaker talked about, Oregon Rural Action.
 4 I'd like to thank the Commission for making
 5 their way to La Grande to listen to our concerns. And I
 6 will be submitting a detail analysis of Exhibit H, the
 7 geology and the soils.
 8 I feel there is a weakness in the bonding,
 9 that there is some substantial problems with the route
 10 itself. I don't know that there is much choices. The
 11 fact is that the bulk of the trail, or the route that
 12 goes across the Blue Mountains goes right through severe
 13 erosion potential. So I will be submitting all of that.
 14 What I'd like to read into the record for the
 15 future is something that I know a lot about, and I think
 16 it's going to greatly impact the future. I think we
 17 need to have this stuff in the record so that people can
 18 look back, which is the age we are in now. We are
 19 talking social media; we are talking the web.
 20 Everything is public; there is no private stuff anymore.
 21 The decisions are always going to be known, whatever
 22 happens.
 23 "An Overview: The electric grid, which has
 24 remained in the same basic form for 100 years, is
 25 changing very rapidly. The introduction of battery

Page 108

1 storage, smart meters, and smart inverters is reworking
 2 the way that utilities participate in the marketplace.
 3 The pace of that change will [only] accelerate..."
 4 "The key points are as follows:
 5 "Within 10 to 15 years much of the power on
 6 the grid will come from widely distributed generating
 7 sources.
 8 "Many of these sources will be small to
 9 moderately sized providers hosted through standalone
 10 microgrids.
 11 "Top-down control of those thousands of
 12 emerging sources will no longer be viable."
 13 You can't have tens of thousands of sources
 14 managed the way we've been managing it. What we need is
 15 something that looks a lot more like the Internet. That
 16 is exactly what has been proposed by our research
 17 organizations that are looking into this.
 18 "The rules needed to provide robust management
 19 for many of those sources will mimic those of the
 20 Internet protocols which provide information from the
 21 bottom up.
 22 "Distributed generation will make the grid:
 23 More reliable, more resilient, safer to operate."
 24 That is all over the engineering journals. In
 25 fact, large power grids tend to collapse, and there is

Page 109

1 no way to stop it. It's a huge argument going on in the
 2 engineering community right now about just that. The
 3 grid in a nutshell is chaotic. You cannot predict when
 4 it's going to go down. Big stuff just makes it happen
 5 more often and bigger.
 6 "The paradigm shift will make much of the
 7 high-voltage transmission system obsolete.
 8 "That obsolescence will occur long before the
 9 proposed 50 years of financing [for this project].
 10 "The proposed Boardman to Hemingway 500kV
 11 power line is unneeded. Idaho Power's own data clearly
 12 shows that the utility's electric demand has been flat"
 13 [from 2007 to 2016]."
 14 And that's because even with population growth
 15 we are seeing efficiencies, we are seeing conservation,
 16 and we are seeing renewables. So it's all changing
 17 very, very quickly.
 18 "The existing grid will be eclipsed by a
 19 decentralized system. High-voltage, long-distance power
 20 lines will be increasingly underutilized. Moreover,
 21 such lines are inherently unstable and dangerous. They
 22 are fire hazards in arid, semi-arid, and forested
 23 environments -- the ecosystems along any proposed route
 24 for the line in eastern Oregon."
 25 Everything we have around us is fire prone.



Oregon Department of Energy and the Energy Facility Siting Council

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for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) Thomas Thompson

Mailing Address (mandatory) 2202 Bekelar Lane
LaGrande, OR

Phone Number (optional) 541-962-7788 Email Address (optional) thomasdc.thompson@gmail.com

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Kellen Tardaewether, Senior Siting Analyst
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550 Capitol Street NE
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Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony

(Please print legibly - Use the back for additional space if needed. Additional written comments may be attached to this card.)

my name is Thomas Thompson and am a landowner
along the proposed alternative (existing 240 line
alternative). In review of the B2H alternative
criteria and assuming both alternatives will
be approved ~~to~~ by the council, I support
the Morgan Lake alternative. For the

(additional space for written comments)

Following reasons:

- 1) It is the shortest thus reducing impacts
- 2) It is located in more conifer forest w/
higher moisture to help reduce noxious
weed invasion most specifically the annual
grass (ventenada debrina).
- 3) It avoids Ladd Marsh Wildlife Refuge.
- 4) Less landowners and perhaps less unwilling
~~land~~ landowners to negotiate easements with.
- 5) Avoids more county elk winter range
- 5) Avoids the City of La Grande viewshed
and residences.
- 6) Avoids the viewshed of the Southern
end of the Grand Ronde Valley.

For these reasons, we support the
Morgan Lake Alternative.



Melita Trent
2325 17th St
Baker City, OR 97614

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PERMIT NO. 3019 PM 311



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AUG 21 2019

Kellen Tordella, Senior Staffing Analyst
Oregon Department of Energy
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

01-374299



August 19, 2019

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301
email: B2H.DPOComments@Oregon.gov

B2H EFSC Exhibit K APPLICANT FAILED TO INCLUDE ALL EFU LANDS FOR
PURPOSES OF 215.275 ANALYSIS

Exhibit K, 4.1.1.4 Non-EFU Alternatives

Idaho Power failed to include all farm land in the analysis required by ORS 215.275. Of critical concern are items (4) requiring restoration of agricultural land and associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility.

And (5) requiring that there be clear and objective conditions on the application for utility facility siting to mitigate and minimize the impacts of the proposed facility, if any, on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmlands.

Idaho Power's analysis failed to include lands zoned as a combination of rangeland and farm use as farm land subject to the provisions of ORS 215.275

The failure to include all required land in the analysis results in a lack of compliance with the requirements of OAR 345-021-0010(l)(k) and OAR 345-022-0030. Due to this omission, the council cannot find the developer in compliance with ORS 469.504 or ORS 197.646 or OAR 345-022-0030.

The applicant states, "Several of the agricultural areas in the project area are zoned a combination of rangeland and farm use. Based on discussions with DLCD, IPC did not consider such hybrid zoned lands to be EFU lands for purposes of the ORS 215.278 analysis." This statement is not DOCUMENTATION as required for the application to be complete. There is no indication of who spoke with whom on what date, and nothing to document that the action actually occurred. Following is documentation taken directly from the LCDC rules that the combination zones are EFU and are required to be included in the ORS 215.278 analysis as well as the dictionary, IRS and FDA definitions of farm use which are consistent with the LCDC definition.

LCDC defines Exclusive Farm Use Zone in ORS 215.203(2)(a) as "farm use" means **the current employment of land for the primary purpose of obtaining a profit in money by raising, harvesting and selling crops or the feeding, breeding, management and sale of, or the produce of, livestock, poultry, fur-bearing animals or honeybees or for dairying and the sale of dairy products or any other agricultural or horticultural use or animal husbandry or any combination thereof.-----**"

Oxford Dictionary defines "farming" as "The activity or business of growing crops and raising livestock"

The Internal Revenue Service defines "farm" as "includes stock, dairy, poultry, fruit, furbearing animal, and truck farms, plantations, ranches, nurseries, ranges, greenhouses or other similar structures used primarily for the raising of agricultural or horticultural commodities, and orchards and woodlands."

The FDA defines "farm" as "an establishment under one ownership in one general physical location devoted to the growing and harvesting of crops, the raising of animals (or seafood), or both"

A failure to include all farm land in completing the requirements of ORS 215.275 means the applicant is not in compliance with OAR 345-022-0030 which is required in order to issue a site certificate or determine whether or not the application meets the standards. This understatement of farm lands is especially problematic due to the decision *Friends of Parrett Mountain v. Northwest Natural Gas Co.*, 336. iOr. 93, 108 (2003) requiring the determination to be "reasonable" meaning fair proper, just, moderate or suitable under the circumstances". This transmission line is being sited on a far greater percentage of agricultural private land in counties where the public land includes a much greater percent of the total lands in the counties. The omission of most agricultural lands from the 215.275 analysis also means that the stated percentage of total farm lands being taken from the counties is significantly understated.

Name: Moira Trent

Signature:



Address: 2325 17th Street, Baker City, OR 97814-2951

TARDAEWETHER Kellen * ODOE

From: C Troch <ctrochlell@gmail.com>
Sent: Sunday, August 18, 2019 4:11 PM
To: B2H DPOComments * ODOE
Subject: B2H comments

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project (B2H) 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

This letter is a public comment for the above referenced project. Specifically, this letter will discuss Idaho Power's compliance with Standard 345-022-0110 - Public Services, in Exhibit U (3.5.6.2 and 3.5.6.5) of the EFSC application for B2H to ODOE. The letter will discuss the impact potential wildfires caused by the B2H transmission line will have on the ability of public and private providers within the analysis area to provide fire protection.

The effect of transmission lines on wildfire impact in western states has been well documented. In California, PG&E lines have caused 5 of the 10 most destructive fires since 2015, producing a liability of over 30 billion dollars for PG&E. When considering the impact of B2H's operation, residents of Union County find the similarities between La Grande and Paradise California, where the infamous Camp Fire struck in 2018, deeply concerning. La Grande and Paradise share similar elevations and populations, however, La Grande has several characteristics that make it significantly more vulnerable to the ravages of wildfire than Paradise. For instance, La Grande averages 18 inches of rain yearly while Paradise enjoys 55 inches. Additionally, the proposed line runs adjacent to La Grande, while the line causing the Camp Fire was 7 miles from Paradise. Oregon's 2006 Communities at Risk Assessment by the Oregon Department of Forestry cites a startling fact: The fire risk of the wildland urban interface (WUI) in La Grande has been rated the #1 WUI fire risk in Oregon!

There is no doubt that construction of the proposed B2H transmission line would significantly increase the risk of wildfire in our area. From Idaho Power's own Draft Protection Order (Exhibit U-3.5.6.2, p. U-24): "Most activities will occur during summer when the weather is hot and dry. Much of the proposed construction will occur in grassland and shrub-dominated landscapes where the potential for naturally occurring fire is high. Project construction-related activities, including the use of vehicles, chainsaws, and other motorized equipment, will likely increase this potential risk in some areas within the Site Boundary. Fire hazards can also be related to workers smoking, refueling, and operating vehicles and other equipment off roadways. Welding on broken construction equipment could also potentially result in the combustion of native materials near the welding site." Idaho Power recognizes this hazard but makes no consideration of it in its application.

There are several specifics to examine in an analysis of the proposed B2H line's effects on Union County's ability to provide fire protection services. Firstly, firefighting crews in our region are limited and staffed by volunteers. In their application, Idaho Power avers, "Most of the fire districts within the analysis area comprise volunteers, and in some cases, it takes considerable time to collect and mobilize an entire fire crew." As well, JB Brock, Union County emergency

Manager states in Idaho Power's application "volunteer fire departments (rural fire protection districts) have a hard time finding volunteers due to budget constraints, similarly to budget constraints at the state and federal level. The wildland fires are getting bigger and cost more to fight" (U-1C-6). **Fire crews in Union County are not equipped to handle potential wildfires generated by the proposed B2H transmission line.**

The fact that fire crews are unstable, small and volunteer affects many aspects of their ability to respond to wildfires. Delayed response times, as noted in the quote from the previous paragraph, is one effect. Estimates of response time in the EFSC application are best-case scenarios. The estimate of 4 to 8 minutes as the response time in Union County (Table U-10) is far from even a best-case scenario (p. U-17). Residents that live on Morgan Lake Road concur that driving time is at least 10-15 minutes to the most accessible areas of the line from the base of Morgan Lake Road. Add to this estimate travel time from the La Grande Fire Station (approximately 7 minutes) and the time needed for individual fire fighters to travel to the Fire Station for a more realistic best-case scenario response time of over 22 minutes. If land owners are driving their livestock down the road, then no - one can proceed until they are done. Remember - the Paradise Camp Fire burned at a rate of over 1 acre per second!

Another factor is the complications to firefighting introduced by the transmission lines themselves. According to Marvin Vetter, ODOF's Rangeland Coordinator, "local crews have no training in this scenario and will wait for the lines to be de-energized." JB Brock, Union County Emergency Manager, states, "The project (transmission line) could limit the ability on initial attack if fire fighters have to wait for power lines to be de-energized." (U-1C-6)

These delays allow fires to grow even more and in the meantime homes may be lost and people may die. There is only one road in and out of this area.

Our community, struggling to maintain volunteer fire crews cannot possibly hope to address the overwhelming additional challenges and risks imposed by a giant project such as the B2H transmission line!! This is not addressed in Idaho Power's application and Idaho Power cannot therefore conclude that the proposed B2H transmission line is "not expected to have significant adverse impacts on fire protection services" (Exhibit U 3.5.6.2)! Considering the current capacities of fire protection services in Union County and the additional risks of wildfire imposed by the B2H transmission line, I urge you to act in accordance with state statute OAR 345-022-0110 and **reject Idaho Power's application to construct the Boardman to Hemingway transmission line.** In fact, I invite you to come visit our community and see for yourself this area which has only one poorly maintained county road. Please come see how this project will threaten peoples lives in so many ways for a system that will not benefit anyone in the area and may in fact be obsolete by the time it is built.

Sincerely,

Cathy Trochlell
2409 E N Ave.
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: David Trochlell <dtrochlell@gmail.com>
Sent: Tuesday, August 20, 2019 5:14 PM
To: B2H DPOComments * ODOE
Subject: Subject: B2H comments

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project (B2H) 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

This is a public comment on the above referenced project. Specifically, it addresses Idaho Power Company's (IPC) compliance with Standard 345-022-0110 - Public Services, in Exhibit U (3.5.6.2 and 3.5.6.5) of the EFSC application for B2H to ODOE. My focus is on the potential impact that wildfires caused by the B2H transmission line may have and the inadequacy of fire protection within the analysis area.

The effect of transmission lines on wildfire impact in western states has been well documented. In California, PG&E lines have caused five of the ten most-destructive fires since 2015, producing a liability of over 30 billion dollars for PG&E. When considering the impact of B2H's operation, residents of Union County find the similarities between La Grande and Paradise California - where the infamous Camp Fire raged in 2018 - deeply concerning. La Grande and Paradise share similar elevations and populations, however, La Grande has several characteristics that make it significantly more vulnerable to the ravages of wildfire than Paradise. For one, La Grande's climate is much drier than Paradise's: annual precipitation here averages 18 inches, whereas Paradise, California receives about 55 inches of precipitation. Additionally, the proposed line runs adjacent to the city of La Grande, but the line that caused the devastating Camp Fire was seven miles from Paradise. Oregon's 2006 Communities at Risk Assessment by the Oregon Department of Forestry cites a startling fact: **The fire risk of the wildland urban interface (WUI) in La Grande has been ranked as #1 (highest risk) in Oregon.**

There is no doubt that construction of the proposed B2H transmission line would significantly increase the risk of wildfire in our area. From IPC's own Draft Protection Order (Exhibit U-3.5.6.2, p. U-24): "Most activities will occur during summer when the weather is hot and dry. Much of the proposed construction will occur in grassland and shrub-dominated landscapes where the potential for naturally occurring fire is high. Project construction-related activities, including the use of vehicles, chainsaws, and other motorized equipment, will likely increase this potential risk in some areas within the Site Boundary. Fire hazards can also be related to workers smoking, refueling, and operating vehicles and other equipment off roadways. Welding on broken construction equipment could also potentially result in the combustion of native materials near the welding site." **Idaho Power recognizes this hazard, but makes no consideration of it in its application. That is appallingly irresponsible!**

There are several specifics to examine in an analysis of the proposed B2H line's effects on Union County's ability to provide fire protection services. Firefighting crews in our region are limited and are staffed by volunteers. In their application, IPC states: "Most of the fire districts within the analysis area comprise volunteers, and in some cases, it takes considerable time to collect and mobilize an entire fire crew." JB Brock, Union County Emergency Manager, mentions in IPC's application: "volunteer fire departments (rural fire protection districts) have a hard time finding

volunteers due to budget constraints, similarly to budget constraints at the state and federal level. The wildland fires are getting bigger and cost more to fight" (U-1C-6). **The plain truth is this: fire crews in Union County are not adequately equipped to control a potential wildfire generated by the proposed B2H transmission line.**

The fact that fire crews are unstable, small, and consist of volunteers affects many aspects of their ability to respond to wildfires. Delayed response times, as noted in the quote from the previous paragraph, is one effect. Estimates of response time in the EFSC application are unrealistic, best-case scenarios. The estimate of four to eight minutes as the response time in Union County (Table U-10) is far from even a best-case scenario (p. U-17). Residents who live on Morgan Lake Road concur that driving time is at least 10-15 minutes to the most accessible areas of the line from the base of Morgan Lake Road. Added to this estimated travel time from the La Grande Fire Station (approximately seven minutes) would be the time required for individual volunteer firefighters to travel to the fire station and you have a much more realistic best-case scenario response time of over 22 minutes. If a rancher is driving livestock down Morgan Lake Road, then nobody can proceed up or down this road to escape a fire until the livestock are moved off the road. Given our problematically slow response time to fires, it is more than a little frightening to remember that California's Camp Fire burned at a rate of over one acre per second!

Another factor is the complications to firefighting introduced by the transmission lines themselves. According to Marvin Vetter, ODF's Rangeland Coordinator, "local crews have no training in this scenario and will wait for the lines to be de-energized." JB Brock, Union County Emergency Manager, agrees: "The project (transmission line) could limit the ability on initial attack if firefighters have to wait for power lines to be de-energized." (U-1C-6). Any delay such as this suggests could be deadly. Homes may be lost and people may die. Please remember: **There is only one narrow, steep, and winding road (Morgan Lake Road) in and out of the local project area.**

Our community, which struggles to maintain volunteer fire crews, cannot possibly hope to respond to the overwhelming additional challenges and risks imposed by a giant project such as the B2H transmission line. This is not addressed in IPC's application, so therefore it is ridiculously short-sighted when the IPC concludes that the proposed B2H transmission line is "not expected to have significant adverse impacts on fire protection services" (Exhibit U 3.5.6.2). Considering the current capacities of fire protection services in Union County and the additional risks of wildfire imposed by the B2H transmission line, I urge you to act in accordance with state statute OAR 345-022-0110 and **please reject Idaho Power Company's application to construct the Boardman to Hemingway transmission line.** In fact, I invite you to come visit our community and see for yourself that access to the project area is extremely poor, and that allowing this transmission line to operate would be frighteningly dangerous to our community and would needlessly place our lives at risk.

Sincerely,
Dave Trochlell
2409 E N Ave.
La Grande, OR 97850



Oregon Department of Energy and the Energy Facility Siting Council

Public Hearing on the Draft Proposed Order
for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) ARNOLD F. TROPF

Mailing Address (mandatory) Box 131 Adrian OR 97901

Phone Number (optional) (541) 372-5540 Email Address (optional) _____

Today's Date: 6/19/19

Do you wish to make oral public testimony at this Hearing: Yes No

Written comments can also be submitted today.

All written comments must be received by the deadline, July 23, 2019, 5 p.m. PDT to:

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony

(Please print legibly – Use the back for additional space if needed. Additional written comments may be attached to this card.)

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<p>1 crossing the Owyhee River going through me. The Owyhee 2 River, in my eyes and pretty much anybody that lives 3 around there in that area, is wild and scenic, ladies 4 and gentlemen. We have deer and we have turkeys, wild 5 turkeys and pheasants, quail, all of that, just like 6 they do up the river. But we have people making their 7 livings and taking care of their -- pay their taxes and 8 things as well. 9 And so that's my concern of crossing over our 10 ground on the Owyhee. 11 VICE CHAIRMAN JENKINS: Ms. Webster, may I ask 12 a question of Mr. Foss? 13 HEARING OFFICER WEBSTER: You may. 14 VICE CHAIRMAN JENKINS: The first three 15 speakers that we had, Roger Findley, Gary Pearson, and 16 Jay Chamberlin, talked about crossing agricultural land 17 in the Adrian area. Is this your land that they were 18 referring to? 19 MR. JIM FOSS: This is a Nyssa address, but it 20 is, I'm assuming -- and that's all I can do -- I believe 21 it's coming across over the hill, and we live on the 22 Idaho side of the Snake River but we're in Oregon. So 23 it's not there in Adrian; it's a Nyssa address. It's 24 Rock Springs Road and Owyhee Avenue, which goes to the 25 dam, right up the Owyhee River.</p>	<p>1 today, and I've heard quite a bit about it, and there's 2 been quite of bit of friction about it. 3 And looking at this map where the line is 4 supposedly going to cross, it looks to me like on 5 Cline's Hill, around Cline's Hill there east of Harper; 6 am I right? Am I correct? 7 HEARING OFFICER WEBSTER: I can't answer the 8 question. 9 MR. ARNOLD TROPF: Well, anyway, where it 10 crosses 20/26 there between Vale and Harper. 11 I've been wondering why they can't just 12 completely eliminate going into farm ground. Going 13 south with the line, going pretty close to the mouth of 14 the Owyhee Canyon, cross the canyon, go over toward, 15 what, Blackjack Mountain and go over and hit that Glen 16 Bridger transmission line and use the right of way right 17 there and follow that transmission line right toward 18 Murphy, and then drop down into Murphy. Why can't they 19 do that rather than even to come close to this farm 20 ground? 21 And I heard that they had restrictions there. 22 They've got restrictions for ATVs and stuff. What's 23 more important? We've got to get what's most important 24 here figured out. 25 And it looks to me like they can bring that</p>
Page 47	Page 49
<p>1 VICE CHAIRMAN JENKINS: But where this pivot 2 is? 3 MR. JIM FOSS: Where the pivot is, yes. It's 4 crossing quite a bit of private ground or different 5 private ground owners there, two, maybe three. I'm not 6 real sure. I'm one of them where they've dog-legged the 7 thing down in here and then come across this versus the 8 alternate route that they have to go stay out on the 9 BLM. If I'm understanding the maps right. 10 VICE CHAIRMAN JENKINS: Thank you. 11 HEARING OFFICER WEBSTER: Thank you. 12 MR. JIM FOSS: You're welcome. 13 HEARING OFFICER WEBSTER: Just a reminder, if 14 there's anybody who hasn't filled out a green form that 15 does want to give public comment tonight, please fill it 16 out. 17 Following Mr. Tropf we will hear from Timothy, 18 I think is it Froesch or Froesch? 19 MR. TIMOTHY FROESCH: Yes. 20 HEARING OFFICER WEBSTER: Mr. Tropf, if you 21 could, provide your name and address, please. 22 MR. ARNOLD TROPF: Yes. I'm Arnold Tropf. I 23 live at 404 Main Street, Adrian, Oregon. 24 I would like to thank you for including me in 25 this oral discussion. I just heard about this meeting</p>	<p>1 line down through there west of Mitchell Butte and Chalk 2 Butte and go across the mouth of the canyon there where 3 the siphon goes across and go south and hit the Glen 4 Bridger transmission line, follow that Glen Bridger line 5 right over into Idaho and drop right down into Murphy. 6 Now, it sounds to me like that's a no-brainer. 7 So I think we better get our maps out and 8 study things because this doesn't make sense to even 9 have to come into farm ground and have a problem with 10 litigation. 11 HEARING OFFICER WEBSTER: And I will just 12 refer us back to what Ms. Tardaewether said at the 13 outset, which is that the EFSC is not talking about 14 reconfiguring at this point; it was the application came 15 forward with the sites for the transmission lines. And 16 the EFSC's job is pretty much a thumbs up/thumbs down on 17 the route that has been provided. 18 MR. ARNOLD TROPF: So it's all cut and dried 19 then on where you're going to put this line? 20 HEARING OFFICER WEBSTER: There is a proposal 21 for a line that the EFSC will either approve or not 22 approve. 23 MR. ARNOLD TROPF: So that's all I got to say, 24 but it sounds to me like they done the figuring wrong 25 when they lined this thing out.</p>

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1 HEARING OFFICER WEBSTER: Thank you for your
2 comment. Thanks.
3 Next we'll hear from Mr. -- I can't tell if
4 it's a "P" or an "F." Is it Froesch or Proesch?
5 Following Mr. Proesch we will hear from JoAnn
6 Marlette.
7 MR. TIMOTHY PROESCH: My name is Timothy
8 Proesch. I live at 2104 Lake Owyhee Road, which is a
9 Nyssa address also but closer to Adrian, as the Fosses
10 as well. So if you guys, you've been on your map and
11 looked at section 13 and tower 255/4. So I purchased
12 this property in November of last year. This was just
13 brought to my attention not even 2 weeks ago that you
14 guys have proposed to the previous owner that you guys
15 had an agreement with them to survey this land to put
16 this in. So if you look at this section 13, not only
17 are you guys putting a tower on my proposed new home
18 site, you guys are also wanting to use an existing road
19 that I use to access my irrigation for the whole
20 property, which is 113.7 acres.
21 Nobody from Idaho Power, nobody from Oregon
22 Department of Energy has contacted me. The last time
23 there was even a title search done on this property,
24 knowing it was on the market, was May of last year. So
25 we're looking at year and a half that you guys haven't

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1 done any due diligence to continue to see, knowing this
2 property was on the market. And now I feel like I'm
3 being forced into allowing this to transpire because
4 this is your guys' proposed route.
5 So I am not obligated to continue to follow
6 the contractual agreement that you guys had with the
7 previous owner for the surveying of this land. I
8 purchased this property outright from the previous
9 owner; there's no bank loan or anything on this
10 property.
11 And so I have come ill-prepared for this
12 meeting because I just found out about this, and I have
13 not been contacted by anybody; not Idaho Power, like I
14 said, not Oregon Department of Energy, nobody. This was
15 brought to light to me by my neighbors. They said, Do
16 you know about this? I said, No, absolutely not, nobody
17 has contacted me whatsoever regarding this issue. But
18 yet, the proposed route runs right through my property
19 with the tower and an access road which is going to take
20 up a huge chunk of my land.
21 So there's several issues that I am going to
22 bring to your guys' attention in my formal written to
23 you guys because, like I said, this was just brought to
24 my attention. But to have this not discussed with me
25 through any kind of proper channels and not doing a

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1 continued property search and title search on these
2 properties that impact private land, I think is kind of
3 an oversight that needs to be addressed. Because now
4 here I am owning this property for almost a year now and
5 not been contacted whatsoever regarding this, but yet,
6 your proposed site runs right on my property, and then
7 your lines are going to drape from my property and my
8 new proposed home site across that pivot that Mr. Foss
9 discussed previously.
10 So I mean, I haven't seen another map; I just
11 have the map that was presented to me by Idaho Power
12 yesterday. I talked to a representative from Idaho
13 Power yesterday, who came to my house, who showed me the
14 detailed map. And I haven't even seen whatever, the
15 other map you guys are talking about, Double Mountain.
16 So I don't even know how close that infringes on my
17 property.
18 But to have this just being brought to light
19 and you guys want to move forward with this project, is
20 kind of devastating to me, especially for the amount of
21 property that I purchased and for the price I purchased
22 it for, there's a reason I purchased this property away
23 from everything and everybody; not to be impeded on by
24 anybody else, especially a big corporation.
25 I feel kind of bullied into this whole thing.

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1 And talking with Idaho Power, we talked about the
2 eminent domain also, which I don't feel like is fair to
3 somebody who's a private landowner. Especially I
4 shouldn't have to follow a contractual agreement you
5 guys had with somebody else just for the survey of the
6 property. Here it is impeding clear through my
7 property, and it's impacting my neighbors and everybody
8 around me.
9 I have future plans for development for this
10 land, not just to have Idaho Power take up the majority
11 of my land. Like I said, if you zoom in on this, you
12 guys are taking up a huge chunk of my property. The
13 biggest chunk of my property that I have, which is like
14 88.8 acres, you guys are going to drive right through
15 the middle of it to access your guys' tower and then
16 your tower is going to be on my property, on my new
17 proposed home site that I've been planning since I
18 bought this property a year ago.
19 And to just have this brought to me, it wasn't
20 even brought to me through the proper channels, it was a
21 concerned neighbor that was concerned because he knew my
22 future plans and knew what I had done and how much money
23 and how much capital I have invested in doing this.
24 This is my life savings. Yes, I'm younger than most of
25 these people that are speaking out about this, but it's

<p style="text-align: right;">Page 66</p> <p>1 interaction with him. And one of the engineers out of 2 our department went out there yesterday and met with 3 him, just dropped everything. He had gone and went out 4 there, took a look at it. At this point, I don't know 5 that there's anything we can do that would change 6 things. We're going to have to look at things a little 7 bit more. 8 We have continued to work with a lot of 9 different landowners on various micrositing issues here 10 or there in trying to resolve issues ahead of time where 11 we can. So that's kind of where we're at with this 12 right now. 13 Mr. Proesch, as he indicated, just fairly 14 recently bought that parcel of property. We had over 15 the course of the last year, we had hired a title 16 company to go out and do title searches. We got that 17 information back certainly no more than 6 months ago. 18 And in fact, when the title company did the title 19 search, Mr. Proesch had not yet purchased that land; it 20 was a previous landowner's name who came back on the 21 results of the title search. So that's basically where 22 that's at. 23 While I have the opportunity in front of the 24 Council, I also wanted to point out and thank Roger 25 Findley and Gary Pearson for their comments earlier.</p>	<p style="text-align: right;">Page 68</p> <p>1 statement that I'm concerned with over there in Adrian, 2 Oregon. 3 HEARING OFFICER WEBSTER: So come back up. 4 MR. ARNOLD TROPF: I'm a recipient of a heart 5 pacemaker. I've got a monitor that's supposed to work 6 with cell phone connections, and I, myself, and several 7 other people in Adrian -- 8 HEARING OFFICER WEBSTER: Hang on just one 9 sec. I just want to reintroduce you. You're Mr. Trof; 10 right? 11 MR. ARNOLD TROPF: Arnold Trof. 12 And I'm very concerned about my situation as 13 far as communications. What would this, what kind of an 14 adverse effect would this have on our communications 15 being's we don't have much now with this transmission 16 line going through? Because it used to be that I used 17 to use CenturyLink through their phone network but they 18 discontinued it. So I don't have 24/7, which I need to 19 have. But I can't get transmission out of there now. 20 So I don't know what would happen if it did, if I did 21 get it, would I be able to use it with this transmission 22 line, with static? 23 HEARING OFFICER WEBSTER: At this point we are 24 here just to get public comment and not answer those 25 questions.</p>
<p style="text-align: right;">Page 67</p> <p>1 When this whole project started, I was involved with it 2 from the get-go back in 2006 when it was first 3 identified. In fact, it came out in an IRP in the 4 summer of 2006. We do a road show to talk about the 5 plan with the public. And literally that fall of 2006, 6 I was over here in this room next door explaining the 7 whole plan to everybody. I met Roger and his wife Jean 8 and Gary, along with probably about 300 other people 9 that were here that night, which has to be the largest 10 crowd we've ever had for one of our IRP meetings. 11 So anyway, I wanted to thank those folks for 12 their comments. They expressed some concerns still with 13 some routing issues, but in general I think they were 14 very complimentary to Idaho Power on the efforts we've 15 made to reach out to the public and everybody that we 16 realize is going to be impacted by this line. 17 HEARING OFFICER WEBSTER: Any further 18 questions from Council for Mr. Stokes? Thank you. 19 Has anybody joined us that would like to give 20 public comment this evening? 21 As I indicated, we will be hanging around here 22 until 8:00, but we'll go off the record, and we will 23 reconvene if we need to. But at this point I want to 24 thank you all for coming and participating. 25 MR. ARNOLD TROPF: Could I make one more</p>	<p style="text-align: right;">Page 69</p> <p>1 MR. ARNOLD TROPF: That's just another 2 concern. 3 HEARING OFFICER WEBSTER: Thank you. 4 MR. CARL MORTON: I'm Carl Morton. 5 HEARING OFFICER WEBSTER: If you would just 6 state and spell your name and address for the record. 7 MR. CARL MORTON: My name is Carl Morton, 8 M-o-r-t-o-n. We have property at 2185 Rock Springs 9 Canyon Road. 10 Our concern is that we have livestock in the 11 area, and we do have other properties next to the power 12 line that goes out toward Burns. When we're out there 13 it's very concerning because our horses can feel the 14 electricity, and the cows don't hang around it. We do 15 have irrigation systems that are aluminum, and when the 16 lightning storms come in we don't even change the water 17 just because of the issues of electricity. 18 We do have a very scenic area out there. As 19 Mr. Bowman stated, the eagles, we have deer around, we 20 have a lot of wildlife out there. And where your guys' 21 power line is going right next to our property is 22 probably within 50 feet. I'm pretty sure you wouldn't 23 like that power line next to your house. I don't want 24 to get up in the morning and see that thing or hear it. 25 We have grandkids, they're going to be around.</p>

ESTERSON Sarah * ODOE

From: Dan Turley <Dan.Turley@pgn.com>
Sent: Wednesday, August 21, 2019 3:40 PM
To: B2H DPOComments * ODOE
Cc: Dan Turley; TARDAEWETHER Kellen * ODOE
Subject: [Fortimail Spam Detected] Glass Hill Coalition Comment Letter to EFSC B2H Draft Proposed Order
Attachments: 20190820 Glass Hill Coalition Comment Letter to EFSC B2H Draft Proposed Order.pdf

Hello,

Attached comment letter submitted on the B2H Draft Proposed Order from the Glass Hill Coalition.

Sincerely,
Dan Turley

August 20, 2019

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, Oregon 97301

RE: Comments on the Boardman to Hemmingway Transmission Line Site Certificate Draft Proposed Order

The following comments are focused on ensuring the adverse impacts of the Morgan Lake Alternative west of La Grande Oregon are known to the Council and intended to identify significant issues that we believe were not fully considered in the Draft Order and should prevent the Alternative Route from being permitted.

The proposed Order recognizes the Oregon Statewide Planning Goal 4: Forested Lands (OAR 660-015-0000(4)) but we do not understand why the application of this goal does not preclude the permitting of the Morgan Lake alternative as the Proposed Route meets a specific requirement of this goal by predominately following an existing 230 kv transmission line and a natural gas line in accordance with the 'Implementation' criteria #7 from Goal 4 which specifically states - "Maximum utilization of utility rights-of-way should be required before permitting new ones." Why doesn't the fact that the Proposed Route predominately follows existing utility right-of-ways not clearly demonstrate that these right-of-ways are not fully utilized and thus should restrict the creation of a new right-of-way?

On page 168 of the Order it provides the following information:

In areas of big game winter range and critical habitat, UCZPSO 20.09(6) permits conditions to be imposed to require that new structures be located near adjacent existing structures and to share common access roads or locate near existing roads. As the applicant describes, new structures related to the proposed transmission line would follow existing electric, natural gas, and highway corridor as much as feasible in Union County.

Why would this condition not preclude the use of the Morgan Lake Alternative as both routes will go through 'big game winter range and critical habitat' yet the Proposed Route would follow an existing electrical line and gas line as specified by this condition?

As shown on the attached Idaho Power Map #67 for the Morgan Lake Alternative, between mile marker 11 and 12 the transmission line route will cross property owned by Joel Rice, this property as shown on the attached recorded survey 039-2003 has a Natural Resources Conservation Service Wetland Reserve Easement that encompasses Winn Meadow which is the head waters of Sheep Creek which flows into Rock Creek and then into the Grande Ronde River just south of Hilgard Park. With the criteria shown below from page 241 of the Order, the transmission line location will need to be moved further away from the Ladd Marsh Wildlife Area property corner resulting in this right-of-way being moved closer the meadow and associated springs that feed Sheep Creek than shown on Map #67:

Because an evaluation of an alternative with greater impacts was not completed, in order to satisfy OAR 345-022-0040(1), the Department recommends Council restrict the site boundary of

the Morgan Lake alternative to avoid crossing or siting of facility components within the protected area, as follows:

Recommended Protected Areas Condition 2: *During design and construction of the facility, if the Morgan Lake alternative route is selected, the certificate holder shall ensure that facility components are not sited within the boundary of the Ladd Marsh Wildlife Area. The certificate holder shall provide to the Department a final design map for Union County demonstrating that the site boundary and facility components are located outside of the protected area boundary.*

Why doesn't this easement on Joel's property afford this area a 'protected classification' and preclude the line from crossing or impacting its resources and other remarkable values.

The location of the line adjacent to the head waters of Sheep Creek should also be considered significant/protected as the Grande Ronde River Basin to include its tributaries continues to have declining water flows and the activities of the line construction and the creation of a utility corridor through this basin could further hinder the water flow from the springs in this small basin and thus the Grande Ronde River.

The attached photo was taken from the south end of Winn Meadow shows the relationship of the Morgan Lake Alternative route to Winn Meadow and the basin at the head end of Sheep Creek. As can be seen from the photo would also have a significant negative visual impact on this area as would the entire route as the Morgan Lake Alternative goes through predominately undeveloped forest and range lands.

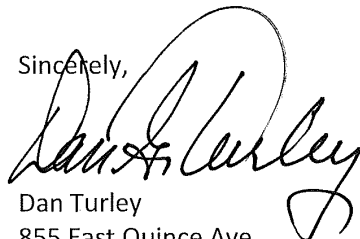
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UCZPSO 5.04: Predominantly Forestland Conditional Uses - Review Criteria

The following uses may be established on predominantly forestland parcels or tracts in an A-4 Zone subject to the review procedures identified in Section 24.03 and subject to approval by the Planning Commission based on applicable standards in Article 21.00 and the following criteria:...
3. New electrical transmission lines with right of way widths of up to 100 feet as specified in ORS 772.210.

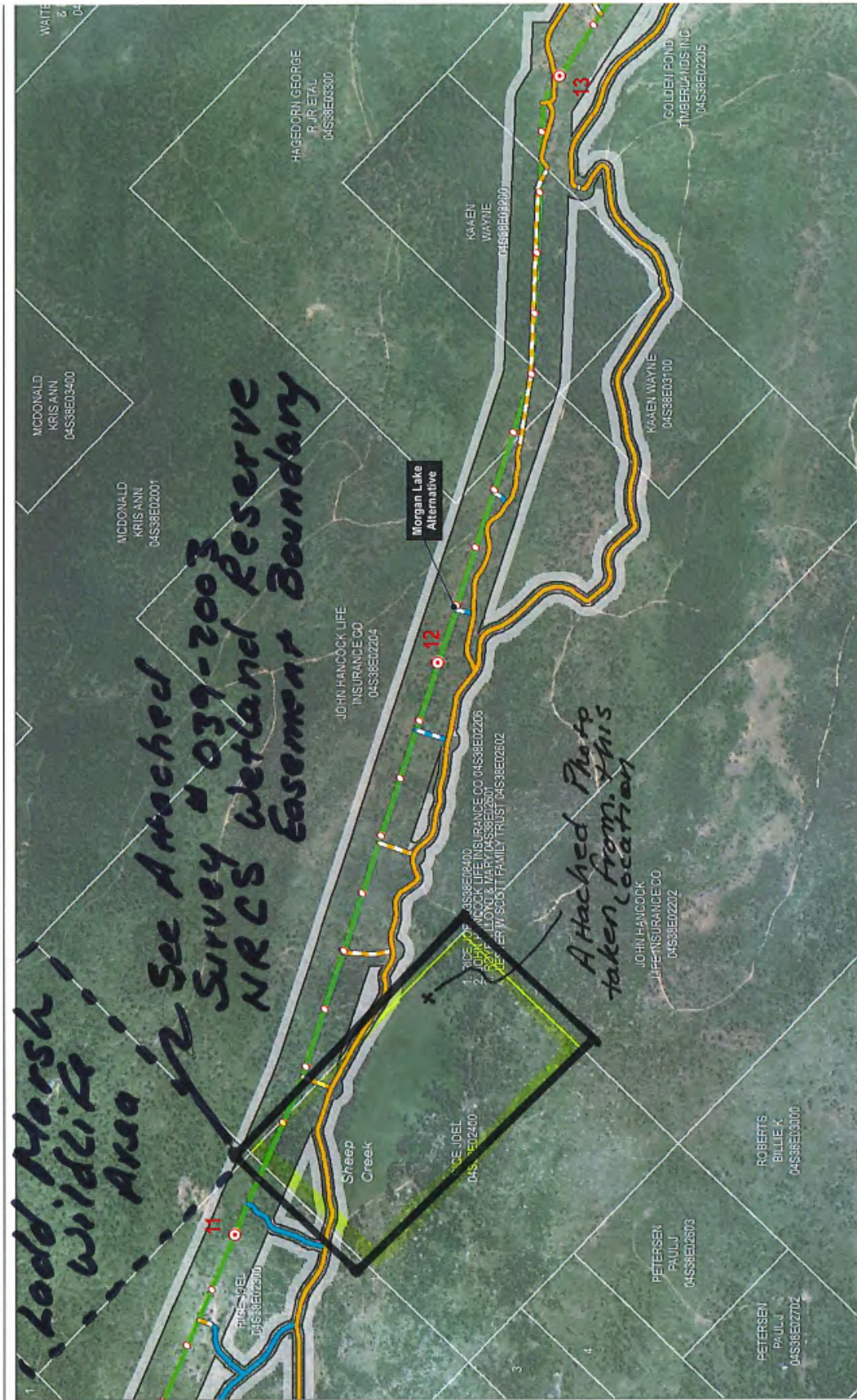
This would indicate that the right-of-way width through 'predominately forested' areas would be limited to 100 feet wide and not the 250-foot right-of-way that is stated in the Idaho Power permit application, but the proposed order does not seem to provide a requirement for this criterion to be followed?

Sincerely,



Dan Turley
855 East Quince Ave
Hermiston, Oregon 97838

Representing the Glass Hill Coalition



State or Local Parks and Recreation or Wildlife
Idaho Power Map
Union County
Map 67

Access

- Existing Road, Substantial Modification, 21-70% Improvements
- Existing Road, Substantial Modification, 71-100% Improvements
- New Road, Bladed
- New Road, Primitive

Land Status

- State or Local Parks and Recreation or Wildlife

Parcels

- Landowner Name/Parcel # (Current as of March 2016)
- Project Features
- Site Boundary (Oregon Only)
- Project Features
- Alternative
- Mileposts



0 1,000 Feet

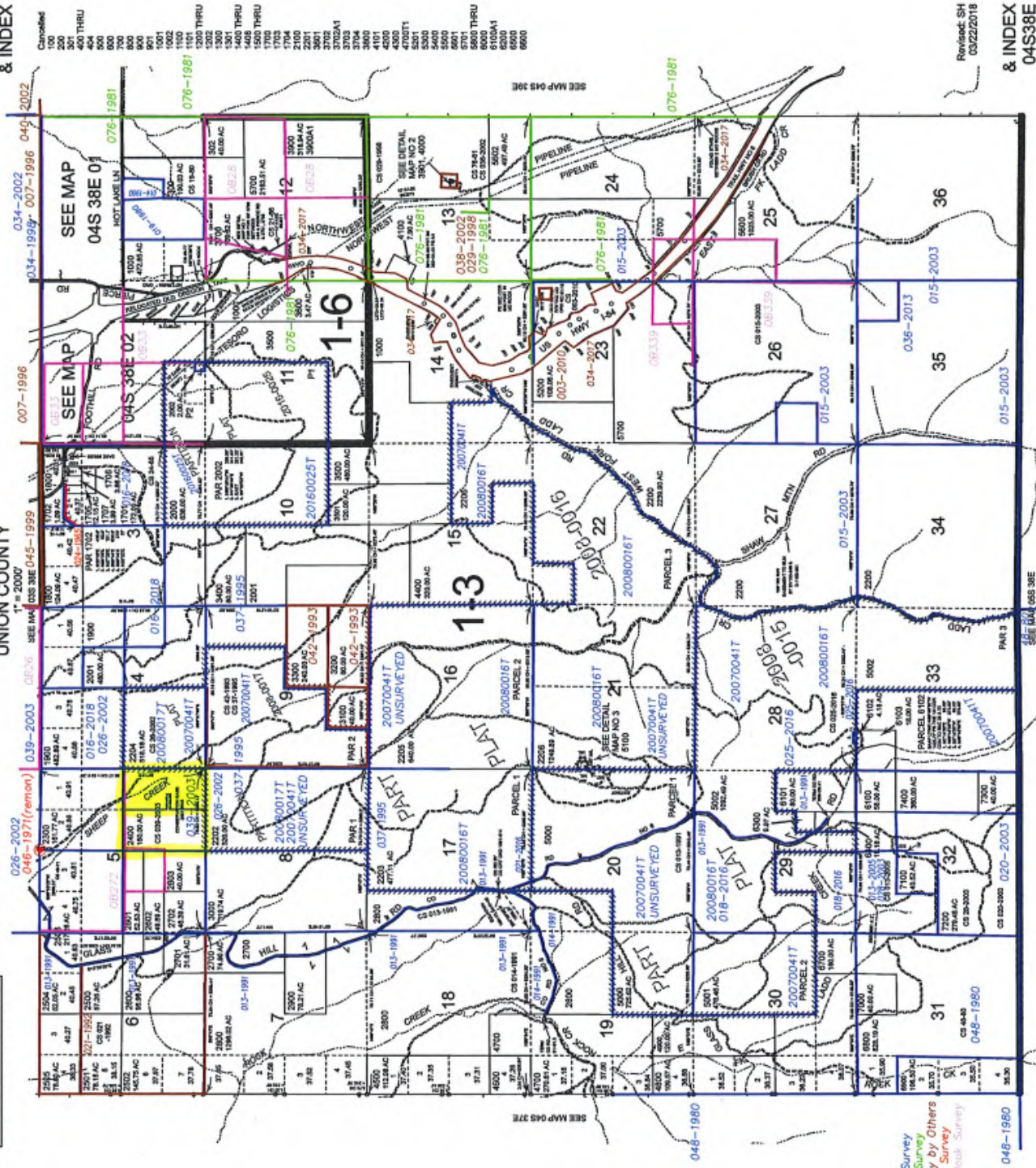
Source(s): BLM, County Assessors Office (various), IPC, Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus, DigitalGlobe, GeoEye, IGN, IPC, Swirestop

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 & INDEX

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T.4S. R.38E. W.M.
 UNION COUNTY

THIS MAP WAS PREPARED FOR
 ASSESSMENT PURPOSE ONLY



Revised: SH
 03/22/2018

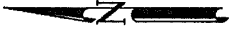
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 & INDEX

048-1990

- BGB Survey
- AFA Survey
- Survey by Others
- Voeltz Survey
- Old Break Survey

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SURVEY NUMBER 039-2003



SCALE: 1" = 300'
BASIS OF BEARING

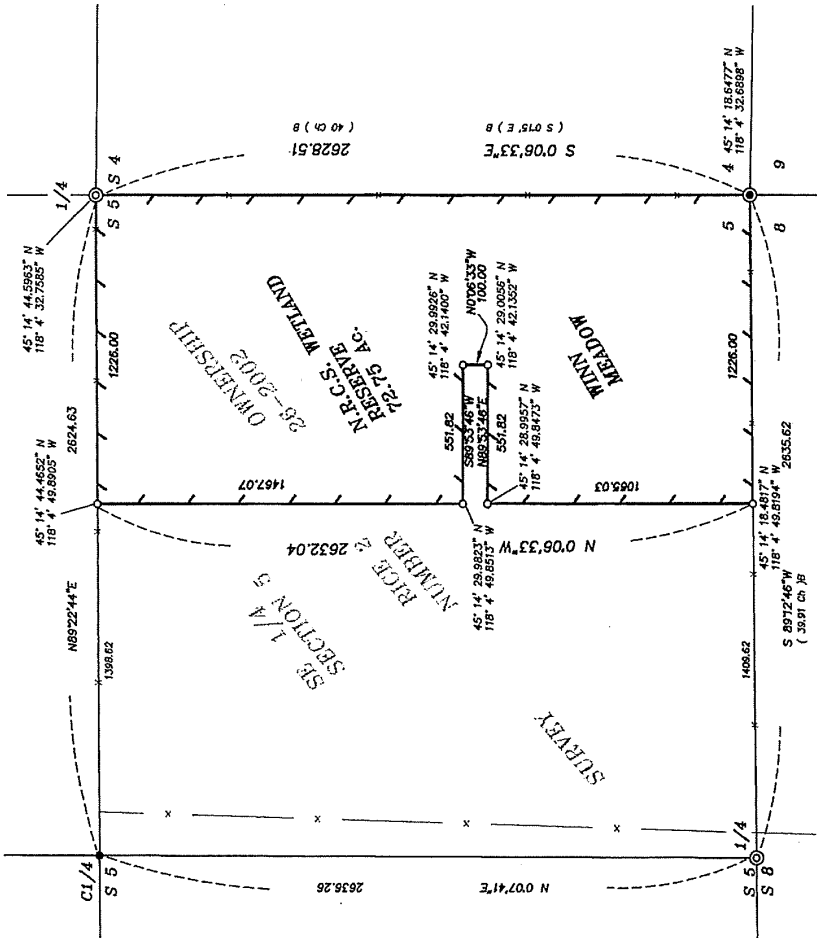
Forward bearing as published by the U.S.C. and G.S. from A. COLLEGE to A. VALLEY. Dated 1946.

LEGEND

- Set 5/8" iron pin with yellow plastic cap marked "BOB SURVEY MARKER".
- Found 5/8" iron pin with 2 1/2" aluminum cap, set by Survey number 26-2002.
- ⊙ Found 2 1/2" aluminum monument as per Union County Monumentation records.
- ⊙ Found 2 1/2" aluminum monument, set by Survey number 26-2002.
- () B Record measurement of GLO contract No. 385, by W. B. Barr, dated 7 May 1881
- Posted Easement Boundary
- - - Existing fence line

REFERENCE MATERIAL

Union County Monumentation Records
Original GLO contract No. 385, by W.B. Barr,
dated 7 May 1881
Union County Survey No. 26-2002



UNION COUNTY SURVEYOR
Date Received 11/5/03
Date Filed 11/8/03
By R. Griffith & J. Blackman
Filed Date Nov. 31, 2003

REGISTERED PROFESSIONAL LAND SURVEYOR
JOEL RICE
JAN 12, 1981
CRENSHAW, BLACKMAN
DIA
Renewed Date Nov. 31, 2003

R. BAGGETT, GRIFFITH & BLACKMAN
Map of Survey
2008 Adams Avenue, LaBonte, Oregon
Wetland Reserve East Boundary
Located in the Southeast Quarter of Section 5,
Township 4 South Range 38 East of the Willamette
Meridian
Union County
SURVEYED FOR N.R.C.S. and Dr. Joel Rice
SURVEYED BY C.T.B.
Scale: 1" = 300' Drawn by: G.T.B. 11-4-03

NARRATIVE
This survey was done at the request of Dr. Joel Rice and the Natural Resources Conservation Service. Dr. Rice and the N.R.C.S. wanted to monument and post the Wetland Reserve Easement boundary on Dr. Rice's property. I located the property lines by using a previous Survey 26-2002, for Boise Building Solutions. The Easement boundary was marked with yellow plastic caps and 2 1/2" aluminum monuments. The monument locations were determined by Dr. Rice's ownership lines located by said survey 26-2002. I find no unusual conditions on this survey.



Photo Looking north from South end of
Winn Meadow - Morgan Lake Alternative
route would result in placing the
'right-of-way', and associated towers
through the trees on the right side
of this photo -

TARDAEWETHER Kellen * ODOE

From: Dan Turley <saveglasshill@gmail.com>
Sent: Thursday, August 22, 2019 11:34 AM
To: B2H DPOComments * ODOE
Cc: TARDAEWETHER Kellen * ODOE
Subject: Fwd: Glass Hill Coalition Comment Letter to EFSC B2H Draft Proposed Order
Attachments: 20190820 Glass Hill Coalition Comment Letter to EFSC B2H Draft Proposed Order.pdf

I am resubmitting this testimony on behalf of the Glass Hill Coalition. I had previously submitted this testimony from my PGE email account which could create unintended confusion. PGE is not affiliated in any way with the Glass Hill Coalition.

Thank you,
Dan Turley

----- Forwarded message -----

From: Dan Turley <Dan.Turley@pgn.com>
Date: Thu, Aug 22, 2019, 10:06 AM
Subject: Fwd: Glass Hill Coalition Comment Letter to EFSC B2H Draft Proposed Order
To: Dan Turley <saveglasshill@gmail.com>

From: Dan Turley <Dan.Turley@pgn.com>
Sent: Wednesday, August 21, 2019 3:39 PM
To: B2H.DPOComments@Oregon.gov
CC: Dan Turley <Dan.Turley@pgn.com>,TARDAEWETHER Kellen * ODOE <Kellen.Tardaewether@oregon.gov>
Subject: Glass Hill Coalition Comment Letter to EFSC B2H Draft Proposed Order

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Sincerely,

Dan Turley

August 20, 2019

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, Oregon 97301

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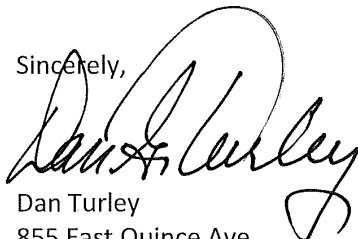
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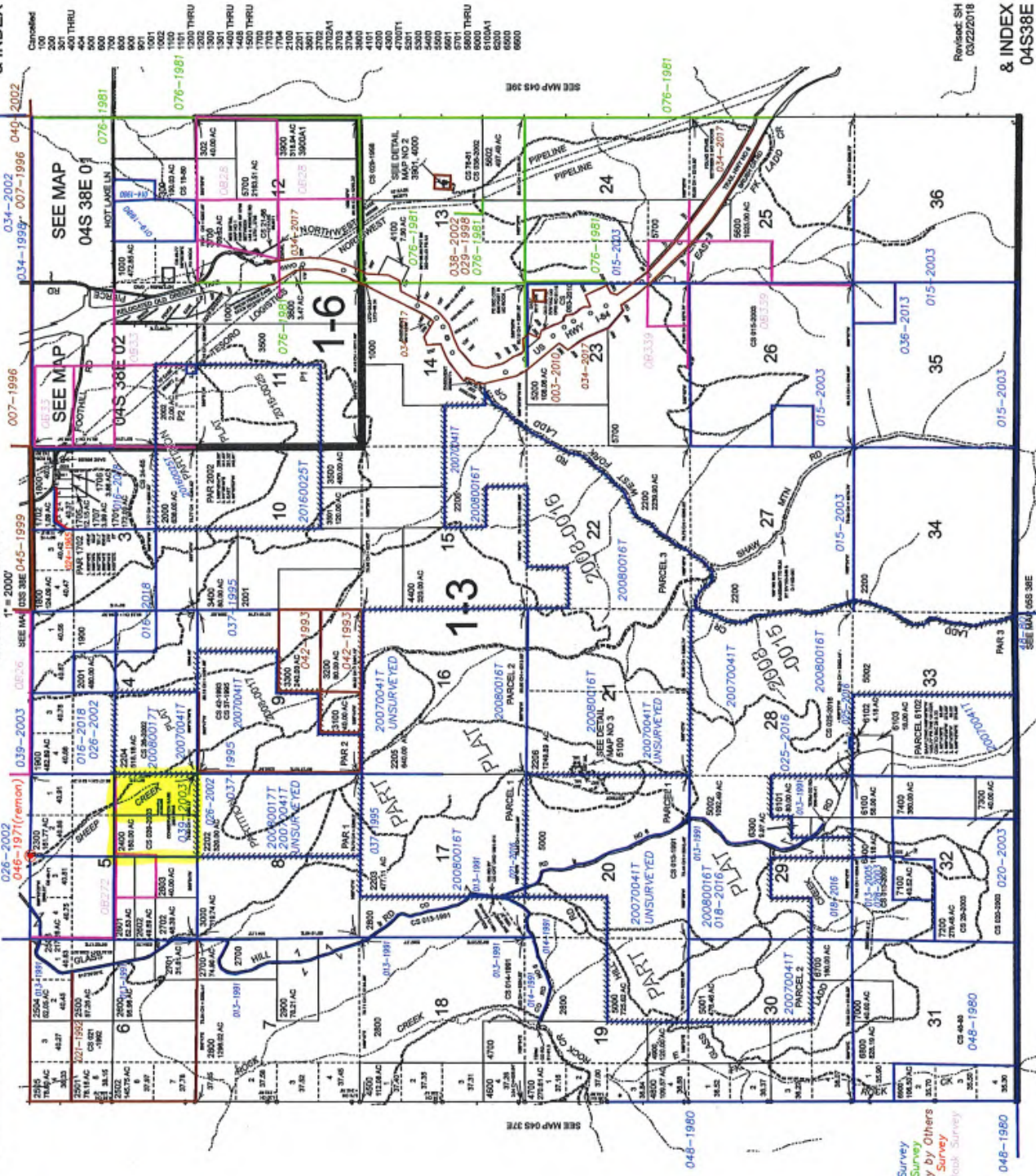
Dan Turley
855 East Quince Ave
Hermiston, Oregon 97838

Representing the Glass Hill Coalition

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 & INDEX

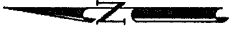
T.4S. R.38E. W.M.
 UNION COUNTY

THIS MAP WAS PREPARED FOR
 ASSESSMENT PURPOSE ONLY



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SURVEY NUMBER 039-2003



SCALE: 1" = 300'
BASIS OF BEARING

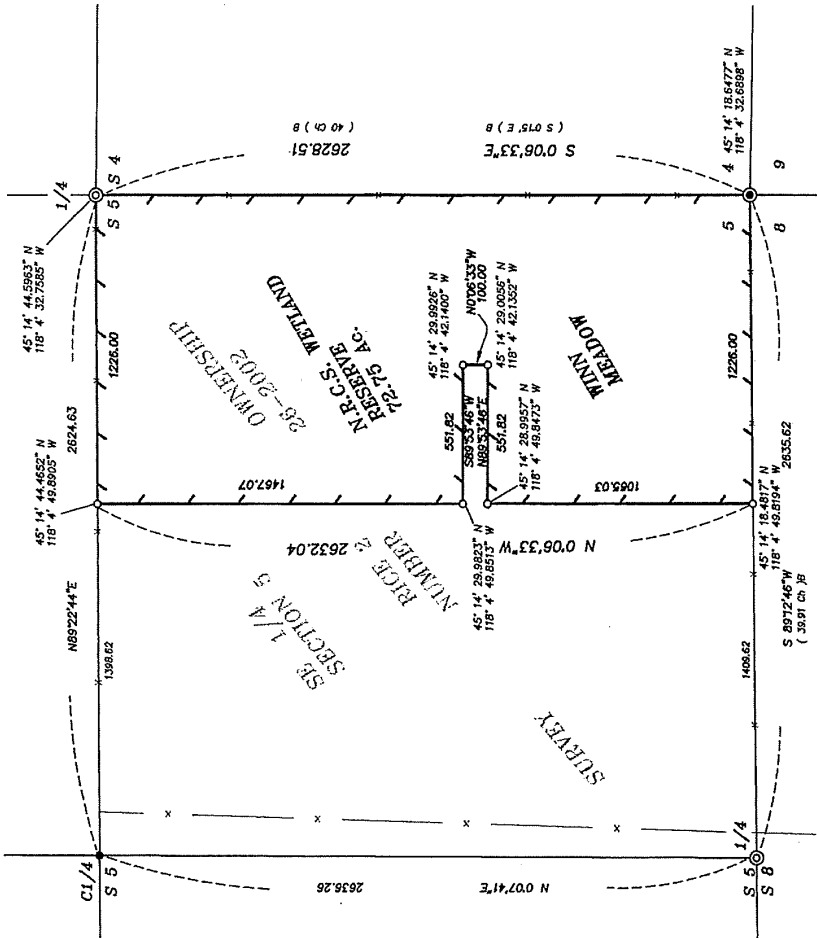
Forward bearing as published by the U.S.C. and G.S. from A. COLLEGE to A. VALLEY. Dated 1946.

LEGEND

- Set 5/8" iron pin with yellow plastic cap marked "BOB SURVEY MARKER".
- Found 5/8" iron pin with 2 1/2" aluminum cap, set by Survey number 26-2002.
- ⊙ Found 2 1/2" aluminum monument as per Union County Monumentation records.
- ⊙ Found 2 1/2" aluminum monument, set by Survey number 26-2002.
- () B Record measurement of GLO contract No. 385, by W. B. Barr, dated 7 May 1881
- Posted Easement Boundary
- Existing fence line

REFERENCE MATERIAL

Union County Monumentation Records
 Original GLO contract No. 385, by W.B. Barr, dated 7 May 1881
 Union County Survey No. 26-2002



*Parcel
 Rice, Joel
 04538E02400*

NARRATIVE

This survey was done at the request of Dr. Joel Rice and the Natural Resources Conservation Service. Dr. Rice and the N.R.C.S. wanted to monument and post the Wetland Reserve Easement boundary on Dr. Rice's property. I located the property lines by using a previous Survey 26-2002, for Boise Building Solutions. The Easement boundary was marked on the west line of the easement. The North, East and South lines of the easement were determined by Dr. Rice's ownership lines located by said survey 26-2002. I find no unusual conditions on this survey.

UNION COUNTY SURVEYOR
 Date Received 11/5/03
 Date Filed 11/8/03
 By R. GRIFFITH & BLACKMAN
 Filed Date Nov. 31, 2003

REGISTERED PROFESSIONAL LAND SURVEYOR
 R. GRIFFITH & BLACKMAN
 2008 Adams Avenue, LaBonte, Oregon
 Registered Date Nov. 31, 2003

R. GRIFFITH & BLACKMAN
 Maps of Survey
 Wetland Reserve Easement Boundary
 Located in the Southeast Quarter of Section 5,
 Township 4 South Range 38 East of the Willamette
 Meridian
 Union County
 SURVEYED FOR N.R.C.S. and Dr. Joel Rice
 SURVEYED BY C.T.B.
 Scale: 1" = 300' Drawn by: G.T.B. 11-4-03



Photo Looking north from South end of
Winn Meadow - Morgan Lake Alternative
route would result in placing the
'right-of-way', and associated towers
through the trees on the right side
of this photo -



Oregon Department of Energy and the Energy Facility Siting Council

Public Hearing on the Draft Proposed Order
for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) Kerry Tuxit

Mailing Address (mandatory) PO Box 3324
LaGrande OR 97850

Phone Number (optional) () _____ Email Address (optional) _____

Today's Date: 6-20-19

Do you wish to make oral public testimony at this Hearing: Yes No

Written comments can also be submitted today.

All written comments must be received by the deadline, July 23, 2019, 5 p.m. PDT to:

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony

(Please print legibly – Use the back for additional space if needed. Additional written comments may be attached to this card.)

1 - ODFW told me that I could not build on the proposed location due to the wildlife, why is this now an option?

2 - Last year Idaho power told me that my home was too close to the proposed placement. Has this been resolved?

<p style="text-align: right;">Page 122</p> <p>1 Next we will hear from Mr. Tweit, followed by 2 Michael McAllister. 3 MR. KERRY TWEIT: Hi, my name is Kerry Tweit, 4 T-w-e-i-t. I'm located, currently living at 74 West 5 Hawthorne. 6 The location of my current house is, at this 7 point in time, from what I was told last fall by Idaho 8 Power, less than 1500 feet away from where one of the 9 towers are supposed to go on my property. I was told 10 that -- last fall they showed up at my property for the 11 first time that I talked to them on the property. And 12 they said they were surprised and wanted to know why 13 there was a house there. I said, Well, it's been in the 14 plans since I bought the property 10 years ago. All 15 they had to do was ask the County. 16 And he told me they weren't aware of it, and 17 that it was going to present a problem. I said, Well, 18 what are the alternatives? We said, Well, we either 19 move the house or we move the transmission lines; it's 20 too close. 21 That made me fairly stressed. This home that 22 I built, as you heard from Mr. Horst earlier tonight, 23 and he talked about the location being a little piece of 24 heaven. I looked for a long time before I purchased 25 property, and when I found this property, I was</p>	<p style="text-align: right;">Page 124</p> <p>1 endangered species assessment on my property. I asked 2 him why. He said, Because there is going to be power 3 lines built on your property. My response was, No, 4 there is not. Nobody has ever told me this. His 5 response was, It's a done deal, it's going to happen. I 6 said, Well, why wasn't I told? 7 Immediately following that conversation, I 8 went down to the County, I spoke with Scott Cartel [ph] 9 and he told me that I had been notified. I said, Well, 10 why would I be here if I had been notified. He said, 11 Well, it says right here on the computer that you were 12 notified. I wasn't. 13 So there has been some frustration in probably 14 the clarity that Idaho Power -- I am right in the middle 15 of a really important proposed location for them. They 16 want to come down off the ridge and make a 90-degree 17 turn right on my property. 18 Probably another real significant issue there 19 is when I first purchased the property I was required to 20 do a wildlife assessment through Oregon Fish and 21 Wildlife. The first three times that Oregon Fish and 22 Game came up to my property they told me no. They said 23 it was too sensitive of a wildlife corridor and they 24 wouldn't let me build anywhere on my property. I fought 25 that. They came out the fourth time and said that they</p>
<p style="text-align: right;">Page 123</p> <p>1 extremely impressed by, I was close to town, but it was 2 remote. I have game cameras on the property. We have a 3 lot of elk, deer, bears. We get quite a few cougars 4 that come through. I usually get a dozen or so pictures 5 a year. We have fox. We have a lot of animals up 6 there. It's really a wonderful place to be. 7 The sunrise and sunsets are breathtaking, to 8 the point where I designed to build the house that the 9 entire roof is a deck so I can watch that every morning 10 and every night. I actually have a hot tub up there 11 that I sit in and watch the sunrise and the sunsets. 12 The sunsets are, when I look that direction, are right 13 where the towers are going to go. 14 Also, on my property, when I first built it 15 for fire protection, the County required that I had 16 approximately 1500 gallons of fire protection, 60 psi. 17 So I put a 3000-gallon tank on the hill, which is the 18 exact location of where they want to put one of the 19 towers. I'm not sure how that will be mitigated, but 20 apparently it's going to have to go. Another plan that 21 I wasn't aware of. 22 The other thing that happened through Idaho 23 Power at the beginning was I received a phone call, it's 24 been approximately 2 years ago, from a gentleman from 25 Humboldt University telling me that he wanted to do an</p>	<p style="text-align: right;">Page 125</p> <p>1 would agree to let me build as long as I only built on 2 the very eastern portion of my property. 3 The proposed tower that is going to go on my 4 property and control station is right in the middle of 5 what Fish and Wildlife told me I could not build it 6 because it was too sensitive of an area. Another 7 setback. 8 So now I have my house finished and built. I 9 am living in my dream home. And it looks as though that 10 is all going to change. 11 I haven't been told by Idaho Power how they 12 are going to rectify the issue that my house is less 13 than 1,500 feet from their proposed site. They haven't 14 responded to that. All they said was that they would 15 figure it out. So I still haven't been told that. 16 You have already heard from some of the other 17 people on Hawthorne Drive about their concerns about 18 obviously the beauty, the looking at the power lines, 19 the sound of the transmission lines. The gentleman from 20 Idaho Power told me that one of the main reasons that 21 they wanted nobody within 1,500 feet of those power 22 lines was because of the noise. 23 I asked him if it was a safety issue. And he 24 said, Well, there has been people in the past that have 25 implied that it was, but there has never been a court</p>

<p style="text-align: right;">Page 126</p> <p>1 litigation that had proven that. So I have to trust 2 them on that, I guess. 3 I think you'll have to understand, I'm a 4 little bit skeptical about this. Idaho Power hasn't 5 been -- I haven't been contacted -- I mean, I have now. 6 But through this planning process, I really wasn't 7 contacted. Nobody came to my place and looked at the 8 site. I don't know if they know there is a pond right 9 next to where they want to put this tower. I don't know 10 if they understand I had to put a well in 700 feet deep, 11 the water is amazing. I don't know if that will change. 12 The road coming up Hawthorne has to have a lot 13 of annual maintenance on it for just three houses. The 14 idea of them hauling that heavy equipment, and I don't 15 know what they are going to do to improve or better that 16 road, my concern is they will make it worse. Only 17 because of the limited history that I've had with them 18 hasn't really been very supportive. Tonight was the 19 first night that I got a chance to listen to this many 20 people talk about their concerns. 21 Honestly, I'm more concerned now than before I 22 came in. I have heard a lot of information tonight that 23 kind of would make, I think, anybody in my shoes afraid 24 of the future of what's going to happen up there. I 25 love this place. I think it's going to change</p>	<p style="text-align: right;">Page 128</p> <p>1 For everybody here, if you are to looking at 2 the computer screen that's up on the back wall, there is 3 a third power line, which is the green route. There is 4 red, green, and yellow. And I'm pleased to see that the 5 green line was turned on this evening. It wasn't on 6 when I originally looked at it. 7 I also came in late and I was told that I'm 8 not supposed to advocate for the western route 9 recognized by the BLM and environmental analysis because 10 it has not been applied for. That route is what I've 11 been involved with advocating for for 10 years now, 12 since day one, really. 13 I think I probably wrote Adam Bless, with the 14 Oregon Energy Council, probably the first letter he 15 received with my concerns about siting this line through 16 Union County here. And with an empirical background for 17 virtually every acre of the stretch from Hilgard to Ladd 18 Canyon that probably nobody else has, I feel like it's 19 my community contribution to represent it as completely 20 and as well as I can. 21 The green route is by far the superior route 22 when you consider just about any aspect; fish, forest, 23 wildlife, range, fire, feasibility, all the above. In 24 my analysis collecting facts relative to all these 25 resources, the green route is by far the best route.</p>
<p style="text-align: right;">Page 127</p> <p>1 dramatically. That is all I have. 2 HEARING OFFICER WEBSTER: Thank you. 3 Following Mr. McAllister we have Charles 4 Gillis on deck. 5 MR. MICHAEL McALLISTER: I'm Michael 6 McAllister. I live at 60069 Morgan Lake Road right at 7 the top where you confront the wind as you break the 8 summit. 9 I am of the Move B2H camp, an advocate of 10 moving and have been for at least 10 years, when the 11 initial proposed route was presented. I am a natural 12 resource inventory expert, and made a career 13 inventorying fish, forest, wildlife, range, ozone 14 damage, carbon sequestration. I collect facts from the 15 landscape and have been in La Grande since 1979, when I 16 lived right below lower Morgan Lake, which apparently is 17 not recognized by Idaho Power. 18 The eagles built two nests right above my wall 19 tent where I lived as I went to school here at Eastern 20 Oregon University. And it's really a pleasure to be 21 here tonight with the community and hearing all of their 22 different concerns and considerations. It's always been 23 above my mental capacity to explore the rightness or 24 wrongness of the power line; so I have focused on moving 25 B2H.</p>	<p style="text-align: right;">Page 129</p> <p>1 And I can honestly say that it's a travesty that, for 2 whatever reason, Idaho Power has chosen to completely 3 disregard that route. I have seen no evidence in 4 10 years that Idaho Power has shown any consideration of 5 that route. I think it's appalling. 6 I do credit Idaho Power for having in the 7 10 years considered routes through John Day, extensively 8 routes through the Blue Mountains, and having recognized 9 the importance of not further fragmenting large-scale 10 forest tracks, and that the I-84 corridor is probably 11 the best route. But specifically through this neck of 12 the woods, through Union County, Ladd Canyon, I think 13 every concern I've heard here this evening can be 14 mitigated by placing this transmission line on the 15 environmentally-preferred route. 16 And I am providing comment, written comment 17 that will specify as well as I can with the time that I 18 have. I don't believe it's up to me to demonstrate a 19 burden of proof to this end, but I'm doing my best to do 20 that. 21 And I thank you all for your listening here 22 this evening. 23 HEARING OFFICER WEBSTER: Thank you. 24 Following Mr. Gillis, we will hear from, I 25 believe it's John Winters, if I'm reading that</p>

TARDAEWETHER Kellen * ODOE

From: RTweten <rasclodat@gmail.com>
Sent: Wednesday, August 14, 2019 4:46 PM
To: B2H DPOComments * ODOE
Cc: Randy
Subject: Comment Letter to B2H Transmission Line and EFSC permitting process
Attachments: B2H_Insufficient Adress of ESA fish species-habitats.docx

Dear Sirs/Madams:

Please see my attached letter of protest for the current proposed B2H DPO and my request that you, State of Oregon, ODE, deny the Site Certificate Application as currently presented by Idaho Power, the applicant.

I am available for further address of these issues I present if you'd like. You can contact me through email, which would be best.

Thank you for your time and effort, and for attending to the issues I raise in this very controversial, less than complete, application.

Sincerely,

Randy Tweten
608 N Avenue
La Grande, OR 97850

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Far and away the best prize that life has to offer is the chance to work hard at work worth doing. Theodore Roosevelt
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Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St, N.E.
Salem, OR 97301

Sent Via E-Mail: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Energy Facility Siting Council:

I request that my letter protesting issuance of an Oregon Site Certificate for the currently proposed Boardman-to-Hemingway Transmission Project (B2H Project) be entered into the permanent written record. I also request response to, and resolve of, the issues I raise herein.

Specifically, the applicant, Idaho Power (primary) has failed to acknowledge, and as a result, address fully the presence of a Federal and State-listed, Threatened species. It has also failed to identify and address the effects of the proposed action on, not only the listed species, but the Category-1, and Federal designated Critical Habitat. A co-sponsor of the project, Bonneville Power administration, is also a party to the Federal Columbia River Power System (FCRPS) Biological Opinion, requiring them to promote conservation and recovery of Federally-listed, under the Endangered Species Act, salmon and steelhead in the interior Columbia Basin.

The Draft Proposed Order (DPO), p. 304, lines 20-26, fails to list Bull Trout, a listed State-Sensitive Threatened Species, also listed as Threatened by USFWS. Similarly, the DPO only gives brief identification of federally listed Mid-Columbia River and Snake River steelhead, and Snake River spring/summer and fall Chinook salmon. OAR-345-021-0010 (1)(p) requires identification of all fish and wildlife at the proposed location, and identification of habitat classification categories, as set forth in OAR-635-415-0025, in order to comply with OAR-345-022-0060, requiring identification of habitat categories and required mitigation.

Compliance with the federal Endangered Species Act (ESA) requires identification and address of the effects of the proposed action through ESA section 7(a)(2) consultation with the NMFS (anadromous fish species) or USFWS (resident fish species). ESA section 7(a)(1) also requires that federal actions (the BLM EIS/permitting) are implemented in a manner to promote the recovery of listed species. The ESA consultation process requires that the action agency (in this case BLM with USFS input for their lands), identify and speak to the effects of the action, both on the 'animal' AND on the designated critical habitat. The DPO does none of this, hence fails this requirement. Additionally, the DPO does not adequately address the adverse impacts to Federally designated critical habitat (DCH). DCH for Snake River spring/summer Chinook salmon is identified as "all areas with historical presence", and is NOT found only where they exist today. DCH ESA determinations of 'may effect' are linked to the standing PACFISH riparian habitat conservation areas (buffers) on both BLM and USFS lands. This equates to a 300-foot buffer on main rivers, and a 150-foot buffer on perennial tributaries (100-foot buffer on intermittent streams). The DPO speaks to only stating there will be no roads below 'ordinary high-water mark'. This in no uncertain terms addresses the Primary Constituent elements of the DCH for salmon OR steelhead.

The applicant has failed to comply with both federal and state requirements to address adverse effects of the proposed action on identified threatened (state or federal designation) fish species and their habitats!

The Grande Ronde River watershed contains a well-documented population of Bull Trout, Snake River steelhead, and Snake River spring/summer Chinook salmon. By state statute, wherever a portion of a watershed contains a Threatened or Endangered species, the entire watershed is reviewed for its potential impacts to those species under federal protection. The Grande Ronde River watershed encompasses the entirety of Union county, and the majority of Wallowa county. As evaluated in the DPO, ASC Exhibit P, suitable habitat used by state-listed Threatened and Endangered species is designated pursuant to ODFW's Habitat Mitigation Policy, and EFSC's Fish and Wildlife Habitat standards, as Category-1 Habitat, where any impact, direct or indirect is prohibited. There is NO mitigation for Category-1 Habitat! And given the DPO does not address federal ESA consultation requirements, it too, is out of compliance and undercutting the purpose of this federal law.

The DPO, p. 304, line 32, through p. 307, line 21, acknowledges that there will be impact, but is unable to quantify it. Since any impact is prohibited for Cat-1 Habitats, the magnitude of impact becomes irrelevant, rather, not lawful. Hence, the applicant has failed to meet the requirements for issuance of a Site Certificate contained in OAR-345-022-0080, and the Idaho Power's B2H proposed action's permit, being not in in compliance with state nor federal protected species laws, should be denied.

In view of the fact that sufficient recovery of the area's Bull Trout, SR-steelhead, and SR s/s Chinook salmon populations and their down-listing from its Threatened status is reliably projected to be a matter of decades, and especially with the current and projected compounding effects of climate change, issuance of a **Site Certificate by the State of Oregon should be denied, with prejudice!**

Sincerely,

S/N Randy G. Tweten

Randy Tweten
608 N Avenue
La Grande, OR 97850

TARDAEWETHER Kellen * ODOE

From: Katrina Ward <Katrina.Ward@umatillaelectric.com>
Sent: Thursday, August 15, 2019 12:09 PM
To: B2H DPOComments * ODOE
Cc: Robert Echenrode; Steve Meyers
Subject: [Fortimail Spam Detected] UEC Letter
Attachments: 2019.08.15 B2H public comment letter.pdf

Hello. Please find attached a letter from Umatilla Electric Cooperative regarding the B2H transmission line.

Thank you.

Katrina Ward

Executive Assistant to the CEO



750 W. Elm
PO Box 1148
Hermiston, OR 97838
(541) 564-4388 office
(541) 567-8142 fax
katrina.ward@umatillaelectric.com

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August 15, 2019

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy (ODOE)
550 Capitol St N.E.
Salem, OR 97301
Fax: 503-378-6457
B2H.DPOComments@Oregon.gov

Dear Kellen,

Umatilla Electric Cooperative has been an active stakeholder in the planning of the Boardman to Hemingway (B2H) transmission line for several years, and we appreciate the opportunity to comment.

As a power provider in Northeast Oregon, we believe B2H would be an important addition to the Northwest's electrical transmission network. Among its many benefits, it would give Idaho Power more access to our hydropower and other generation to help balance its summer peaking loads with the Northwest's winter peaking loads. It would give wind and solar projects in the intermountain West a connection to the Northwest and California markets.

As an electric utility with a developing economic base, UEC understands the need to provide critical public infrastructure. We appreciate the challenge of finding a route that represents the least impact upon our communities and our environment. In the siting of B2H, Idaho Power has worked with UEC in a responsible and collaborate process to minimize impact to landowners, agencies and high value farmland.

In the public interest, we have engaged with landowners and local, state and federal agencies in "green energy corridor" discussions to find a transmission route through northern Morrow County that would serve our communities for decades to come. Idaho Power has been a key participant in those productive discussions.

As a cooperative of 10,300 individual members, we understand and respect the concerns expressed among some of our members regarding this project. We urge the Energy Facility Siting Council, ODOE and Idaho Power to address those comments with care and diligence.

Thank you, members of EFSC and staff of ODOE, for your ongoing efforts to oversee facilities that help ensure Oregon has an adequate energy supply while protecting public safety and the environment.

Sincerely,

Robert Echenrode
General Manager and CEO
Umatilla Electric Cooperative

750 W. Elm Street • PO Box 1148 • Hermiston OR 97838

Phone: (541) 567-6414

Fax: (541) 567-8142

Toll Free: 800-452-2273

Eric W. Valentine
1712 Alder St
La Grande, OR 97850
evalenti@eoni.com
541-786-3843

August 16, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR 97301

Re: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project, 9/28/2018; Draft Proposed Order

Dear Members of the Council,

You hold the heart of La Grande and Union County in your hands, At the end of the day, your committee and the Idaho Power Company officials go home to places far from La Grande. Yet for decades and decades ahead, your siting decision will continue to reverberate in this community. With that in mind, I raise the following objections to the plan as submitted by Idaho Power.

I. The requirements of OAR 345-022-0080 have not been met. This project, whether it goes above the Grande Ronde Hospital, or through the Morgan Lake area, WILL have a significant impact.

The height and width of these towers cannot be mitigated. If located on the hillside above the Grande Ronde Hospital, the lines will be visible not only from La Grande but throughout the Grande Ronde Valley. They are many times as high as any buildings and foliage in the area, altering the view irreparably for this community.

If the Morgan Lake route is chosen, the proposal erroneously states the transmission lines will be hidden by the pine trees there. First, the pine

ESTERSON Sarah * ODOE

From: Eric Valentine <evalenti@eoni.com>
Sent: Monday, August 19, 2019 7:58 PM
To: B2H DPOComments * ODOE
Subject: Re: Geological Hazards and Soil Stability; Exhibit H / Drill site 95/3 and 95/4 on unstable and steep slopes in an active seismic zone

August 19, 2019

**Energy Facilities Siting Council
c/o Kellen Tardaewether, Siting Senior Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR 97301**

Via [EMAIL: B2H.DPOComments@Oregon.gov](mailto:B2H.DPOComments@Oregon.gov)

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Members of the Council:

Re: Geological Hazards and Soil Stability; Exhibit H.

Re: Geologic Hazard Protection - Drill site 95/3 and 95/4 on unstable and steep slopes in an active seismic zone

My comment addresses the danger that construction and operation of an additional transmission line in an active seismic zone presents to the public, both local area residents and travelers on the nearby Interstate 84.

The relevant standard is the 345-022-0020 Structural Standard:

“(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility;”

(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).

Permanent Administrative Order EFSC 2-2017 Chapter 345 Department of Energy; Energy Facility Siting Council; effective date 10/18/2017; agency approved date 09/22/2017.

Geological Hazards and Soil Stability; Exhibit H. Attachment H-1, Engineering Geology and Seismic Hazards Supplement to Exhibit H Boardman to Hemingway 500kV Transmission Line Project Boardman, Oregon to Hemingway, Idaho January 25, 2018; Shannon & Wilson, Inc. 3990 Collins Way, Suite 100, lake Oswego, Oregon. 97035.

The construction process is described in detail in 3.9 Mitigation of the Exhibit H of IPC's ASC. Specifically, the area at or near Drill site 95/3 and 95/4 is shown and described on the following tables and maps:

Exhibit H – Attachment H-1 Appendix B Soils Data Tables and Maps by Shannon & Wilson, Inc.: Map page 18 of 44:

Table B3: Soil Descriptions, described as:

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5776CN; erosion hazard; severe, percent of slope Low; 30: High; 60. Sheet 3 of 4 Exhibit H – Appendix C: Summary of Proposed Boring Locations:

Map Sheet 36 - Drill site 95/3 and 95/4

Exhibit H – Table C1: Summary of Proposed Borings – Sheet 2 of 8

95/3 – cited for Angle change along alignment; Slope stability/landslide; Geo-Seismic Hazard; Road and railroad crossing

95/4 – cited for Angle change along alignment; Road and railroad crossing Exhibit H - Appendix E: Landslide Inventory, E.2.3; PLS-002 Sheet 5,6

“PLS-002 is an approximately 460-acre potential landslide that was identified in available LiDAR data.

PLS-002 has not been verified in the field and should not be considered a landslide based solely on interpretation of LiDAR data.

The IPC Proposed Route passes above this potential landslide between towers 93/5 and 95/3, potentially affecting the stability of these proposed towers and associated work areas. A field reconnaissance along this portion of the alignment should be performed as part of the geotechnical exploration program.”

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(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).

The applicant has not fully described the risks of heavy construction in this area. What mitigation methods would be required to place earthquake resistant towers on unstable slopes, in an active seismic zone, if the area suffered an earthquake of the intensity that formed these slopes.

Special Paper 6, included on the DOGAMI website, describes an extensive study done in 1979 by the Geoscience Research Consultants in Moscow, Idaho and State of Oregon Department of Geology and Mineral Industries on the seismic history of the Blue Mountains and the La Grande area. The introduction of this paper is closes as follows: “In summary, consistencies of structural trends, compatibility of the Blue Mountain folding to backslope faulting in the La Grande area and systematic

distribution in the orientation of linear trends favor northwesterly compression as the tectonic control in the study area. Furthermore, the general lack of interference, or lateral offset of linears or of any of the intersecting faults, as is discussed in the next sections, suggest that all of the post-Columbia River Basalt Group structures in the area near La Grande have been created in response to only one major tectonic episode.”

Further in the same paper “The Graves Creek-Rock Creek-Coyote Creek area has the greatest density of faults within the study area. At least six major and several minor northwest-trending faults of the Rock Creek fault system occur in the area (Plate 1). The Graves creek fault can be traced from the eastern edge of Sec. 7, T35S, R37E to the southern boundary of the Hilgard 7 1/2 - minute quadrangle, a distance of about 6 mi (10 km). The Graves Creek fault probably extends farther southeastward beyond the map area. Offset across this fault is 265 ft (80 km) in Sec. 34, T 35S, R37E.”

The IPC ASC to the EFSC (Exhibit H – Attachment H-1, page 28) includes the following brief description of the area: The Mt. Emily Section (802) is described as “an 18 mile fault, forming a steep range front from Thimbleberry Mountain to the mouth of the Grande Ronde River Canyon, by Personius, compiled by the U.S. Geological Survey website and assessed in 11/16/2016.”

“The West Grande Ronde Valley fault zone may be active. Subtle topographic features indicate that there may have been earthquakes that broke through the ground surface as recently as the last 10,000 years. Previous studies indicate that the West Grande Ronde Valley fault is capable of generating a magnitude 7 earthquake.” From Summary of the La Grande Quadrangle Geology” also on DOGAMI website.

DOGAMI recommendations for protection of the Portland’s infrastructure HUB in the secondary flood zone of a possible Cascadia Subduction Fault earthquake/tsunami have been largely unimplemented for lack of funding, as is the ShakeAlert system which, unless funded will not be available in Oregon until 2021 at the earliest. ShakeAlert is an early warning system being developed by USGS.

Oregon made national news when “Governor Brown signed HB 3309, which amended the previous law to no longer prohibit the construction of building such as hospitals and schools and other emergency-preparedness centers in tsunami inundation zones along the coast. The bill had bipartisan support and bucked standards held for twenty-five years keeping those facilities out of harm’s way should a massive tsunami hit.” Wisely, some cities along the coast continue following original DOGAMI assessments and recommendations concerning new infrastructure built away from the inundation zone. How this will impact funding assistance to move the existing schools, hospitals, city halls and emergency services?

Clearly Oregon legislative priorities have moved away from seismic hazard emergency preparedness, but this potential hazard to the area brings with it considerable risks, despite the proposed construction “mitigation” methods. It is within the EFSC’s judgment to decide against adding an additional hazard to the natural and infrastructure hazards the citizens of this area already live with. There are dangers both to human safety and the environment with an additional transmission line in a possibly quite seismic area, so close to the heavily traveled I84 transportation/utility corridor, the Hilgard Junction State Recreation Area and the Grande Ronde river. Further study and subsequent intrusive construction will not reduce the risks to the safety of the travelers through this canyon or the residents of the valley nearby. The application does not comply with the relevant standard.

Remedies:

Additional study of the probable seismic hazards; including ground failure, landslide, cyclic softening of clays and silts, etc. as required by OAR 345-022-0020, Rev. subsection 12. “The certificate holder shall design, engineer and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site that are expected to result from all maximum probable seismic events. As used in this rule seismic hazard includes ground shaking, ground failure, landslide, liquefaction, triggering and consequences (including flow failure, settlement buoyancy, and lateral spreading), cyclic softening of clays and silts, fault rupture, directivity effects and soil-structure interaction.

Disqualify this route as an unreasonable risk for a site for an additional high voltage power facility and too close in proximity to Hilgard State Recreational Area, and the I84 transportation/utility corridor.

Additional letter of credit dedicated solely for financial restitution necessary to restore potential damage caused by any of the above in an amount sufficient to restore the surrounding environment and infrastructure, both publicly and privately owned.

Thank you for your consideration,

Sincerely,

Eric Valentine
1712 Alder
La Grande, OR 97850

References

Barrash, Warren, John G Bond, John D. Kauffman, and Ramesh Venkatakrishnan, 1980, Geology of the La Grande Area, Oregon: Oregon Department of Geology and Mineral Industries Special Paper 6.

Brown, Jordyn The Register-Guard; July 12, 2019 Oregon's Lawmakers put earthquake, hazard preparation on back burner.

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Loew, Tracy, Salem Statesman Journal ; June 24, 2019 Oregon Legislature Repeals Tsunami Zone Building Law.

Personius, S. F. Compiler, 202c, Fault number 802a West Grande Ronde Valley fault zone, Mount Emily section, in Quaternary fault and fold database of the United States: U. S. Geological Survey website <http://earthquakes.usgs.gov/hazards/qfault>, accessed 11/16/2016 06:23 PM

Schlicker, H. G. and Deacon R. J. 1971 Engineering Geology of the La Grande Area, Union County, Oregon: Oregon Department of Geology and Mineral Industries Open File Report O-1971-03, 16 p., 1 plate, scale 1;24,000.

forest is not dense enough to hide the lines. Second, the towers will be approximately twice as high as the trees

Morgan Lake is a city park close to La Grande. It receives numerous visitors daily in the spring, summer, and early fall. Campers, fishermen, hikers, birders love the quiet beauty of this park. See attached Ex. A

Idaho Power mis-states that there is only one lake here. There are two, within a quarter mile of each other. The second one is important bird breeding habitat.

This area is more than "pretty." It is pristine and primitive, served only by a narrow, rutted, gravel/dirt road. There is no way that Idaho Power can mitigate the damage its power lines will create to this area. Its scenic values will be totally destroyed. I doubt that Idaho Power executives and shareholders would invest in second, recreational homes whose view was despoiled by power lines in the fashion that Morgan Lake will be damaged.

Cutting down timber, constructing roads across this area, will permanently damage this area. The soil is rocky and dry. The scarring will be long term, not a mere ten years as Idaho Power states.

II. OAR 345-022-0110 requirements cannot be mitigated by Idaho Power. Regardless of the power line route, the project WILL have a SIGNIFICANT adverse effect on the La Grande Public's traffic safety, police and fire protection, health care, and schools.

IPC, under its traffic safety assessment (3.5.5.1) continually uses the word "could" impact. That is totally false. It WILL IMPACT. Sunset drive is not merely the major arterial to the Grande Ronde Hospital and Clinics, it is the ONLY way to get there. Sunset is a narrow street, which only accommodates three normal car widths. This project WILL, not could, "disrupt local traffic due to over sized, skew moving vehicles on smaller roadways and increased vehicular traffic from construction personnel."

The Facilities Siting Council MUST look at the life and death hazards that delayed ambulance and helicopter services due to IPC construction traffic will create. Similar hazards exist to delays to police and fire services to this area.

The La Grande High School, Central Elementary School, and La Grande Middle School are all within less than half a mile of Sunset drive. It will be impossible for Idaho Power to provide any mitigation to student traffic in the area, student bus routes, students walking to and from school.

The noise from the project, whether traffic or construction is impossible to minimize to hospital patients and staff, and to classroom students.

The two routes proposed by Idaho Power are really an exercise in the theater of the absurd. Far west of the city of La Grande and Morgan Lake lie federal land and private grazing land with roads closed to the public.

You, as members of the Siting Council, have an obligation to use courageous common sense and deny BOTH these proposed routes. The routes are unconscionable. Should you allow either of these routes, your own conscience will live with the decision that you have destroyed a beautiful community when there was an available, viable alternative.

Please have the courage to do the right thing.

Sincerely,



Eric W. Valentine



TARDAEWETHER Kellen * ODOE

From: Eric Valentine <evalenti@eoni.com>
Sent: Monday, August 19, 2019 7:58 PM
To: B2H DPOComments * ODOE
Subject: Re: Geological Hazards and Soil Stability; Exhibit H / Drill site 95/3 and 95/4 on unstable and steep slopes in an active seismic zone

August 19, 2019

**Energy Facilities Siting Council
c/o Kellen Tardaewether, Siting Senior Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR 97301**

Via [EMAIL: B2H.DPOComments@Oregon.gov](mailto:B2H.DPOComments@Oregon.gov)

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

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Eric Valentine
1712 Alder
La Grande, OR 97850

References

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Oregon Department of Energy, Energy Facility Siting Council, OAR Amend: 345-022-0020; Structural Standard EFSC 2-2017 Chap. 345, Division 22; General Standards for Siting Facilities. Effective date: 10/18/2017.

Idaho Power Corporation, 2017, Exhibit H of the Application for the Boardman to Hemingway Transmission Line Project: Report Prepared by Idaho Power Corporation, Boise, Idaho.

Geological Hazards and Soil Stability; Exhibit H. Attachment H-1, Engineering Geology and Seismic Hazards Supplement to Exhibit H Boardman to Hemingway 500kV Transmission Line Project Boardman, Oregon to Hemingway, Idaho January 25, 2018, Shannon & Wilson, Inc. 3990 Collins Way, Suite 100, lake Oswego, Oregon. 97035, page 28 and elsewhere.

Loew, Tracy, Salem Statesman Journal ; June 24, 2019 Oregon Legislature Repeals Tsunami Zone Building Law.

Personius, S. F. Compiler, 202c, Fault number 802a West Grande Ronde Valley fault zone, Mount Emily section, in Quaternary fault and fold database of the United States: U. S. Geological Survey website <http://earthquakes.usgs.gov/hazards/qfault>, accessed 11/16/2016 06:23 PM

Schlicker, H. G. and Deacon R. J. 1971 Engineering Geology of the La Grande Area, Union County, Oregon: Oregon Department of Geology and Mineral Industries Open File Report O-1971-03, 16 p., 1 plate, scale 1;24,000.

ESTERSON Sarah * ODOE

From: Gretchen Valido <gbvalido@yahoo.com>
Sent: Thursday, August 22, 2019 4:37 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019
Attachments: B2H.DPOComment 8-22-2019.docx

August 22, 2019

Energy Facilities Siting Council
Attn: Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR 97301

Via Email: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019

Dear Chair Beyeler and Members of the Council:

I am writing in opposition to Idaho Power's proposed 305-mile Boardman to Hemingway (B2H) 500kv Transmission line across Eastern Oregon. I urge you to reject Idaho Power's application for a Site Certificate for this unnecessary, outdated, risky transmission line.

Arguments against the line include negative impacts to the historic and beloved Oregon Trail, to agricultural lands, to forests and threatened wildlife habitat, recreation, tourism and open spaces, social infrastructure, and the environment. Oregonians value these resources and recognize their importance to our quality of life. Another factor is long-term financial impacts to ratepayers who will bear the burden of higher consumer electric rates to pay for this unneeded, expensive project.

I cite a specific concern about transmission line and utility equipment failure causing wildfires. The Western wildfires of 2017-2018 were horribly destructive to public infrastructure as well as personal property. With Climate Change we will see increasingly hotter summers, more powerful storms, and drier forests over the lifetime of this B2H into 2070 and beyond. How can we best plan now for what lies ahead? We must not underestimate the intensifying danger that the Climate Crisis portends over fifty years into the future. As we lose swaths of forests and wildlife habitat to fire in Eastern Oregon, all of Oregon hurts.

Transmission lines have already sparked massive fires in California and other western states, causing cascading losses and legal battles. It is probable wildfires will occur—how many times?—over the lifetime of B2H. A responsible B2H transmission line proposal would factor in the cost of damages from wildfires as part of the projected cost of providing electricity—damage to transmission line infrastructure and private property, loss of lives, loss of business revenue, loss of forests and wildlife, and loss of landscape carbon sequestration. Who will bear the costs of wildfire if the cause is due to the B2H transmission line or related utility equipment failure? How many times will the transmission line need to be repaired or rebuilt, at what cost? Who will

replant lost forests? Insurance rates will inevitably rise or be unavailable at all as risks of wildfire rise due to impacts of the Climate Emergency, and such escalating costs must be factored into a B2H project proposal. Has Idaho Power made externalized costs transparent in their B2H financial model?

In addition to the above-referenced objections, like the vast majority of Oregonians, what is occupying my thoughts these days is the Climate Emergency and how Oregon must be part of the solution. The public is increasingly alarmed about Global Warming. They understand we must have a massive, swift and fleet shift to a carbon-free, high-renewables electric future, in which the marginal cost of energy will no doubt approach zero, and homes become power plants. Wholesale markets are rapidly opening up to battery storage. Utilities must anticipate they will need to alter rate design. So we already know the future will look very different, and old models like the dangerous, risky, liability-laden B2H transmission line must be scrapped before an expensive mistake is made with so many negative impacts on many constituencies.

“Who knows what the world will be like in 20 years?” ~ Ahmed Farugui, Principal, Brattle Group

Constructing a 500kV transmission line based on a financial model going out 50 years+ is unrealistic and irresponsible, considering how fast the electricity market is innovating, with utilities barely wrapping their heads yet around developments in renewables, long duration energy storage, smart grids, micro-grids, DR, DER, home energy management technology, and efficiency opportunities.

“People do not get excited about rates, they get excited about what rates enable them to do, whether it is lowering their bills or protecting the Climate.” ~ Andre Ramirez, Senior Adviser for Pricing Design and Research, Southern California Edison

One can predict that next generation, disruptive technology along with savvy customer engagement would likely leave B2H a stranded asset, with ratepayers stuck on the hook while investors demand their return on investment—which is highly unfair, unnecessary, and outmoded, last century thinking. Idaho Power must get on board with future thinking/planning. A rejection of their Site Certificate application will push them in a better, smarter direction while being more responsible to ratepayers and the planet.

We know this: utilities today have an exciting, dynamic future and customers will increasingly demand smart innovation that meets their concerns. B2H would have a limited, dangerous future and just must not be built.

Considering the points above, Idaho Power cannot comply with state standards, nor with what the future demands. Therefore EFSC must deny the Site Certificate.

Sincerely,

Gretchen Valido
19681 Ridgewood Drive
Bend, OR 97703

August 22, 2019

Energy Facilities Siting Council
Attn: Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR 97301

Via Email: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019

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Considering the points above, Idaho Power cannot comply with state standards, nor with what the future demands. Therefore EFSC must deny the Site Certificate.

Sincerely,

Gretchen Valido
19681 Ridgewood Drive
Bend, OR 97703

ESTERSON Sarah * ODOE

From: Christy Varner <cdv@bakercitylaw.com>
Sent: Thursday, August 22, 2019 4:17 PM
To: B2H DPOComments * ODOE
Cc: 'Andrew Martin'
Subject: Boardman to Hemingway Transmission Line - Ernst and Georgeann Dorn /Dorn Enterprises, Inc
Attachments: 190822.Ltr to ODOE-1.pdf
Importance: High

August 18, 2019

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301
B2H.DPOComments@Oregon.gov

RE: Boardman to Hemingway Transmission Line
Ernst and Georgeann Dorn /Dorn Enterprises, Inc
Malheur County, Detail Map #125

ATTACHED please find a copy of the letter from Ernst & Georgeann Dorn for your attention. If you have any questions or concerns please call.

Thank you.
Christy

Ernst & Georgeann Dorn
453 Palos Verdes Dr. W
Palos Verdes Estates, CA 90274

Christy Varner
Legal Secretary

Intermountain Law, PC
3370 10th Street, Suite H
PO Box 1026
Baker City, OR 97814

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Ernst & Georgeann Dorn
453 Palos Verdes Dr. W
Palos Verdes Estates, CA 90274

August 18, 2019

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301
B2H.DPOComments@Oregon.gov

RE: Boardman to Hemingway Transmission Line
Ernst and Georgeann Dorn /Dorn Enterprises, Inc
Malheur County, Detail Map #125

B2H EFSC PROPOSED ORDER MISINTERPRETS MALHEUR COUNTY CODE 6-3A-2(A)(14) AND APPLICANT FAILED TO INCLUDE ALL EFU LANDS FOR PURPOSES OF 215.275 ANALYSIS

Idaho Power failed to properly analyze and consider the impact of the proposed facilities on parcels of land that include both high value farm land and range land. In addition the clear language of Malheur County Code 6-3A-2(A)(14) states that commercial facilities for generating electrical power or transmission towers over 200' ft are NOT permitted on Exclusive Farm Use (EFU) lands outright contrary to the finding on page 184.

ORS 215.275 and Malheur County Code Goal 3 require that transmission lines avoid adverse impacts on surrounding lands devoted to farm use in order to prevent a significant change in accepted farm practices or a significant increase in the cost of farm practices on the surrounding farmlands. Of particular concern is that the applicant has sited the facilities on private land/parcels having high value farm land and affecting farming practices while avoiding BLM property where the facility would have absolutely no impact on farming and ranching activities.

The failure to include all required land in the analysis results in a lack of compliance with the requirements of OAR 345-021-0010(I)(k) and OAR 345-022-0030. Due to this omission, the council cannot find the developer in compliance with ORS 469.504 or ORS 197.646 or OAR 345-022-0030.

The applicant states, "Several of the agricultural areas in the project area are zoned a combination of rangeland and farm use. Based on discussions with DLCD, IPC did not consider such hybrid zoned lands to be EFU lands for purposes of the ORS 215.278 analysis." This statement is not DOCUMENTATION as required for the application to be complete. There is no indication of who spoke with whom on what date, and nothing to document that the action actually occurred. Following is documentation taken directly from the LCDC rules that the combination zones are EFU and are required to be included in the ORS 215.278 analysis as well as the dictionary, IRS and FDA definitions of farm use which are consistent with the LCDC definition.

Letter to Kellen Tardaewether
Boardman to Hemingway Transmission Line
August 22, 2019
Page 2

LCDC defines Exclusive Farm Use Zone in ORS 215.203(2)(a) as “farm use” means **the current employment of land for the primary purpose of obtaining a profit in money by raising, harvesting and selling crops or the feeding, breeding, management and sale of, or the produce of, livestock, poultry, fur-bearing animals or honeybees or for dairying and the sale of dairy products or any other agricultural or horticultural use or animal husbandry or any combination thereof.-----**”

Oxford Dictionary defines “farming” as “The activity or business of growing crops and raising livestock”

The Internal Revenue Service defines “farm” as “includes stock, dairy, poultry, fruit, furbearing animal, and truck farms, plantations, ranches, nurseries, ranges, greenhouses or other similar structures used primarily for the raising of agricultural or horticultural commodities, and orchards and woodlands.”

The FDA defines “farm” as “an establishment under one ownership in one general physical location devoted to the growing and harvesting of crops, the raising of animals (or seafood), or both”
A failure to include all farm land in completing the requirements of ORS 215.275 means the applicant is not in compliance with OAR 345-022-0030 which is required in order to issue a site certificate or determine whether or not the application meets the standards. This understatement of farm lands is especially problematic due to the decision *Friends of Parrett Mountain v. Northwest Natural Gas Co.*, 336. iOr. 93, 108 (2003) requiring the determination to be “reasonable” meaning fair proper, just, moderate or suitable under the circumstances”. This transmission line is being sited on a far greater percentage of agricultural private land in counties where the public land includes a much greater percent of the total lands in the counties. The omission of most agricultural lands from the 215.275 analysis also means that the stated percentage of total farm lands being taken from the counties is significantly understated.

EFSC LACKS AUTHORITY TO APPROVE CONSTRUCTION OR MODIFICATION OF ROADS OR OTHER DEVELOPMENT OUTSIDE THE SITE BOUNDARY FOR THE BOARDMAN TO HEMINGWAY TRANSMISSION LINE.

The Oregon Department of Energy and Energy Facility Siting Council span of control for approving development is limited to the area within the site boundary. In order to be covered under the site certificate, roads or other construction must be included in the site boundary. The decision regarding whether or not to include these areas in the site was made by the developer. They chose to limit the area of the site to exclude some of the roads they planned to modify or build. Due to this decision, these areas must be approved through the local county or city planning process. They do not fall under the rules contained in OAR 345-022-0030.

Prior decisions and a contested case decision by the Energy Facility Siting Council support the above, for example: The Oregon Department of Energy and Energy Facility Siting Council allowed Wheatridge Wind Development to not include the gen-tie transmission line in the site certificate.

Letter to Kellen Tardaewether
Boardman to Hemingway Transmission Line
August 22, 2019
Page 3

That decision gave control of the gen-tie line, roads and other actions related to building the transmission line to the contractor and the developer and removed the Oregon Department of Energy and Energy Facility Siting Council from involvement.

Definitions contained in the Oregon Statutes and EFSC Rules clearly define the area which is controlled by the site certificate.

1. A site certificate by definition contained in ORS 469.300(26), ORS 469.401(4) and ORS 369.503(3) means "the binding agreement between the State of Oregon and the applicant, authorizing the applicant to *construct and operate a facility on an approved site*, incorporating all conditions imposed by the council on the applicant."
2. The "site" is defined in ORS 469.300 as "any proposed location of an energy facility and related or supporting facilities."
3. ORS 469.300 also defines "Related or supporting facilities" as "means any structure, proposed by the applicant, to *be constructed or substantially modified* in connection with the construction of an energy facility, including associated transmission lines, reservoirs, storage facilities, intake structures, road and rail access.-----"
4. ORS 469.401(4) and ORS 369.503(3) state that the council does not have jurisdiction over matters that are not *included in and governed by the site certificate* or amended site certificate.

In construing a statute, you may not "insert what has been omitted, or ***omit what has been inserted." ORS 174.010.

The area of EFSC control of modifications to existing roads or development of new roads is also contained in counsel standards contained in OAR 345-001-0010 including:

5. (54) "Site" as defined in ORS 469.300. "Energy facility site" means all land upon which an energy facility is located or proposed to be located. "Related or supporting facilities site" means all land upon which related or supporting facilities for an energy facility are located or proposed to be located.
6. (55) "Site boundary" means the perimeter of the site of a proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors proposed by the applicant."
7. (56) "Site certificate" as defined in ORS 469.300." "means the binding agreement between the State of Oregon and the applicant, authorizing the applicant to *construct and operate* an energy facility *on an approved site*, incorporating all conditions imposed by the state on the applicant."

The above definitions, particularly the definition of "site certificate" in the statute clearly limit the extent of the Oregon Department of Energy and Energy Facility Siting Council evaluation and control to activities occurring on the "site" as defined in the above rules and statutes and impacts those development activities occurring on the site have on the surrounding area. Any modifications to road segments or new roads which are not included in the site boundary are outside the jurisdiction of the Energy Facility Siting Council. The site certificate cannot authorize exceptions to local or state land use goals or plans in order to approve development outside the site.

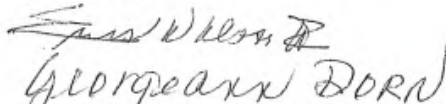
Letter to Kellen Tardaewether
Boardman to Hemingway Transmission Line
August 22, 2019
Page 4

The applicant claims on Page K-216 of their application that the access roads and other such facilities outside the site boundary are related and supporting facilities. Since the applicant chose not to include these facilities in the site certificate, they are not related or supporting facilities. The Energy Facility Siting Council and the Department of Energy made this very clear in the contested case decision regarding the developer's choice not to include the gen-tie line in the site for the Wheatridge Wind Facility. That decision was incorporated into the Final Order for Wheatridge Wind Facility issued April 2017. For example: Page 1, Line 10 states "A site certificate is a binding agreement between the State of Oregon and the applicant, authorizing the applicant to design, construct, operate, and retire a facility on an approved site, incorporating all conditions imposed by the Council on the applicant" In the footnotes on that page there is additional comment relating to this issue, "On the record of the public hearing, Ms. Gilbert/FGRV requested that the Council impose a condition restricting construction and construction impacts to the area within the site boundary. In response, on the record of the June 6, 2016 public hearing, the applicant stated that a specific condition limiting impacts to within the site boundary should not be required as this limitation is self-implementing through approval of the site boundary and site certificate. The department generally agreed with the applicant's statement. Construction activities must be restricted to areas within the site boundary, which as defined at OAR 345-001-0010 means the perimeter of the site of the proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors. Once issued, the site certificate becomes a binding, contractual agreement between the certificate holder and the State of Oregon, which authorizes the certificate holder to design, construct, operate and retire a facility only on an approved site, incorporating all conditions imposed by the council."

The applicant's reference to OAR 660-006-0025(4)(q) applies only to transmission lines. The applicant's reference to 215.283(I) talks to dwellings related to farm use. These arguments are moot since decisions regarding the roads or any other construction activities outside the site boundary are not included in the site certificate.

Please contact me if you have any questions.

Sincerely,


Georgeann DORN
Ernst & Georgeann Dorn

TARDAEWETHER Kellen * ODOE

From: deb vencill (via Google Drive) <vencilldeb@gmail.com>
Sent: Monday, August 19, 2019 3:21 PM
To: B2H DPOComments * ODOE
Subject: [Fortimail Spam Detected] slope-fire-La grande-CD.docx
Attachments: slope-fire-La grande-CD.docx

vencilldeb@gmail.com has attached the following document:



slope-fire-La grande-CD.docx



Due to the risks of significant harm to our neighborhood and community with the Idaho Power proposal, We urge you to deny certification. Sincerely, Al and Deb Vencill

Google Drive: Have all your files within reach from any device.

Google LLC, 1600 Amphitheatre Parkway, Mountain View, CA 94043, USA



August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

Chair Beyeler and Members of the Council:

I am very concerned about the Boardman to Hemingway Transmission Project as it is proposed. My concerns are for the safety of myself and all of the citizens of La Grande if this line is permitted. My primary concerns are slope instability and wildfire hazard.

The proposed route sited to the west of La Grande is placed on a ridge noted to have instability and high risk for slides. The geologic study provided by Idaho Power references several studies (below).

Table H-2. USGS Quaternary Faults within 5 Miles of Project by County on page H-12 clearly shows that the project is placed right on an active fault in the West Grande Ronde Valley Fault Zone. In addition, in exhibit H, Geological Hazards and Soil Stability, Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated "severe." Below is part of the report:

5.2 La Grande Area Slope Instability

As part of our study, we reviewed DOGAMI's open file report: Engineering Geology of the La Grande Area, Union County, Oregon, by Schlicker and Deacon (1971). The study identified several landslides in the areas west and south of La Grande. The majority of the landslide features mapped by Schlicker and Deacon (1971) were similarly mapped as landslides or alluvial fans in Ferns and others (2010). The current SLIDO database uses the feature locations mapped in Ferns and others (2010). While the two map sets generally agree, there are differences in the mapped limits of some landslide and alluvial fan areas, and there is one landslide area in Schlicker and Deacon (1971), near towers 106/3 and 106/4, which is not included in SLIDO or Ferns and others (2010). The Landslide Inventory in Appendix E includes mapped landslide and alluvial fan limits from both SLIDO and Schlicker and Deacon (1971).

This slope instability is not inconsequential to a project like this. Recall in 2014, Oso, Washington, was the site of a catastrophic mudslide as the result of logging disturbance of the soil upslope from the town combined with significant rainfall. This resulted in 43 fatalities. We must learn from previous mistakes in not heeding the geologists' warnings. The area down slope from the proposed B2H line lies the Grande Ronde Hospital and Clinics, which employs hundreds of people and is the critical access hospital for this region. La Grande High School and Central Elementary School are also positioned down slope from the proposed towers. At least 100 homes are positioned down slope of the proposed towers. According to "Engineering Geology of the La Grande Area, Union County, Oregon" maps published by Schlicker, and Deacon (1971), the ENTIRE area of the hillside is deemed a "landslide area" in the La Grande SE quadrangle. This is not a safe place for a transmission line.

The next significant hazard to our community is wildfire. Oregon is ranked 8th Most Wildfire Prone state in the United States according to Verisk Wildfire Risk analysis. La Grande is ranked in the top 50 communities in Oregon with the greatest cumulative housing-unit exposure to wildfire as referenced in "Exposure of human communities to wildfire in the Pacific Northwest," by Joe H. Scott, Julie Gilbertson-Day and Richard D. Stratton (available at http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf). Finally the proposed route is in the vicinity of Morgan lake, the highest risk area (#1) in Union County in terms of wildland-urban interface, according to the County's Community Wildfire Protection Plan, August 10, 2005.

Cal Fire cites Pacific Gas and Electric equipment and power lines as the cause of numerous wildfires in the state in the last 2 years. This includes the Camp Fire in Butte County (2018), Tubbs Fire in Napa/Sonoma Counties (2017), Witch Fire in San Diego (2007), Valley Fire in Lake/Napa/Sonoma Counties (2015), Nuns Fire in Sonoma County (2017), which were all attributed to transmission.

The Boardman To Hemingway Transmission Line Project proposal places lines about 2000 feet or less than half a mile from the La Grande city limits, including medium density housing within the city as well as Grande Ronde Hospital. If a line from this proposed route were to spark a fire, La Grande residents would have little time to react. According to National Geographic, wildfires can move as fast as 6.7 mph in forests and 14 mph in grasslands. A fast-moving fire starting at the B2H lines could move to residential areas of La Grande and HOSPITAL in 10 minutes. This is frightening and an unacceptable risk for our citizens.

The current proposal for a Boardman to Hemingway transmission line does not adequately address the issue of landslides, basically by stating it will be mitigated somehow when the time comes to build. The proposal offers no analysis of wildfire risk, which is an unacceptable omission. All of the routes proposed are unsafe and create an unacceptable risk to the citizens of La Grande.

The Council should DENY the request for a site certificate.

Sincerely,

Name:

Address:
La Grande, OR. 97850

August 12, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

Via E-MAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019

To: Chairmen Beyeler and Members of the Council

I appreciate the opportunity to comment on the Draft Project Order for the Boardman to Hemingway Transmission Project. I am very supportive of the Oregon California Trails Association (OCTA) and the work that they have done to protect the Oregon Trail, especially here in Oregon. OCTA is mentioned numerous times in **Exhibit S** and the **Historic Properties Management Plan and Programmatic Agreement**. OCTA does NOT believe that Exhibit S Historic Properties Management Plan is complete in 7.2.3 Field Crew, and offers this additional condition.

ADDITIONAL CONDITION #1 OCTA recommends that the Council add an Oregon Trail expert to the Cultural Resource Team. This Oregon Trail individual will have qualifications similar to Field crew members. For example, they will have an undergraduate degree in anthropology, archaeology, or in a field such as geology, engineering or history. It will not be necessary to have attended a field school. This individual will be recommended by the National OCTA President and agreed to by the Field Director.

The field surveys, even with SHPO and NPS data, have missed and/or mislabeled some sections of the emigrant trail. OCTA wants the public to know where the Trails are and I do too! OCTA over the years has marked the trail location with wooden signs, small triangles attached to trees, and more recently, carbonite posts and steel rails. Most private property owners are proud of the trail on their property, and after obtaining permission allow the public to walk and hike on the trail.

Idaho Power and their consultants have not acknowledged trail crossings shown on submitted Maps and do not acknowledge visual intrusion of the line for 10 miles per standards, and only upon ODOE's RAI's, put into documents some trail protections. This has been consistent from the BLM process to current day.

Considering the points above, Idaho Power does not comply with the state standards for cultural resources OAR 354-022-0090, or 345-022-0080, Scenic resources. **EFSC Must Deny the Site Certificate!**



Signature

Printed name: Imogene Vickers

Mailing address:

1304 Oak St.
La Grande, OR 97850

Email address:

phone number: (optional)

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

APPLICANT FAILED TO INCLUDE ALL REQUIRED SOURCES OF NOISE IN THEIR MODELING OF NOISE IMPACTS OF DEVELOPMENT

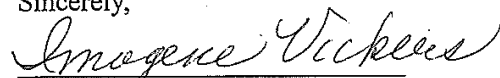
Idaho Power did not include any of the items listed in OAR 340-035-0035(l)(b)(B)(ii), which are only exempt from the noise measurement when the development occurs on a previously used site. When establishing ambient noise level for a new development on a site not previously used, it states: "Sources exempt from the requirements of section (l) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement."

The applicant's noise modeling only includes the noise generated from the transmission line itself. Noise modeling must be corrected to include (b) Warning Devices, (c) sounds created by road vehicles, (d) Sounds from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576 ; (e) bells, chimes, or carillons; (f) aircraft subject to pre-emptive federal regulations and (k) sounds created by the operation of road vehicle auxiliary equipment.

The application is incomplete. Without having the information regarding these additional noise sources, the department and the siting council lack the information regarding how many noise sensitive properties are impacted and by how much.

A proposed order cannot be issued until the developer submits all the information regarding the noise impacts of this development. This information must be available to decide if the standard is met or if it can be met with additional site conditions.

Sincerely,


Signature

Printed Name: *Imogene Vickers*
Mailing Address:

*1204 Oak St
La Grande, OR 97850*

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

COMMENT REGARDING THE BOARDMAN TO HEMINGWAY TRANSMISSION LINE DRAFT PROPOSED ORDER

The application is incomplete as Section X must include information regarding all receptors within ½ mile of site and include all noise sources required to be included in establishing the noise level generated directly or indirectly by the development. Idaho Power has not provided information adequate to determine if they are able to meet the noise standard, even with site certificate conditions.

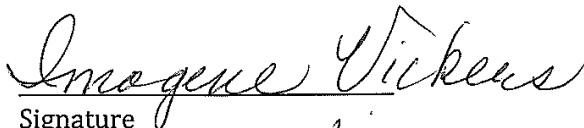
IDAHO POWER FAILED TO COMPLY WITH OAR 345-021-0010(1)(x) which states that Exhibit X must include information about noise generated by construction and operation of the Project within ½ mile of the site boundary. The site boundary means "the perimeter of the site of a proposed energy facility, it's related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors proposed by the applicant" (OAR 345-001-0010(55)).

1. The applicant lists the areas which are included in the site boundary in Exhibit F, Page F-2, however, they failed to include noise modeling or include all the receptors within the ½ mile area beyond the entire site perimeter.
2. The applicant failed to do noise modeling for all noise sensitive property as they did not include churches, schools, libraries, or hospitals as is required by the definition in OAR 340-035-0015(38).
3. The applicant also failed to include the noise identified in OAR 340-035-0035(1)(b)(B)(ii) as not being exempt from the ambient statistical noise level indirectly caused by or attributable to that source including all its related activities. This section states, "Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement." The application is not complete prior to the applicant finishing Exhibit X to include all sources required by this rule as

well as all receptors within ½ mile of the entire site boundary. No decisions can be made absent an accurate accounting of the predicted noise impacts which has not occurred.

No Proposed Order can be issued until the developer has shown that they meet the requirements at the time a site certificate is issued. OAR 345-015-0190(5) allows the Department to find the application is complete when the applicant has submitted information adequate for the Council to make findings or impose conditions on all applicable Council standards. While not all information required by OAR 345-021-0000 and 0010 must be submitted, there must be information adequate to show they meet the requirements or will meet them by implementing the conditions contained in the site certificate. The draft site certificate does not assure that the noise standard will not be exceeded, and the developer has not provided noise modeling or included modeling for all required sources of noise to establish the ambient statistical noise level of the development for all NSR's. Missing information includes: 1. Identification of all noise sensitive receptors within ½ mile of the entire site boundary; 2. Identification and notice to the owners of all noise sensitive properties; and 3. Modeling which includes Items (5)(b) - (f), (j), and (k) which cannot be excluded from the ambient noise measurement.

Sincerely,



Signature

Imogene Vickers

Printed Name:

Mailing Address:

1204 Oak St.
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Josh Votaw <votaw99@gmail.com>
Sent: Thursday, August 22, 2019 12:52 PM
To: B2H DPOComments * ODOE
Subject: Energy Facilities Siting Council
Attachments: Letter.pdf

Please find attached my letter of opposition to the Boardman to Hemingway Transmission Project!!

Thank you and if you have any questions please let me know.

Regards,

Josh

August 18, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

Chair Beyeler and Members of the Council:

I am very concerned about the Boardman to Hemingway Transmission Project as it is proposed. My concerns are for the safety of myself and all of the citizens of La Grande if this line is permitted. I have a family home on Morgan Lake Drive and regularly visit there with my family. My primary concerns are slope instability and wildfire hazard.

The proposed route sited to the west of La Grande is placed on a ridge noted to have instability and high risk for slides. The geologic study provided by Idaho Power references several studies (below).

Table H-2. USGS Quaternary Faults within 5 Miles of Project by County on page H-12 clearly shows that the project is placed right on an active fault in the West Grande Ronde Valley Fault Zone. In addition, in exhibit H, Geological Hazards and Soil Stability, Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated "severe." Below is part of the report:

5.2 La Grande Area Slope Instability

As part of our study, we reviewed DOGAMI's open file report: Engineering Geology of the La Grande Area, Union County, Oregon, by Schlicker and Deacon (1971). The study identified several landslides in the areas west and south of La Grande. The majority of the landslide features mapped by Schlicker and Deacon (1971) were similarly mapped as landslides or alluvial fans in Ferns and others (2010). The current SLIDO database uses the feature locations mapped in Ferns and others (2010). While the two map sets generally agree, there are differences in the mapped limits of some landslide and alluvial fan areas, and there is one landslide area in Schlicker and Deacon (1971), near towers 106/3 and 106/4, which is not included in SLIDO or Ferns and others (2010). The Landslide Inventory in Appendix E includes mapped landslide and alluvial fan limits from both SLIDO and Schlicker and Deacon (1971).

This slope instability is not inconsequential to a project like this. Recall in 2014, Oso, Washington, was the site of a catastrophic mudslide as the result of logging disturbance of the soil upslope from the town combined with significant rainfall. This resulted in 43 fatalities. We must learn from previous mistakes in not heeding the geologists' warnings. The area down slope from the proposed B2H line lies the Grande Ronde Hospital and Clinics, which employs hundreds of people and is the critical access hospital for this region. La Grande High School and Central Elementary School are also positioned down slope from the proposed towers. At least 100 homes are positioned down slope of the proposed towers. According to "Engineering Geology of the La Grande Area, Union County, Oregon" maps published by Schlicker, and Deacon (1971), the ENTIRE area of the hillside is deemed a "landslide area" in the La Grande SE quadrangle. This is not a safe place for a transmission line.

The next significant hazard to our community is wildfire. Oregon is ranked 8th Most Wildfire Prone state in the United States according to Verisk Wildfire Risk analysis. La Grande is ranked in the top 50 communities in Oregon with the greatest cumulative housing-unit exposure to wildfire as referenced in "Exposure of human communities to wildfire in the Pacific Northwest," by Joe H. Scott, Julie Gilbertson-Day and Richard D. Stratton (available at http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf). Finally the proposed route is in the vicinity of Morgan lake, the highest risk area (#1) in Union County in terms of wildland-urban interface, according to the County's Community Wildfire Protection Plan, August 10, 2005.

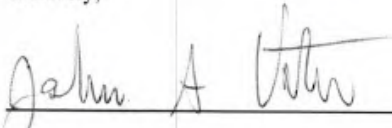
Cal Fire cites Pacific Gas and Electric equipment and power lines as the cause of numerous wildfires in the state in the last 2 years. This includes the Camp Fire in Butte County (2018), Tubbs Fire in Napa/Sonoma Counties (2017), Witch Fire in San Diego (2007), Valley Fire in Lake/Napa/Sonoma Counties (2015), Nuns Fire in Sonoma County (2017), which were all attributed to transmission.

The Boardman To Hemingway Transmission Line Project proposal places lines about 2000 feet or less than half a mile from the La Grande city limits, including medium density housing within the city as well as Grande Ronde Hospital. If a line from this proposed route were to spark a fire, La Grande residents would have little time to react. According to National Geographic, wildfires can move as fast as 6.7 mph in forests and 14 mph in grasslands. A fast-moving fire starting at the B2H lines could move to residential areas of La Grande and HOSPITAL in 10 minutes. This is frightening and an unacceptable risk for our citizens.

The current proposal for a Boardman to Hemingway transmission line does not adequately address the issue of landslides, basically by stating it will be mitigated somehow when the time comes to build. The proposal offers no analysis of wildfire risk, which is an unacceptable omission. All of the routes proposed are unsafe and create an unacceptable risk to the citizens of La Grande.

The Council should DENY the request for a site certificate.

Sincerely,



Name: Joshua Votaw

Address: 60202 Morgan Lake Drive, La Grande, OR 97850

ENERGY FACILITY SITING COUNCIL (EFSC)
Date: 6/20/19 Location: La Grande
REGISTRATION FOR PUBLIC COMMENT

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT
*See reverse for tips on giving testimony

Name: Robert P. Wadlinger

Address: PO Box 1376, La Grande, Or. 97850

I represent (if applicable) _____
Print your name OR your organization/business name.

Send me future notifications about Council meetings via email.
My email address is: _____

I wish to address the Energy Facility Siting Council and/or

I wish to submit the following written comment:

Worked 34 years in construction. So with much
experience, I find it is very unwise to construct lines.
Land is very unstable, reminds me of the Minam Grade
where the highway allways have to be reconstructed.
Towers will need much construction for the footings.
There will be rocks rolling down the hill. Will also
need rock protection. Many homes will be destroyed.
The blasting will be dangerous.

PLEASE NOTE: If there are a large number of speakers, it may be necessary to limit the amount of time each speaker is allowed.

This is a safety Issue!!!!



Oregon Department of Energy and the Energy Facility Siting Council

Public Hearing on the Draft Proposed Order
for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) Robert P. Wadliayec

Mailing Address (mandatory) 4402 - 1376
La Grande, Or. 97856

Phone Number (optional) 541-963-3219 Email Address (optional) _____

Today's Date: June 20

Do you wish to make oral public testimony at this Hearing: Yes _____ No

Written comments can also be submitted today. Totally against

All written comments must be received by the deadline, July 23, 2019, 5 p.m. PDT to:

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony
(Please print legibly – Use the back for additional space if needed. Additional written comments may be attached to this card.)

The land is unstable
Totally against it

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

COMMENT REGARDING THE BOARDMAN TO HEMINGWAY TRANSMISSION LINE DRAFT PROPOSED ORDER

The application is incomplete as Section X must include information regarding all receptors within ½ mile of site and include all noise sources required to be included in establishing the noise level generated directly or indirectly by the development. Idaho Power has not provided information adequate to determine if they are able to meet the noise standard, even with site certificate conditions.

IDAHO POWER FAILED TO COMPLY WITH OAR 345-021-0010(1)(x) which states that Exhibit X must include information about noise generated by construction and operation of the Project within ½ mile of the site boundary. The site boundary means "the perimeter of the site of a proposed energy facility, it's related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors proposed by the applicant" (OAR 345-001-0010(55)).

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Sincerely,

Ground is unsafe for construction



Signature

Printed Name: *Robert P. Wadlinger*

Mailing Address:

PO Box 1376

La Grande, Or. 97850

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:53 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019
Attachments: Scan 2019-8-15 17.38.19.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter signed by me and 54 other residents of La Grande expressing our concerns regarding the B2H Project and we request that EFSC deny the Site Certificate.

I have also sent a bound copy of this material by the US Postal Service.

Sincerely,

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the usage of the "Local Streets" ¹ specifically the Modelaire-Hawthorne Loop) ², hereafter referred to as the "loop", of La Grande to access the site entrance. This residential "loop" was constructed without sidewalks for a new development around the early 1960s.

According to OAR 345-022-0110, Public Services (pg. 5. April 2017) "The applicant...must address all permanent and temporary impacts of the facility on housing, traffic, safety, police and fire protection, health care and schools." ³

My impression from reviewing the application Page 17 ⁴ is that the applicant has not fully examined the final portion of the intended route nor does it fully recognize or address the need for traffic mitigation. This "loop" is the only access to/from thirty-six houses to the rest of the city. The area to the north of the "loop" is occupied by the Grande Ronde Hospital and Medical Clinic. Two blocks to the east is located the local high school and a grade school. ²

In June of 2016, the Grande Ronde Hospital petitioned the City to have a conditional use for a parking lot expansion project next to Hawthorne. The Conditional Use Permit was approved subject to the Condition of Approval that "No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is developed to residential standards and is not designed to support commercial traffic." ⁵

The La Grande Director of Public Works, Kyle Carpenter, provided information regarding the widths for the streets in question. The two streets range from 33 feet to 37 feet in width with no sidewalks. I personally measured the area where the unpaved stem of Hawthorne leaves the "loop" to go up the hill. At the junction it measures 32 feet curb cut to curb cut and narrows to 18-21 feet in width as it goes around the corner up the hill. 6 The Public Works Director also provided pictures of the mapping system showing the existing utilities located in the "loop". 7-8. It should also be noted that from the entrance to the "loop" at Sunset Drive to the entrance of the site the road has a 16% grade.

Attachment U2 9 from the application shows an "Aerial Lift Crane to be Used During Construction" and the Transportation and Traffic Plan on page 19 10 lists a number of other vehicles anticipated to be used. Article 6.6 — Public Street Standards for the City of La Grande Section 6.6.002 states that "Collector Streets are designed to withstand normal trucks of an HS20 loading. Larger trucks are to utilize Arterial Streets where at all possible." 11 The majority of vehicles listed on page 19 exceed that limit and would be using a Local Street in addition to Arterial and Collector Streets. According to the Public Works Director the two streets in the "loop" were designed as Local Streets for residential use, able to accept the pressures of HS20 for the purpose of an occasional need such as a weekly garbage truck or an emergency vehicle but for no more than 5% of the time. The paving construction of these over 50 year old streets in the "loop" was not designed for repetitive use by vehicles heavier than a normal car. These streets in the "loop" have not been repaved, only patched when necessary, since they were first constructed.

The application does not address the "loop" specifically, but 3.1.2 (pg. 19) 10 and Table 6 (pg.17) 12 of the Transportation and Traffic Plan indicate there would be numerous vehicles using this route. Not knowing exactly just which vehicles would be on the "loop" daily but making a conservative estimate of 50 round trips (100 single) it would be a constant parade with one truck every 7.2 minutes. This is unacceptable for numerous reasons including constant excessive noise.

Not only would weight of the vehicles be a problem but the narrowness of the "loop" streets and the ninety degree blind curves that would have to be executed would be either impossible or extremely dangerous considering the turning radius for many of these large vehicles. The

already dangerous situation for a number of driveways that exit onto these "loop" streets at blind curves would be exacerbated. 13-14

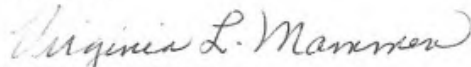
When considering only the traffic and safety issues listed above, the use of the "loop" as a part of the route for Idaho Power seems to be not only dangerous for the residents but unconscionable and irresponsible for Idaho Power to use such streets that are currently primarily for the neighborhood for walking (children to school, all ages for physical training), driving, or biking. I fear there are standards that are either not being considered or they are intentionally being ignored. There should be some common sense, courtesy and respect for the impact this project would impose on any neighborhood.

Finally, La Grande Ordinance Number 3077, which adopted Oregon State Traffic Laws by reference, states in Section 17 page 8 "It shall be unlawful for any person, firm or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes." Neither Modelaire/Hawthorne Loop nor Sunset Drive are posted as truck routes. 15-16

A site review and traffic plan must be completed prior to the cite certificate being issued and not 90 days prior to construction as stated.

For the above reasons I oppose the usage of the proposed route for the construction of the B2H transmission line.

Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon. 97850

gmammen@eoni.com

Exhibit 1

City of La Grande Ordinance Number 3242,
 Series 2018
 Page 236 of 312

**TABLE 1
 STREET STANDARDS**

Functional Classification	ADT Volume	Speed (mph)	# of Travel Lanes	Travel Lane Width	Turn Lane or Median Width	Bike Lanes	Min. Bike Lane Width	On-Street parking
Downtown Arterial	10,000	20	2-3	11'	11'			both sides
Arterial	10,000	40-55	2-5	12'	4-14'	optional ⁴	5'	none
Major Collector	2,000 - 10,000	25-45	2-3	11'	12'	required	5'	one or both sides
Minor Collector	1,000 - 2,000	25-35	2	11'	none	Optional ⁵	5'	one or both sides
Local Street	0 - 1,000	15-25	2	10'	none	none	none	one or both sides

Functional Classification	Sidewalks	Min. Sidewalk Width	Planting Strip Width ¹	Total Paved Width ²	Total ROW Width ³	Private Access Spacing
Downtown Arterial	required	12'	3'6" ⁶	49'	80'	200'
Arterial	required	5'	8'	36'-72'	80'-102'	200' - 400'
Major Collector	required	5'	8'	52'-60'	62'-90'	150' - 300'
Minor Collector	required	5'	8'	30'-48'	60'-78'	75' - 150'
Local Street	required	5'	8'	28'-36'	40'-66'	Each Lot

¹A portion of the required planting strip width may be used instead as additional sidewalk width or reduced right of way, as appropriate.

²The minimum of the paved width was calculated with the following assumptions:

Arterials: Two (2) travel lanes, four foot (4') median divider, no center turn lane, no bike lanes.

Major Collectors: Two (2) travel lanes, two (2) bike lanes, no center turn lane, parking on one (1) side.

Minor Collectors: Two (2) travel lanes, parking on one (1) side of street, no bike lanes.

Local Streets: Two (2) travel lanes, parking on one (1) side of street.

The maximum paved width for each street was calculated assuming the inclusion of all required and optional facilities. Minimum paved widths for each street are as required in Section 6.2.005 of this Code.

³These right-of-way width ranges are for new streets.

⁴Bike lanes should be provided on Arterials unless more desirable parallel facilities are designated and designed to accommodate bicycles.

⁵ Bike lanes should be provided on Minor Collectors where traffic volumes or other factors warrant. Otherwise, Minor Collectors should be designed and designated as shared roadway facilities with wide outside travel lanes of 14' on important bike routes.

Exhibit 2

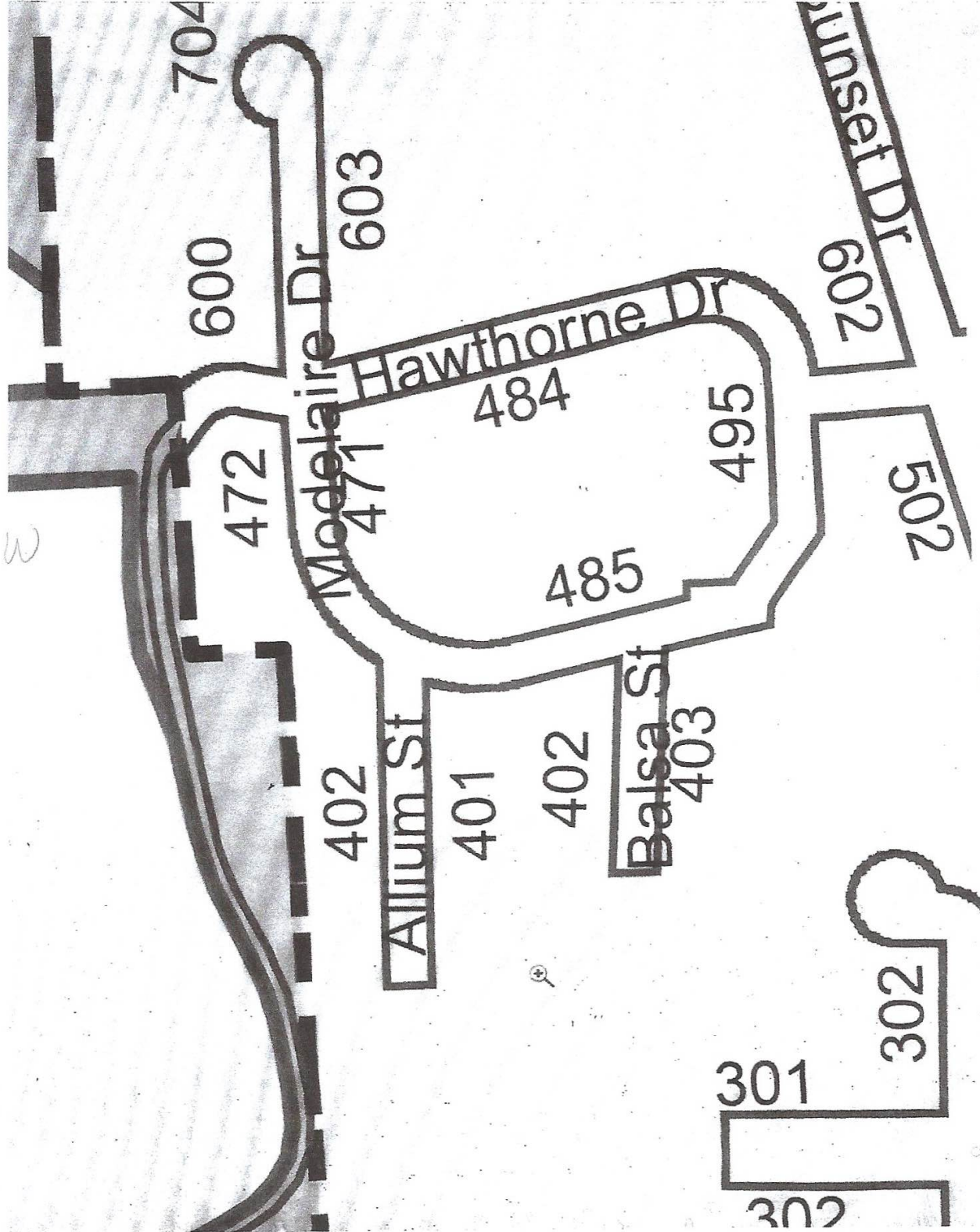


Exhibit 3

Public Services

ORAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

ORAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

ORAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (ORAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (ORAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

ORAR 345-024-0010 and 345-024-0015

This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety. Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

ORAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4

Idaho Power Responses to Comments and Requests for Additional Information on the B2H ApASC
 from the City of La Grande
 Compiled by ODOE. RAI's from the City of La Grande and Responses from IPC

U	U-Public Services include utilities such as road systems, water, sanitation services, power, and other amenities necessary for the construction.	Ordinance #2912, Series 1997 gives the City jurisdiction and control on all City street rights-of-way and Ordinance #3077, Series 2009, establishes the process and requirements for permits and licenses for uses of the streets that are not normal uses and may result in damages.	The project construction has two major road systems through La Grande that are proposed for this project – Morgan Lake Road via Gekeler Lane, 'C' Avenue, Walnut Street, and on up Morgan Lake Road. Roads along these routes are used by the ambulance service for accessing the hospital, the public transit system on its normal daily route, citizens to access locations within and outside this area and also for the school busing system for transporting kids to the La Grande Middle School, La Grande High School and Central Elementary School. In addition to the vehicular modes of travel, those routes are heavily used by bicyclists and pedestrians. The other route that would be utilized is the same route with the exception of turning onto Sunset Drive and up Hawthorne Street to a private gravel road that heads up the area above Deal Canyon. Two other routes that are not addressed but that would be obvious access routes for construction would be South 12th Street and South 20th Street. As a general rule, City streets are built with ninety degree angles, which may restrict some	To address the City's concerns regarding traffic and road use within the city's limits, Idaho Power has added the following proposed conditions to Exhibit K: <i>Land Use Condition 9: Prior to construction in Union County, the site certificate holder shall complete the following to address traffic impacts in the county:</i> <i>a. The site certificate holder shall finalize, and submit to the department for its approval, a final county-specific transportation and traffic plan. The protective measures described in the draft Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be included and implemented as part of the final county-specific plan, unless otherwise approved by the department;</i> <i>b. The site certificate holder shall work with the Union County Road Department and the City of La Grande Public Works Department to identify concerns related to Project construction traffic; and</i> <i>c. The site certificate holder shall develop traffic control measures to mitigate the effects of Project construction traffic.</i> <i>Land Use Condition 26: During construction in Union County, the site certificate holder shall conduct all work in compliance with the Union County-specific</i>
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Exhibit 5

103

IV. CONCLUSIONS

104 Based on the Findings of Fact above, the Planning Commission concludes that the application meets the
105 requirements established in LDC Articles 8.5 and other applicable codes and Ordinances.

106

107

V. ORDER AND CONDITIONS OF APPROVAL

108 Based on the conclusions above, the Planning Commission approves the Conditional Use Permit as
109 requested, subject to the following Conditions of Approval:

- 110 1. No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is
111 developed to a residential standards and is not designed to support commercial traffic.
- 112 2. Any existing driveway curb cuts along Hawthorn Drive bordering GRH's property, that are not used for
113 residential purposes, shall be removed and replaced with City standard improvements that exists
114 adjacent to such areas.
- 115 3. There is a storm sewer line extending through the project area that shall to be protected. Any
116 improvements that may affect the storm sewer line shall be reviewed and approved by the Public Works
117 Director.

118

119

VI. STANDARD CONDITIONS OF APPROVAL FOR LAND USE APPLICATIONS

- 120 1. **Revisions to a Valid Conditional Use Permit:** Any variations, alterations, or changes in a valid
121 Conditional Use Permit requested by the deed holder shall be considered in accordance with the
122 procedures of the Land Development Code as though a new Conditional Use Permit were being applied
123 for.
- 124 2. **Public Works Standards:** Where a development involves work within the public right-of-way, a Right-
125 of-Way Permit shall be obtained from the Public Works Department in advance of commencing with any
126 work in the right-of-way. All improvements within the public right-of-way shall be in conformance with the
127 most recent adopted City of La Grande "Engineering Standard Drawings and Specifications for
128 Construction Manual."
- 129 3. **Building Permits:** The City of La Grande Building Department shall be contacted early in the process
130 and in advance of development to coordinate and obtain required building, plumbing, electrical and/or
131 mechanical permits. All required permits shall be acquired in advance of construction.

132

133

VI. OTHER PERMITS AND RESTRICTIONS

134 The applicant and property owner is herein advised that the use of the property involved in this application
135 may require additional permits from the City of La Grande or other local, State or Federal Agencies.

136 The City of La Grande land use review, approval process and any decision issued does not take the place of,
137 or relieve the applicant of responsibility for acquiring such other permits, or satisfy any restrictions or
138 conditions thereon. The land use decision herein does not remove, alter, or impair in any way the covenants
139 or restrictions imposed on this property by deed or other instrument.

140 The land use approvals granted by this decision shall be effective only when the rights granted herein have
141 been exercised and commenced within one (1) year of the effective date of the decision. In case such right
142 has not been exercised and commenced or an extension obtained, the approvals granted by this decision
143 shall become null and void. A written request for an extension of time shall be filed with the Planning
144 Department at least thirty (30) days prior to the expiration date of the approval.

145

146

7/25/2019

Gmail - Modelaire Roadway Specifications

Exhibit 6



Virginia Mammen <4gmammen@gmail.com>

Modelaire Roadway Specifications

3 messages

Kyle Carpenter <KCarpenter@cityoflagrande.org>
To: "gmammen@eoni.com" <gmammen@eoni.com>

Fri, Jul 12, 2019 at 1:51 PM

I have attached a couple pictures of our mapping system that will give you a sense of where existing utilities are in Modelaire and Hawthorne. As for the widths of the roadways, I took measurements in multiple places, and found the following:

- Modelaire Drive (F Avenue) between Sunset Blvd and Hawthorne Drive is approximately 33 feet wide with a grade of about 5 Percent.
- Hawthorne Drive is approximately 32 feet wide at the bottom near the intersection of Modelaire/F Avenue and widens to about 34 feet where it intersects Modelaire at the top of the hill. The grade heading up hill is approximately 15.5 Percent.
- Modelaire Drive is generally 36 feet wide with some minor variability generally less than a foot (35' to 37'). On the southernmost segment of the roadway where the majority of the elevation gain is observed the grade is approximately 16 Percent.

Let me know if there are any other specifications of these roadways that you are interested in that I have missed. Have a great weekend and thanks for the treats, the guys were very appreciative.

Kyle Carpenter, PE

Public Works Director

City of La Grande

Public Works

Ph: (541) 962-1325

Fax: (541) 963-4844

2 attachments



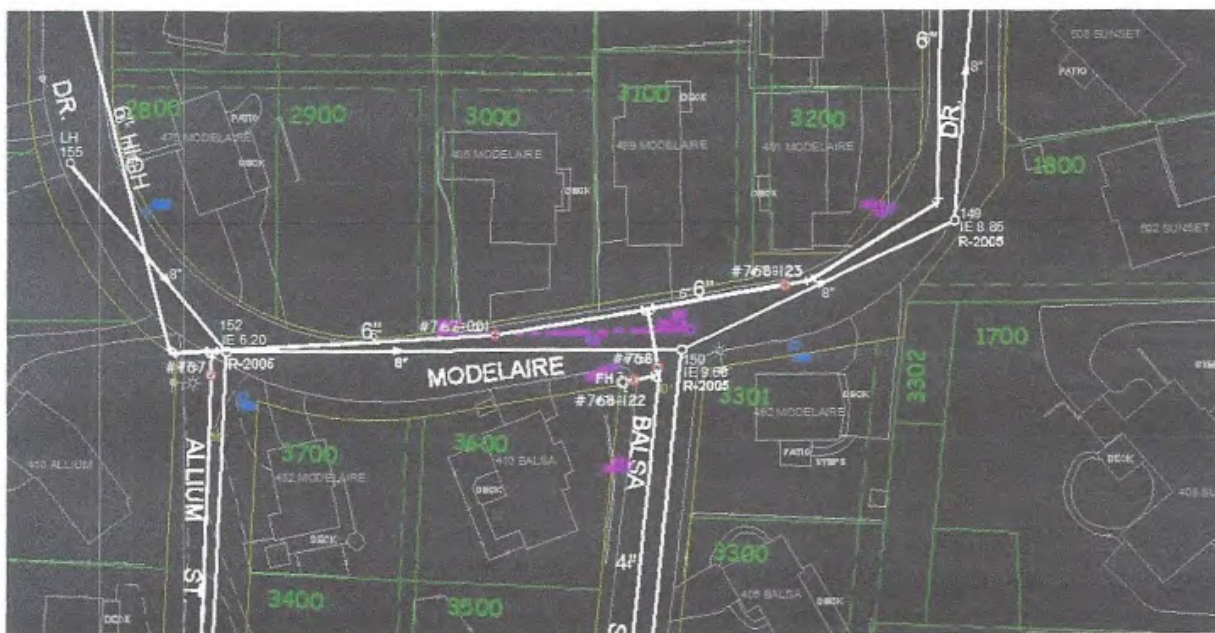
Hawthorne.jpg
150K

Modelaire.jpg
120K

7/25/2019

0 (1067x555)

Exhibit 7



7/25/2019

0 (1397x451)

Exhibit 8



Exhibit 9

attachment U2

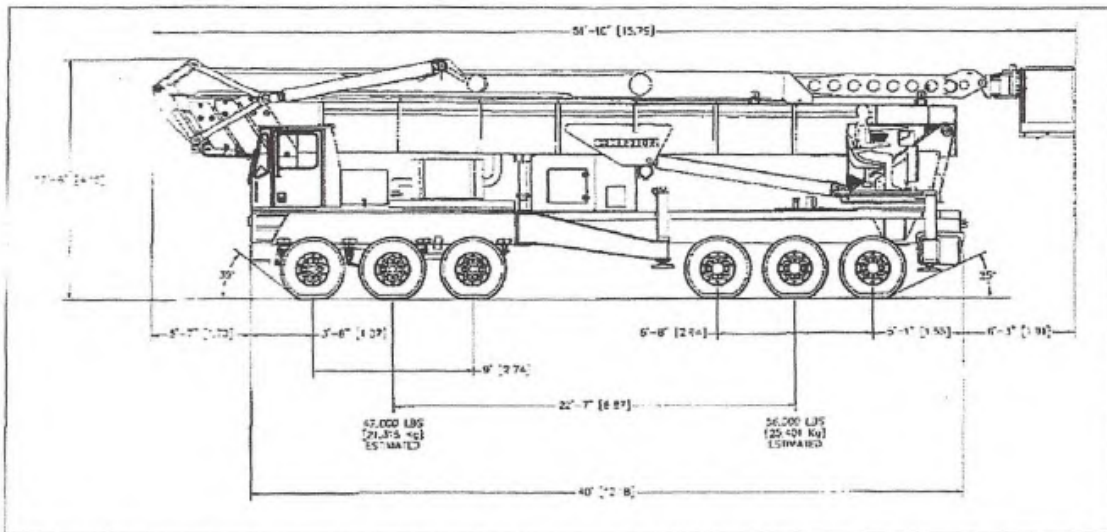


Figure 2. Example Aerial Lift Crane to be Used During Construction (Roadable Length 52 Feet; Width 8 Feet 6 Inches)

Exhibit 10

The following is a summary of anticipated equipment to be used for each transmission-line construction activity.

- Survey work: pickup trucks or ATVs.
- Timber removal: pickup trucks, feller bunchers, dump trucks, wood chippers.
- Road construction: pickup trucks, bulldozers, motor graders, and water trucks.
- Hole digging, installation of directly embedded structures, or foundation installation: pickup trucks, 2-ton trucks, digger derrick trucks, hole diggers, bulldozers, concrete trucks, water trucks, cranes, hydro cranes, wagon rock drills, dump trucks, and front-end loaders.
- Hauling lattice steel members, tubular poles, braces, and hardware to the structure sites: steel haul trucks, carry alls, cranes, and forklifts.
- Assembly and erection of structures: pickup trucks, 2-ton trucks, carry alls, cranes, and a heavy lift helicopter.
- Wire installation: pickups, wire reel trailers, diesel tractors, cranes, 5-ton boom trucks, splicing trucks, three drum pullers, single drum pullers, tensioner, sagging dozers, carry-alls, static wire reel trailers, bucket trucks, and a light duty helicopter.
- Final cleanup, reclamation, and restoration: pickup trucks, 2-ton trucks, bulldozers, motor graders, dump trucks, front-end loaders, hydro-seed truck, and water trucks.

The highest level of traffic will be when the wire stringing operations begin while several other operations are occurring at the same time, which will likely include ROW clearing, installing foundations, hauling steel, and assembling and erecting structures. For the station work, the highest level of traffic will be during site grading and foundation installation. For the communication station sites, the highest level of traffic will be during grading and site preparation.

Detailed estimates of trips generated by transporting Project construction equipment will be provided by the construction contractor prior to construction.

3.1.3 Traffic Related to Timber Removal

In forested areas, the Project will require removal of timber from the Project ROW and for construction and improvement of access roads. Specific timber harvest plans have not been finalized. Logs from timber clearing may be transported to nearby sawmills. Decisions regarding transportation routes for harvested timber will be made following completion of a timber harvest plan, and the number of log truck tips will be estimated when the timber harvest plan has been finalized. Logging slash will remain onsite if possible. For additional discussion regarding removal of timber in forested areas, see Exhibit K, Attachment K-2, ROW Clearing Assessment.

3.1.4 Impacts to V/C Ratios

Based on the estimated trip generation numbers in Tables 4 and 6, a maximum of approximately 1,294 daily one-way vehicle trips are expected within any one construction spread. To facilitate traffic and other analyses, the two construction spreads are divided into smaller sections based on similar construction windows and seasonal weather restrictions. Not all construction sections will have the same number of concurrent construction activities, depending on how the construction contractor sequences and executes the Project. Some sections will have fewer daily vehicle trips. For the purposes of the traffic analysis, the spreads are divided into five sections with multi-use areas that could have additive traffic impacts. The sections are assumed to have approximately equal levels of activity. The 1,294 daily one-way trips per spread divided over five sections of more concentrated traffic results in 259 daily one-

Exhibit 11

City of La Grande Ordinance Number 3242,
Series 2018
Page 252 of 312

ARTICLE 6.6 – PUBLIC STREET STANDARDS

SECTION 6.6.001 - PURPOSE

Upon the request of the La Grande City Council, a variety of street design standards have been reviewed and are now incorporated in the Land Development Code.

SECTION 6.6.002 - CLASS I IMPROVEMENT STANDARDS

This classification will cover those streets that are designed to meet the standards for an expected life of twenty (20) years or more. The attached drawings shall be the minimum standard for those streets in this classification. All streets designated as Federal Aid Urban Streets (F.A.U.) shall be constructed under these design standards. Streets in this designation shall be constructed with sidewalks when at all possible in an effort to increase pedestrian safety. Collector streets are designed to withstand normal trucks of an HS 20 loading. Larger trucks are to utilize Arterial streets where at all possible. This level of development shall be the ultimate goal for all streets within the City of La Grande.

Possible means of financing available for this Class shall be methods A, B, C, D, E, F, G, and H in Section 6.6.006.

A. Advantages

1. The construction life is extended to a period above other City standards.
2. The visible aesthetics in relationship to having curbs and a blacktop surface with landscaping or concrete driveways and a sidewalk is generally appealing to the public.
3. Easy maintenance for the Public Works Department for cleaning and minor repair.
4. Storm sewer drainage is confined within the bounds of the curbs during minor flooding periods.
5. Parking is restricted to a solid barrier, that being the curb; this restricts parking in the area on the back side of the curb and confines travel to the street surface.
6. Defined areas for possible cross walks, signs, power poles, and other utilities that are restricted to the outside areas behind the curbs.
7. It allows for a wide range of financing methods and is to City standards for a ten (10) year Bancroft bonding.
8. Provides a dust free surface.

B. Disadvantages

1. The extreme high level of cost that is incurred with this type of development.

SECTION 6.6.003 - CLASS II IMPROVEMENT LEVEL

Streets constructed in this classification shall be constructed to the same standards as Class I Streets with the exception of the form of drainage system. These streets shall meet the standards as shown on the attached drawing. This level of construction shall be only utilized in substitution for Class I Streets when it is determined by the City Council at the recommendation of the City Engineer or Engineering Superintendent, that an adequate drainage system cannot be installed for a Class I Street.

Exhibit 12

Table 6. Construction Vehicle Trips per Day per Construction Spread

Construction Crew Type	Construction Vehicles					
	Light Construction Vehicles			Heavy Construction Vehicles		
	Number of Pickups/ Mechanic Trucks (per day)	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)	Number of Other Vehicles	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)
Substation Construction	20	2	40	5	2	10
ROW Clearing	9	4	36	5	4	20
Roads/ Pad Grading	9	4	36	9	2	18
Foundations	9	2	18	5	8	40
Tower Lacing (assembly)	27	2	54	0	0	0
Tower Setting (erection)	20	2	40	0	0	0
Wire Stringing	9	4	36	9	4	36
Restoration	3	2	6	0	0	0
Blasting	5	4	20	0	0	0
Material Delivery	20	8	160	12	2	24
Mechanic and Equipment Mgmt.	5	6	30	0	0	0
Refueling	0	0	0	5	4	20
Dust Control	0	0	0	5	4	20
Construction Inspection	5	8	40	0	0	0
Concrete Testing	5	4	20	0	0	0
Environmental Compliance	9	6	54	0	0	0
Surveyors	5	3	30	0	0	0
Totals	—	—	620	—	—	188

Exhibit 13

7/24/2019

Roadway Design Manual: Minimum Designs for Truck and Bus Turns

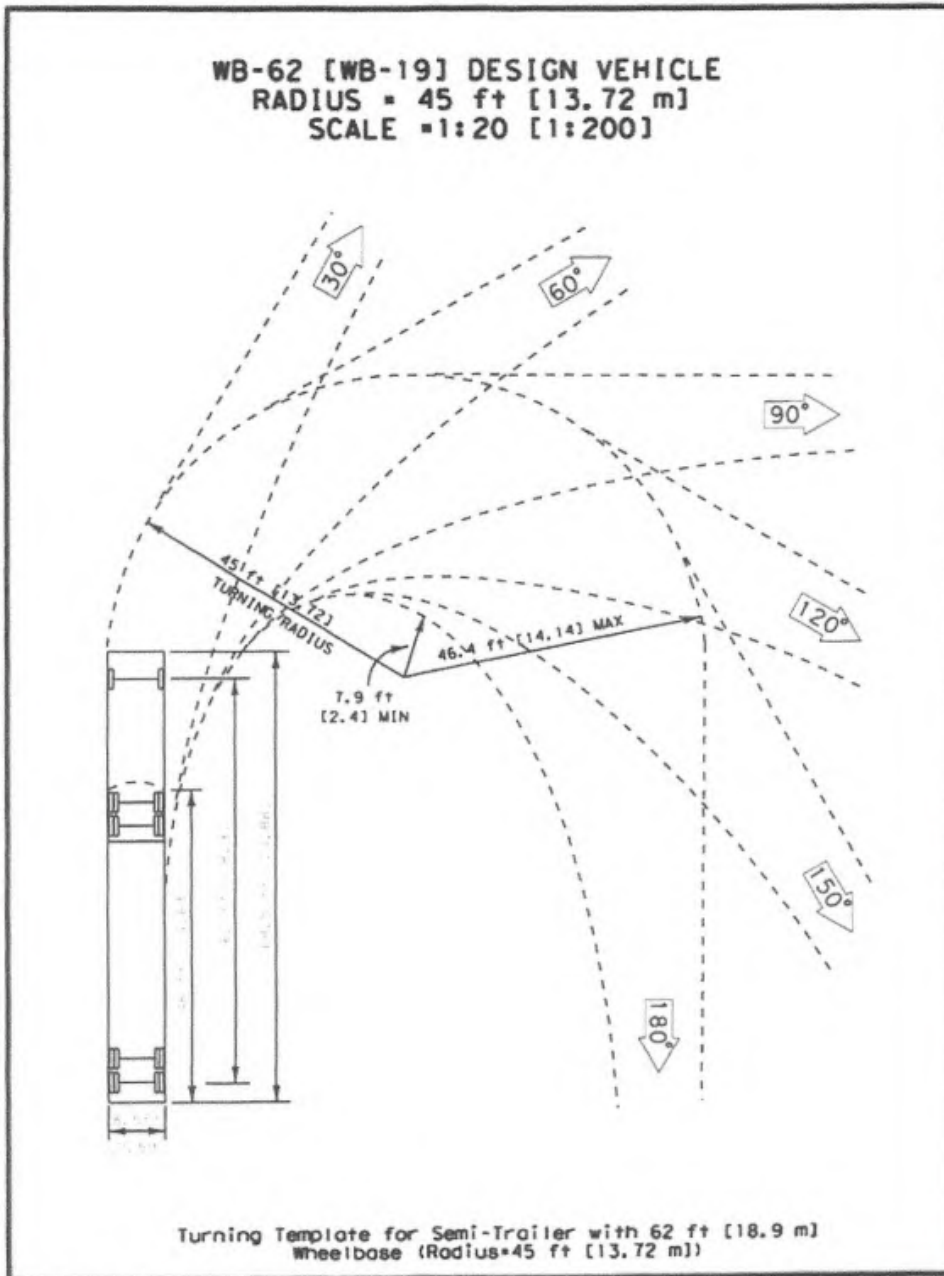


Figure 7-4. Turning Template for Semi-Trailer with 62 ft [18.9 m] Wheelbase, (not to scale). Click [here](#) to see a PDF of the image.

7/24/2019

7-1.png (596x805)

Exhibit 14

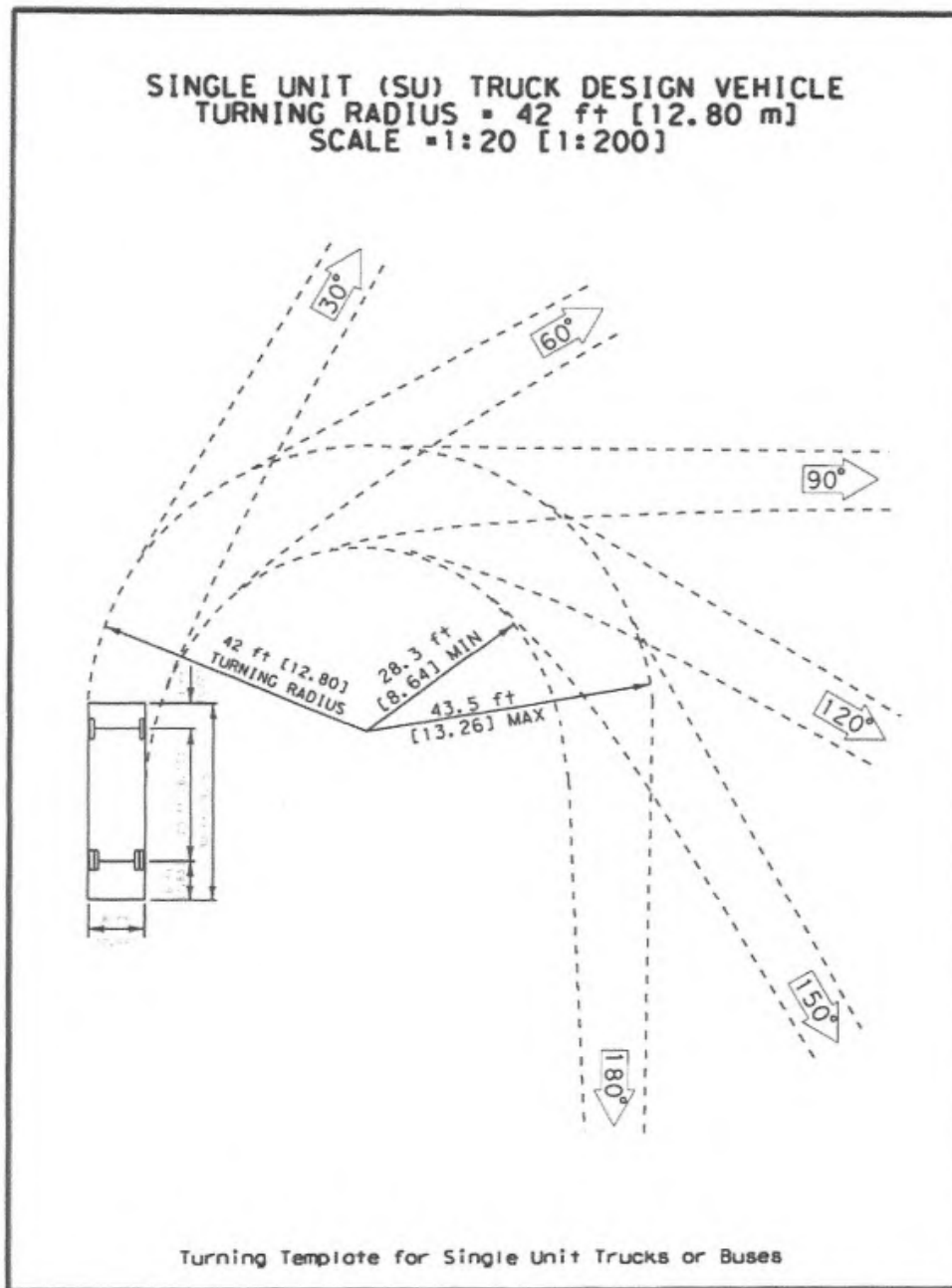


Exhibit 15

**CITY OF LA GRANDE
ORDINANCE NUMBER 3077
SERIES 2009**

**AN ORDINANCE CONTROLLING VEHICULAR AND PEDESTRIAN TRAFFIC, PARADES
AND PROCESSIONS AND ISSUANCE OF PERMITS; PROVIDING PENALTIES; AND
REPEALING ORDINANCE NUMBER 2845, SERIES 1993; ALL AMENDING ORDINANCES
AND ALL OTHER ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH;
AND DECLARING AN EFFECTIVE DATE**

THE CITY OF LA GRANDE ORDAINS AS FOLLOWS:

Section 1. This Ordinance may be cited as the City of La Grande Uniform Traffic Ordinance.

Section 2. APPLICABILITY OF STATE TRAFFIC LAWS.

Oregon Revised Statutes, Chapter 153, and the Oregon Vehicle Code, ORS Chapter 801 and 822, as now constituted, are adopted by reference. Violation of an adopted provision of those chapters is an offense against the City.

Section 3. DEFINITIONS

In addition to those definitions contained in the Oregon state Motor Vehicle Code, the following words or phrases, except where the context clearly indicates a different meaning, shall mean:

a. Alley

A street or highway primarily intended to provide access to the rear or side of lots or buildings in urban areas and not intended for through vehicular traffic.

b. Bicycle

A bicycle is a vehicle that:

1. Is designed to be operated on the ground on wheels;
2. has a seat or saddle for use of the rider;
3. is designed to travel with not more than three (3) wheels in contact with the ground;
4. is propelled exclusively by human power; and,
5. has every wheel more than fourteen inches (14") in diameter or two (2) tandem wheels, either of which is more than fourteen inches (14") in diameter.

c. Bicycle Lane

That part of the highway, adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

d. Bicycle Path

A public way, not part of a highway, which is designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

e. Block

The part of one side of a street lying between the two (2) nearest cross streets.

f. Central Business District

Exhibit 16

ORDINANCE NUMBER 3077
SERIES 2009
Page (8)

a. City Regulation of Special Movement of Oversized Load

The applicant shall submit an application to the City Manager or designee, showing the terminal points of the purported movement; the proposed route; the nature of the movement requested, including the weight and dimensions of the vehicle, load, machine, building, or structure to be moved; the time, date and duration of the proposed movement.

b. Special Movement Permit

A permit shall be required to move any vehicle, structure, or load on, or to access a street when, after preparation for movement, the vehicle, structure or load exceeds fourteen feet (14') in height, requires the use of guy wires, or could result in the blockage of a street. An approved application may serve as a permit, and a copy of the approved application shall be provided to the applicant.

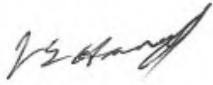
Section 17. TRUCK ROUTES

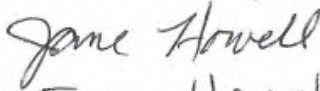
- a. It shall be unlawful for any person, firm, or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes.
- b. Any vehicle with a gross weight over 26,000, pounds specifically picking up deliveries or making deliveries to any business or residence located on a street that is not a truck route will be exempted if the vehicle is driven from the truck route to the destination in the shortest, most direct, and safest route.
- c. The use of Jacob brakes shall not be allowed within the city limits of La Grande, Oregon.
- d. Truck routes will be posted as follows:
 1. Walnut street north from the city limits to C Avenue;
 2. C Avenue east from Walnut Street to Gekeler Avenue;
 3. Gekeler Avenue east to the city limits;
 4. 12th street south from Gekeler Avenue to the city limits;
 5. 2nd Street south from the city limits to Adams Avenue;
 6. Monroe Avenue east from Spruce Street to Highway 82;
 7. Jackson Avenue east from Spruce Street, and
 8. Spruce Street south from the city limits to Monroe.

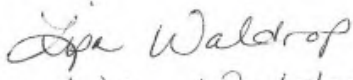
Section 18. IMPOUNDMENT AND DETENTION OF VEHICLES

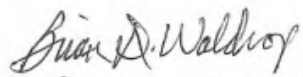
- a. Whenever a vehicle is placed in a manner or location that constitutes an obstruction to traffic or a hazard to public safety, a police officer or enforcement officer shall order the owner or operator of the vehicle to remove said vehicle. If the vehicle is unattended, the officer or enforcement officer may cause the vehicle to be towed and stored at the owner's expense. The owner shall be liable for the costs of towing and storing, notwithstanding that the vehicle was parked by another or that the vehicle was initially parked in a safe manner but subsequently became an obstruction or hazard.

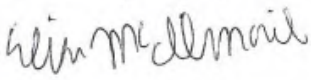
I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE 
PRINTED NAME James E. Howell II
ADDRESS 482 Modelaire Dr
EMAIL j.howell2@frontier.com

SIGNATURE 
PRINTED NAME Jane Howell
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EMAIL d.janehowell@gmail.com

SIGNATURE 
PRINTED NAME Lisa Waldrop
ADDRESS 475 Modelaire Dr.
EMAIL ldjw62@gmail.com

SIGNATURE 
PRINTED NAME BRIAN D. WALDROP
ADDRESS 475 MODELAIRES DR.
EMAIL bdwaldrop58@gmail.com

SIGNATURE 
PRINTED NAME EUSE McILMAIL
ADDRESS 476 MODELAIRES DR.
EMAIL mcilmail154@hotmail.com


I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL



Jessie Huxell
472 Modelaire Dr. LaGrande OR 97850

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL

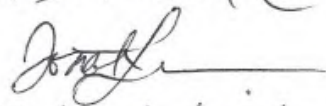

C. Huxell
472 Modelaire Dr. LG, OR 97850
CHRIS Huxell @ EMAIL.COM

SIGNATURE

PRINTED NAME

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EMAIL


Jonah Lindeman
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Blake Bars
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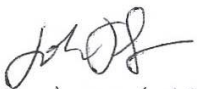
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SIGNATURE 
PRINTED NAME D. Dale Mammox
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SIGNATURE 
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SIGNATURE 
PRINTED NAME Pasco Arritola
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SIGNATURE 
PRINTED NAME JOHN BALUTE
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EMAIL


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SIGNATURE 
PRINTED NAME Andrea Galzow
ADDRESS 486 Hawthorne DR, LA Grande
EMAIL foreverfamily33@aol.com

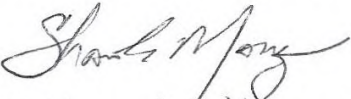
SIGNATURE 
PRINTED NAME Frances E. Lillard
ADDRESS 471 madelaire Dr. L.G.
EMAIL

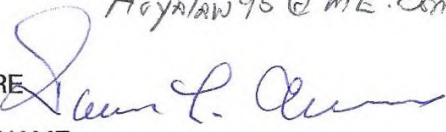
SIGNATURE 
PRINTED NAME Brent H. Smith
ADDRESS 410 Allium St
EMAIL smith brent@gmail.com


SIGNATURE 
PRINTED NAME M. Jeannette Smith
ADDRESS 410 Allium Street
EMAIL jeannetterampton@gmail.com

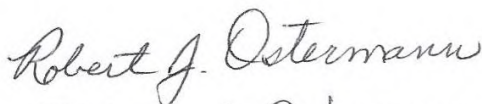
SIGNATURE 
PRINTED NAME KIMBERLEY HEITSTUMAN
ADDRESS 2409 CENTURY LP, LA GRANDE, OR 97850
EMAIL kimheitstuman@hotmail.com


I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE: 
PRINTED NAME Shawn K. Mangum
ADDRESS 2909 E. M. Ave,
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SIGNATURE 
PRINTED NAME
ADDRESS Dennis L. AUER 541-9637720
410 Balsa Street LaGrande, Oregon 97858
EMAIL N/A

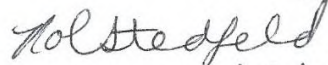
SIGNATURE 
PRINTED NAME Linda Snyder
ADDRESS 491 Modelaire
EMAIL


SIGNATURE 
PRINTED NAME Robert J. Ostermann
ADDRESS 495 Modelaire Dr. LaGrande, OR 97850
EMAIL

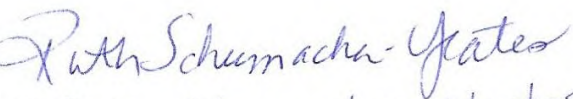
SIGNATURE 
PRINTED NAME Robin J. Ostermann
ADDRESS 495 Modelaire Dr La Grande, OR 97850
EMAIL

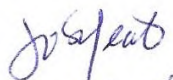
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PRINTED NAME Robin Stedfeld
ADDRESS 485 Modelaine Dr. La Grande
EMAIL rstedfeld@yahoo.com

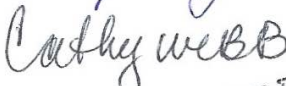
SIGNATURE 
PRINTED NAME Rita Allen
ADDRESS 410 Balsa St. La Grande Or.
EMAIL

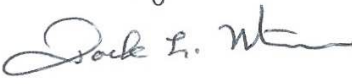
SIGNATURE 
PRINTED NAME Ruth Schumacher Yeates
ADDRESS 408 Sunset Drive La Grande, OR 97850
EMAIL ruthschumacheryeates@gmail.com



SIGNATURE 
PRINTED NAME JOHN YEATES
ADDRESS 408 SUNSET DR. LA GRANDE, OR 97850
EMAIL jyeates52@gmail.com


I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE 
PRINTED NAME LOIS BARRY
ADDRESS P.O. Box 566, La Grande, OR 97850
EMAIL loisbarry31@gmail.com

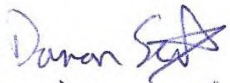
SIGNATURE 
PRINTED NAME CATHY WEBB
ADDRESS 1708 Cedar St. LAGRANDE, OR 97850
EMAIL thunkski@gmail.com


SIGNATURE 
PRINTED NAME Jack L. Martin
ADDRESS 1412 Gilcrest Dr. LaGrande
EMAIL Buff Martin 27 @GMail .com

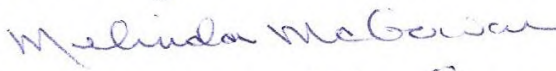
SIGNATURE 
PRINTED NAME GERALDINE BRASETH-PALMER
ADDRESS 1602 Goldencrest Drive LA GRANDE, Ore 97850
EMAIL 


SIGNATURE 
PRINTED NAME Jean BAPH
ADDRESS 1509 MADISON AVE LaGrande, OR 97850
EMAIL Jbaph19@gmail.com

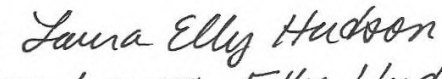
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SIGNATURE 
PRINTED NAME Damon Sexton
ADDRESS 401 Balsa St La Grande, OR 97850
EMAIL Sexton.damon@gmail.com

SIGNATURE 
PRINTED NAME Cory Sexton
ADDRESS 401 Balsa Street La Grande OR 97850
EMAIL Corytris@gmail.com

SIGNATURE 
PRINTED NAME Melinda McGowan
ADDRESS 602 Sunset Dr.
EMAIL melindamegowan@gmail.com

SIGNATURE 
PRINTED NAME Keith D. Hudson
ADDRESS 605 F Ave, LaGrande OR 97850
EMAIL Keithdhudson@gmail.com

SIGNATURE 
PRINTED NAME Laura Elly Hudson
ADDRESS 605 F Ave, La Grande OR 97850
EMAIL ellyhudson@gmail.com

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Gary D. Pierson*
PRINTED NAME Gary D. Pierson
ADDRESS 489 Modelaire Drive, La Grande OR 97850
EMAIL -

SIGNATURE *Lynn Wheeler Duncan*
PRINTED NAME LYNN WHEELER DUNCAN
ADDRESS 489 Modelaire Drive, La Grande OR 97850
EMAIL rlvw1910@gmail.com

SIGNATURE *Anne G. Cavinto*
PRINTED NAME Anne G. Cavinto
ADDRESS 86 Hawthorne Dr. La Grande, OR 97850
EMAIL acavinct@ecu.edu

SIGNATURE *Joe Horst*
PRINTED NAME JOE HORST
ADDRESS 86 HAWTHORNE DR. LA GRANDE OR.
EMAIL joehorst@ecni.com

SIGNATURE *Angela Sherer*
PRINTED NAME ANGELA Sherer
ADDRESS 91 - W. Hawthorne Dr. LaGrande, OR 97850
EMAIL asherer@frontier.com.

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Robert J. Sherer*
PRINTED NAME Robert J. Sherer
ADDRESS 97 W Hawthorne Dr, LaGrande, Or. 97850
EMAIL asherer@frontier.com

SIGNATURE *Heather M. Null*
PRINTED NAME Heather M. Null
ADDRESS 492 Modelaire Dr. La Grande, OR 97850
EMAIL hnull@comi.com

SIGNATURE *Bert R. Frewing*
PRINTED NAME Bert R. Frewing
ADDRESS 709 South 12th Street LaGrande, OR 97850
EMAIL jeanfrewing@gmail.com

SIGNATURE *Lindsay McCullough*
PRINTED NAME Lindsay McCullough
ADDRESS 406 Balsa St., La Grande, OR 97850
EMAIL lindz_mm91@hotmail.com

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Merle E. Comfort*
PRINTED NAME MERLE E. COMFORT
ADDRESS 2009 SCORPIO DRIVE LA GRANDE OR 97850
EMAIL MERLECOMFORT@GMAIL.COM

SIGNATURE *Robin L. Maille*
PRINTED NAME Robin Maille
ADDRESS 401 Cedar St., La Grande
EMAIL r.maille@icloud.com

SIGNATURE *Bruce C Kevan*
PRINTED NAME *Bruce C*
ADDRESS 1511 W Ave LG
EMAIL bruce.kevan@lagrandesd.org

SIGNATURE *Carol S. Summers*
PRINTED NAME CAROL S. SUMMERS
ADDRESS 2811 Belketer Ln - La Grande, OR
EMAIL carolsummers1935@gmail.com

SIGNATURE *Caroline Kaye Juniper*
PRINTED NAME Caroline Kaye Juniper
ADDRESS 406 NTH St. LaGrande - OR 97850
EMAIL

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Gerald D. Juniper*
PRINTED NAME *Gerald Darwin Juniper*
ADDRESS *406 4th St. LaGrande OR. 97850*
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

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SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:53 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019
Attachments: Scan 2019-8-15 17.38.19.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter signed by me and 54 other residents of La Grande expressing our concerns regarding the B2H Project and we request that EFSC deny the Site Certificate.

I have also sent a bound copy of this material by the US Postal Service.

Sincerely,

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the usage of the "Local Streets" ¹ specifically the Modelaire-Hawthorne Loop) ², hereafter referred to as the "loop", of La Grande to access the site entrance. This residential "loop" was constructed without sidewalks for a new development around the early 1960s.

According to OAR 345-022-0110, Public Services (pg. 5. April 2017) "The applicant...must address all permanent and temporary impacts of the facility on housing, traffic, safety, police and fire protection, health care and schools." ³

My impression from reviewing the application Page 17 ⁴ is that the applicant has not fully examined the final portion of the intended route nor does it fully recognize or address the need for traffic mitigation. This "loop" is the only access to/from thirty-six houses to the rest of the city. The area to the north of the "loop" is occupied by the Grande Ronde Hospital and Medical Clinic. Two blocks to the east is located the local high school and a grade school. ²

In June of 2016, the Grande Ronde Hospital petitioned the City to have a conditional use for a parking lot expansion project next to Hawthorne. The Conditional Use Permit was approved subject to the Condition of Approval that "No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is developed to residential standards and is not designed to support commercial traffic." ⁵

The La Grande Director of Public Works, Kyle Carpenter, provided information regarding the widths for the streets in question. The two streets range from 33 feet to 37 feet in width with no sidewalks. I personally measured the area where the unpaved stem of Hawthorne leaves the "loop" to go up the hill. At the junction it measures 32 feet curb cut to curb cut and narrows to 18-21 feet in width as it goes around the corner up the hill. 6 The Public Works Director also provided pictures of the mapping system showing the existing utilities located in the "loop". 7-8. It should also be noted that from the entrance to the "loop" at Sunset Drive to the entrance of the site the road has a 16% grade.

Attachment U2 9 from the application shows an "Aerial Lift Crane to be Used During Construction" and the Transportation and Traffic Plan on page 19 10 lists a number of other vehicles anticipated to be used. Article 6.6 — Public Street Standards for the City of La Grande Section 6.6.002 states that "Collector Streets are designed to withstand normal trucks of an HS20 loading. Larger trucks are to utilize Arterial Streets where at all possible." 11 The majority of vehicles listed on page 19 exceed that limit and would be using a Local Street in addition to Arterial and Collector Streets. According to the Public Works Director the two streets in the "loop" were designed as Local Streets for residential use, able to accept the pressures of HS20 for the purpose of an occasional need such as a weekly garbage truck or an emergency vehicle but for no more than 5% of the time. The paving construction of these over 50 year old streets in the "loop" was not designed for repetitive use by vehicles heavier than a normal car. These streets in the "loop" have not been repaved, only patched when necessary, since they were first constructed.

The application does not address the "loop" specifically, but 3.1.2 (pg. 19) 10 and Table 6 (pg.17) 12 of the Transportation and Traffic Plan indicate there would be numerous vehicles using this route. Not knowing exactly just which vehicles would be on the "loop" daily but making a conservative estimate of 50 round trips (100 single) it would be a constant parade with one truck every 7.2 minutes. This is unacceptable for numerous reasons including constant excessive noise.

Not only would weight of the vehicles be a problem but the narrowness of the "loop" streets and the ninety degree blind curves that would have to be executed would be either impossible or extremely dangerous considering the turning radius for many of these large vehicles. The

already dangerous situation for a number of driveways that exit onto these "loop" streets at blind curves would be exacerbated. 13-14

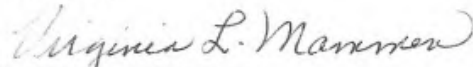
When considering only the traffic and safety issues listed above, the use of the "loop" as a part of the route for Idaho Power seems to be not only dangerous for the residents but unconscionable and irresponsible for Idaho Power to use such streets that are currently primarily for the neighborhood for walking (children to school, all ages for physical training), driving, or biking. I fear there are standards that are either not being considered or they are intentionally being ignored. There should be some common sense, courtesy and respect for the impact this project would impose on any neighborhood.

Finally, La Grande Ordinance Number 3077, which adopted Oregon State Traffic Laws by reference, states in Section 17 page 8 "It shall be unlawful for any person, firm or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes." Neither Modelaire/Hawthorne Loop nor Sunset Drive are posted as truck routes. 15-16

A site review and traffic plan must be completed prior to the cite certificate being issued and not 90 days prior to construction as stated.

For the above reasons I oppose the usage of the proposed route for the construction of the B2H transmission line.

Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon. 97850

gmammen@eoni.com

Exhibit 1

City of La Grande Ordinance Number 3242,
 Series 2018
 Page 236 of 312

**TABLE 1
 STREET STANDARDS**

Functional Classification	ADT Volume	Speed (mph)	# of Travel Lanes	Travel Lane Width	Turn Lane or Median Width	Bike Lanes	Min. Bike Lane Width	On-Street parking
Downtown Arterial	10,000	20	2-3	11'	11'			both sides
Arterial	10,000	40-55	2-5	12'	4-14'	optional ⁴	5'	none
Major Collector	2,000 - 10,000	25-45	2-3	11'	12'	required	5'	one or both sides
Minor Collector	1,000 - 2,000	25-35	2	11'	none	Optional ⁵	5'	one or both sides
Local Street	0 - 1,000	15-25	2	10'	none	none	none	one or both sides

Functional Classification	Sidewalks	Min. Sidewalk Width	Planting Strip Width ¹	Total Paved Width ²	Total ROW Width ³	Private Access Spacing
Downtown Arterial	required	12'	3'6" ⁶	49'	80'	200'
Arterial	required	5'	8'	36'-72'	80'-102'	200' - 400'
Major Collector	required	5'	8'	52'-60'	62'-90'	150' - 300'
Minor Collector	required	5'	8'	30'-48'	60'-78'	75' - 150'
Local Street	required	5'	8'	28'-36'	40'-66'	Each Lot

¹A portion of the required planting strip width may be used instead as additional sidewalk width or reduced right of way, as appropriate.

²The minimum of the paved width was calculated with the following assumptions:

Arterials: Two (2) travel lanes, four foot (4') median divider, no center turn lane, no bike lanes.

Major Collectors: Two (2) travel lanes, two (2) bike lanes, no center turn lane, parking on one (1) side.

Minor Collectors: Two (2) travel lanes, parking on one (1) side of street, no bike lanes.

Local Streets: Two (2) travel lanes, parking on one (1) side of street.

The maximum paved width for each street was calculated assuming the inclusion of all required and optional facilities. Minimum paved widths for each street are as required in Section 6.2.005 of this Code.

³These right-of-way width ranges are for new streets.

⁴Bike lanes should be provided on Arterials unless more desirable parallel facilities are designated and designed to accommodate bicycles.

⁵ Bike lanes should be provided on Minor Collectors where traffic volumes or other factors warrant. Otherwise, Minor Collectors should be designed and designated as shared roadway facilities with wide outside travel lanes of 14' on important bike routes.

Exhibit 2

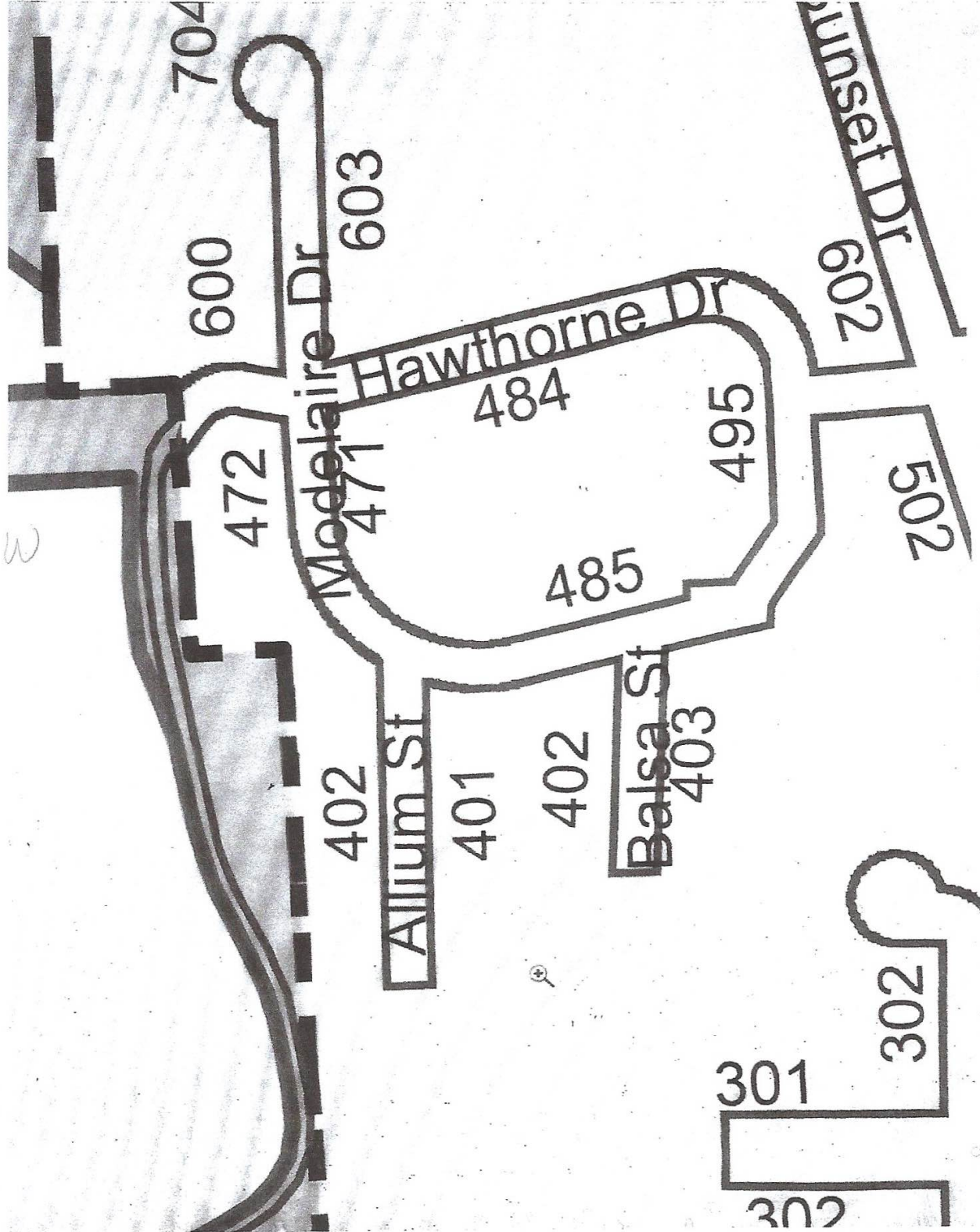


Exhibit 3

Public Services

ORAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

ORAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

ORAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (ORAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (ORAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

ORAR 345-024-0010 and 345-024-0015

This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety. Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

ORAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4

Idaho Power Responses to Comments and Requests for Additional Information on the B2H ApASC
 from the City of La Grande
 Compiled by ODOE. RAI's from the City of La Grande and Responses from IPC

U	U-Public Services include utilities such as road systems, water, sanitation services, power, and other amenities necessary for the construction.	Ordinance #2912, Series 1997 gives the City jurisdiction and control on all City street rights-of-way and Ordinance #3077, Series 2009, establishes the process and requirements for permits and licenses for uses of the streets that are not normal uses and may result in damages.	The project construction has two major road systems through La Grande that are proposed for this project – Morgan Lake Road via Gekeler Lane, 'C' Avenue, Walnut Street, and on up Morgan Lake Road. Roads along these routes are used by the ambulance service for accessing the hospital, the public transit system on its normal daily route, citizens to access locations within and outside this area and also for the school busing system for transporting kids to the La Grande Middle School, La Grande High School and Central Elementary School. In addition to the vehicular modes of travel, those routes are heavily used by bicyclists and pedestrians. The other route that would be utilized is the same route with the exception of turning onto Sunset Drive and up Hawthorne Street to a private gravel road that heads up the area above Deal Canyon. Two other routes that are not addressed but that would be obvious access routes for construction would be South 12th Street and South 20th Street. As a general rule, City streets are built with ninety degree angles, which may restrict some	To address the City's concerns regarding traffic and road use within the city's limits, Idaho Power has added the following proposed conditions to Exhibit K: <i>Land Use Condition 9: Prior to construction in Union County, the site certificate holder shall complete the following to address traffic impacts in the county:</i> <i>a. The site certificate holder shall finalize, and submit to the department for its approval, a final county-specific transportation and traffic plan. The protective measures described in the draft Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be included and implemented as part of the final county-specific plan, unless otherwise approved by the department;</i> <i>b. The site certificate holder shall work with the Union County Road Department and the City of La Grande Public Works Department to identify concerns related to Project construction traffic; and</i> <i>c. The site certificate holder shall develop traffic control measures to mitigate the effects of Project construction traffic.</i> <i>Land Use Condition 26: During construction in Union County, the site certificate holder shall conduct all work in compliance with the Union County-specific</i>
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Exhibit 5

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IV. CONCLUSIONS

Based on the Findings of Fact above, the Planning Commission concludes that the application meets the requirements established in LDC Articles 8.5 and other applicable codes and Ordinances.

V. ORDER AND CONDITIONS OF APPROVAL

Based on the conclusions above, the Planning Commission approves the Conditional Use Permit as requested, subject to the following Conditions of Approval:

1. No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is developed to a residential standards and is not designed to support commercial traffic.
2. Any existing driveway curb cuts along Hawthorn Drive bordering GRH's property, that are not used for residential purposes, shall be removed and replaced with City standard improvements that exists adjacent to such areas.
3. There is a storm sewer line extending through the project area that shall to be protected. Any improvements that may affect the storm sewer line shall be reviewed and approved by the Public Works Director.

VI. STANDARD CONDITIONS OF APPROVAL FOR LAND USE APPLICATIONS

1. **Revisions to a Valid Conditional Use Permit:** Any variations, alterations, or changes in a valid Conditional Use Permit requested by the deed holder shall be considered in accordance with the procedures of the Land Development Code as though a new Conditional Use Permit were being applied for.
2. **Public Works Standards:** Where a development involves work within the public right-of-way, a Right-of-Way Permit shall be obtained from the Public Works Department in advance of commencing with any work in the right-of-way. All improvements within the public right-of-way shall be in conformance with the most recent adopted City of La Grande "Engineering Standard Drawings and Specifications for Construction Manual."
3. **Building Permits:** The City of La Grande Building Department shall be contacted early in the process and in advance of development to coordinate and obtain required building, plumbing, electrical and/or mechanical permits. All required permits shall be acquired in advance of construction.

VI. OTHER PERMITS AND RESTRICTIONS

The applicant and property owner is herein advised that the use of the property involved in this application may require additional permits from the City of La Grande or other local, State or Federal Agencies.

The City of La Grande land use review, approval process and any decision issued does not take the place of, or relieve the applicant of responsibility for acquiring such other permits, or satisfy any restrictions or conditions thereon. The land use decision herein does not remove, alter, or impair in any way the covenants or restrictions imposed on this property by deed or other instrument.

The land use approvals granted by this decision shall be effective only when the rights granted herein have been exercised and commenced within one (1) year of the effective date of the decision. In case such right has not been exercised and commenced or an extension obtained, the approvals granted by this decision shall become null and void. A written request for an extension of time shall be filed with the Planning Department at least thirty (30) days prior to the expiration date of the approval.

7/25/2019

Gmail - Modelaire Roadway Specifications

Exhibit 6



Virginia Mammen <4gmammen@gmail.com>

Modelaire Roadway Specifications

3 messages

Kyle Carpenter <KCarpenter@cityoflagrande.org>
To: "gmammen@eoni.com" <gmammen@eoni.com>

Fri, Jul 12, 2019 at 1:51 PM

I have attached a couple pictures of our mapping system that will give you a sense of where existing utilities are in Modelaire and Hawthorne. As for the widths of the roadways, I took measurements in multiple places, and found the following:

- Modelaire Drive (F Avenue) between Sunset Blvd and Hawthorne Drive is approximately 33 feet wide with a grade of about 5 Percent.
- Hawthorne Drive is approximately 32 feet wide at the bottom near the intersection of Modelaire/F Avenue and widens to about 34 feet where it intersects Modelaire at the top of the hill. The grade heading up hill is approximately 15.5 Percent.
- Modelaire Drive is generally 36 feet wide with some minor variability generally less than a foot (35' to 37'). On the southernmost segment of the roadway where the majority of the elevation gain is observed the grade is approximately 16 Percent.

Let me know if there are any other specifications of these roadways that you are interested in that I have missed. Have a great weekend and thanks for the treats, the guys were very appreciative.

Kyle Carpenter, PE

Public Works Director

City of La Grande

Public Works

Ph: (541) 962-1325

Fax: (541) 963-4844

2 attachments



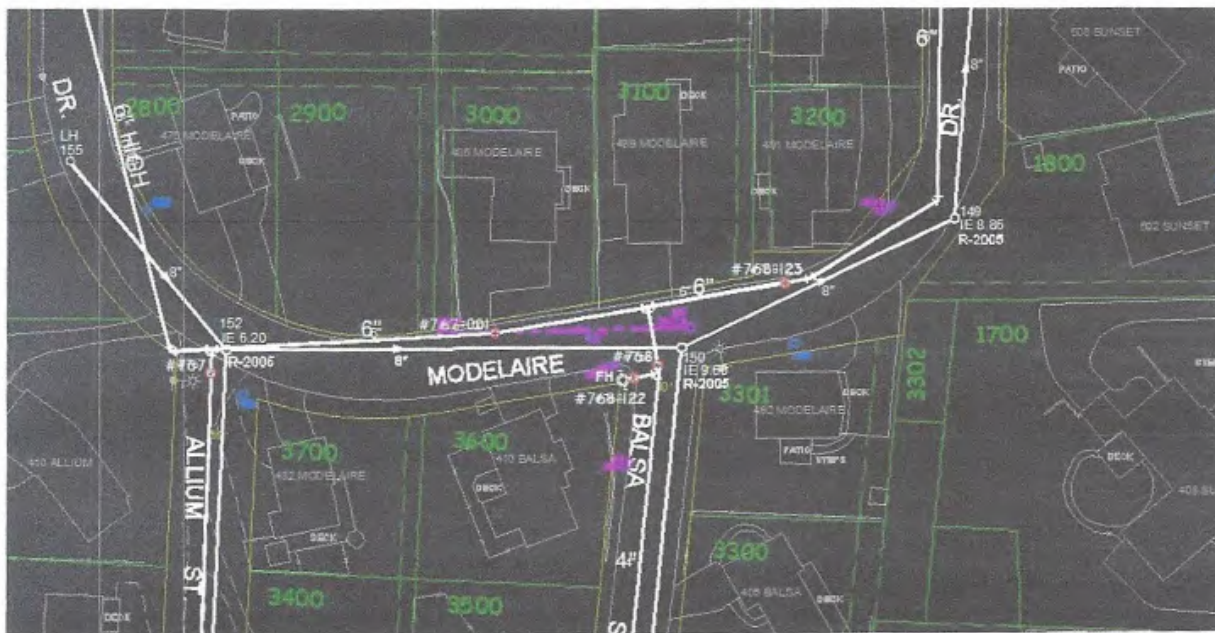
Hawthorne.jpg
150K

Modelaire.jpg
120K

7/25/2019

0 (1067x555)

Exhibit 7



7/25/2019

0 (1397x451)

Exhibit 8



Exhibit 9

attachment U2

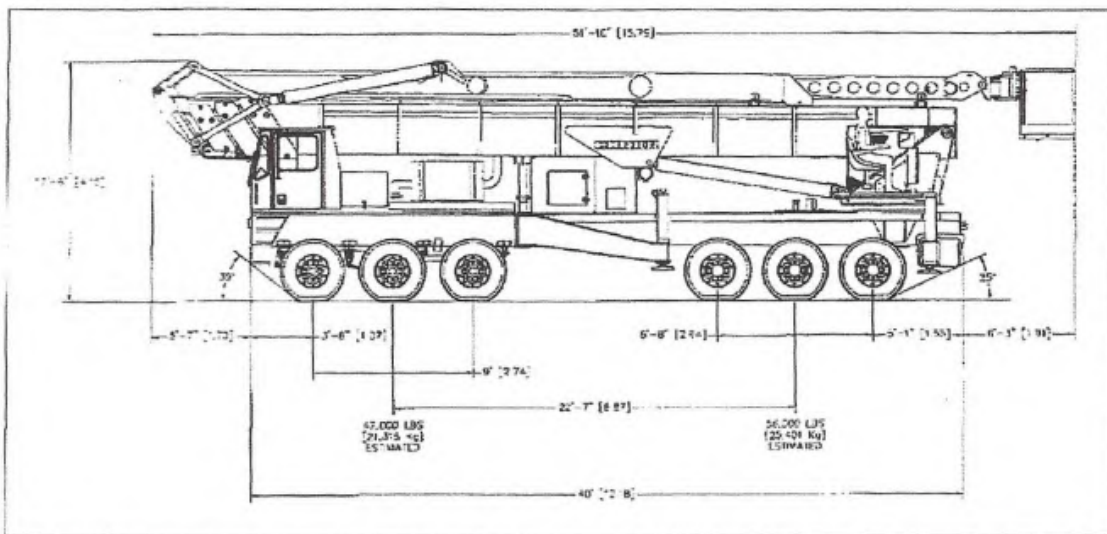


Figure 2. Example Aerial Lift Crane to be Used During Construction (Roadable Length 52 Feet; Width 8 Feet 6 Inches)

Exhibit 10

The following is a summary of anticipated equipment to be used for each transmission-line construction activity.

- Survey work: pickup trucks or ATVs.
- Timber removal: pickup trucks, feller bunchers, dump trucks, wood chippers.
- Road construction: pickup trucks, bulldozers, motor graders, and water trucks.
- Hole digging, installation of directly embedded structures, or foundation installation: pickup trucks, 2-ton trucks, digger derrick trucks, hole diggers, bulldozers, concrete trucks, water trucks, cranes, hydro cranes, wagon rock drills, dump trucks, and front-end loaders.
- Hauling lattice steel members, tubular poles, braces, and hardware to the structure sites: steel haul trucks, carry alls, cranes, and forklifts.
- Assembly and erection of structures: pickup trucks, 2-ton trucks, carry alls, cranes, and a heavy lift helicopter.
- Wire installation: pickups, wire reel trailers, diesel tractors, cranes, 5-ton boom trucks, splicing trucks, three drum pullers, single drum pullers, tensioner, sagging dozers, carry-alls, static wire reel trailers, bucket trucks, and a light duty helicopter.
- Final cleanup, reclamation, and restoration: pickup trucks, 2-ton trucks, bulldozers, motor graders, dump trucks, front-end loaders, hydro-seed truck, and water trucks.

The highest level of traffic will be when the wire stringing operations begin while several other operations are occurring at the same time, which will likely include ROW clearing, installing foundations, hauling steel, and assembling and erecting structures. For the station work, the highest level of traffic will be during site grading and foundation installation. For the communication station sites, the highest level of traffic will be during grading and site preparation.

Detailed estimates of trips generated by transporting Project construction equipment will be provided by the construction contractor prior to construction.

3.1.3 Traffic Related to Timber Removal

In forested areas, the Project will require removal of timber from the Project ROW and for construction and improvement of access roads. Specific timber harvest plans have not been finalized. Logs from timber clearing may be transported to nearby sawmills. Decisions regarding transportation routes for harvested timber will be made following completion of a timber harvest plan, and the number of log truck tips will be estimated when the timber harvest plan has been finalized. Logging slash will remain onsite if possible. For additional discussion regarding removal of timber in forested areas, see Exhibit K, Attachment K-2, ROW Clearing Assessment.

3.1.4 Impacts to V/C Ratios

Based on the estimated trip generation numbers in Tables 4 and 6, a maximum of approximately 1,294 daily one-way vehicle trips are expected within any one construction spread. To facilitate traffic and other analyses, the two construction spreads are divided into smaller sections based on similar construction windows and seasonal weather restrictions. Not all construction sections will have the same number of concurrent construction activities, depending on how the construction contractor sequences and executes the Project. Some sections will have fewer daily vehicle trips. For the purposes of the traffic analysis, the spreads are divided into five sections with multi-use areas that could have additive traffic impacts. The sections are assumed to have approximately equal levels of activity. The 1,294 daily one-way trips per spread divided over five sections of more concentrated traffic results in 259 daily one-

Exhibit 11

City of La Grande Ordinance Number 3242,
Series 2018
Page 252 of 312

ARTICLE 6.6 – PUBLIC STREET STANDARDS

SECTION 6.6.001 - PURPOSE

Upon the request of the La Grande City Council, a variety of street design standards have been reviewed and are now incorporated in the Land Development Code.

SECTION 6.6.002 - CLASS I IMPROVEMENT STANDARDS

This classification will cover those streets that are designed to meet the standards for an expected life of twenty (20) years or more. The attached drawings shall be the minimum standard for those streets in this classification. All streets designated as Federal Aid Urban Streets (F.A.U.) shall be constructed under these design standards. Streets in this designation shall be constructed with sidewalks when at all possible in an effort to increase pedestrian safety. Collector streets are designed to withstand normal trucks of an HS 20 loading. Larger trucks are to utilize Arterial streets where at all possible. This level of development shall be the ultimate goal for all streets within the City of La Grande.

Possible means of financing available for this Class shall be methods A, B, C, D, E, F, G, and H in Section 6.6.006.

A. Advantages

1. The construction life is extended to a period above other City standards.
2. The visible aesthetics in relationship to having curbs and a blacktop surface with landscaping or concrete driveways and a sidewalk is generally appealing to the public.
3. Easy maintenance for the Public Works Department for cleaning and minor repair.
4. Storm sewer drainage is confined within the bounds of the curbs during minor flooding periods.
5. Parking is restricted to a solid barrier, that being the curb; this restricts parking in the area on the back side of the curb and confines travel to the street surface.
6. Defined areas for possible cross walks, signs, power poles, and other utilities that are restricted to the outside areas behind the curbs.
7. It allows for a wide range of financing methods and is to City standards for a ten (10) year Bancroft bonding.
8. Provides a dust free surface.

B. Disadvantages

1. The extreme high level of cost that is incurred with this type of development.

SECTION 6.6.003 - CLASS II IMPROVEMENT LEVEL

Streets constructed in this classification shall be constructed to the same standards as Class I Streets with the exception of the form of drainage system. These streets shall meet the standards as shown on the attached drawing. This level of construction shall be only utilized in substitution for Class I Streets when it is determined by the City Council at the recommendation of the City Engineer or Engineering Superintendent, that an adequate drainage system cannot be installed for a Class I Street.

Exhibit 12

Table 6. Construction Vehicle Trips per Day per Construction Spread

Construction Crew Type	Construction Vehicles					
	Light Construction Vehicles			Heavy Construction Vehicles		
	Number of Pickups/ Mechanic Trucks (per day)	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)	Number of Other Vehicles	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)
Substation Construction	20	2	40	5	2	10
ROW Clearing	9	4	36	5	4	20
Roads/ Pad Grading	9	4	36	9	2	18
Foundations	9	2	18	5	8	40
Tower Lacing (assembly)	27	2	54	0	0	0
Tower Setting (erection)	20	2	40	0	0	0
Wire Stringing	9	4	36	9	4	36
Restoration	3	2	6	0	0	0
Blasting	5	4	20	0	0	0
Material Delivery	20	8	160	12	2	24
Mechanic and Equipment Mgmt.	5	6	30	0	0	0
Refueling	0	0	0	5	4	20
Dust Control	0	0	0	5	4	20
Construction Inspection	5	8	40	0	0	0
Concrete Testing	5	4	20	0	0	0
Environmental Compliance	9	6	54	0	0	0
Surveyors	5	3	30	0	0	0
Totals	—	—	620	—	—	188

Exhibit 13

7/24/2019

Roadway Design Manual: Minimum Designs for Truck and Bus Turns

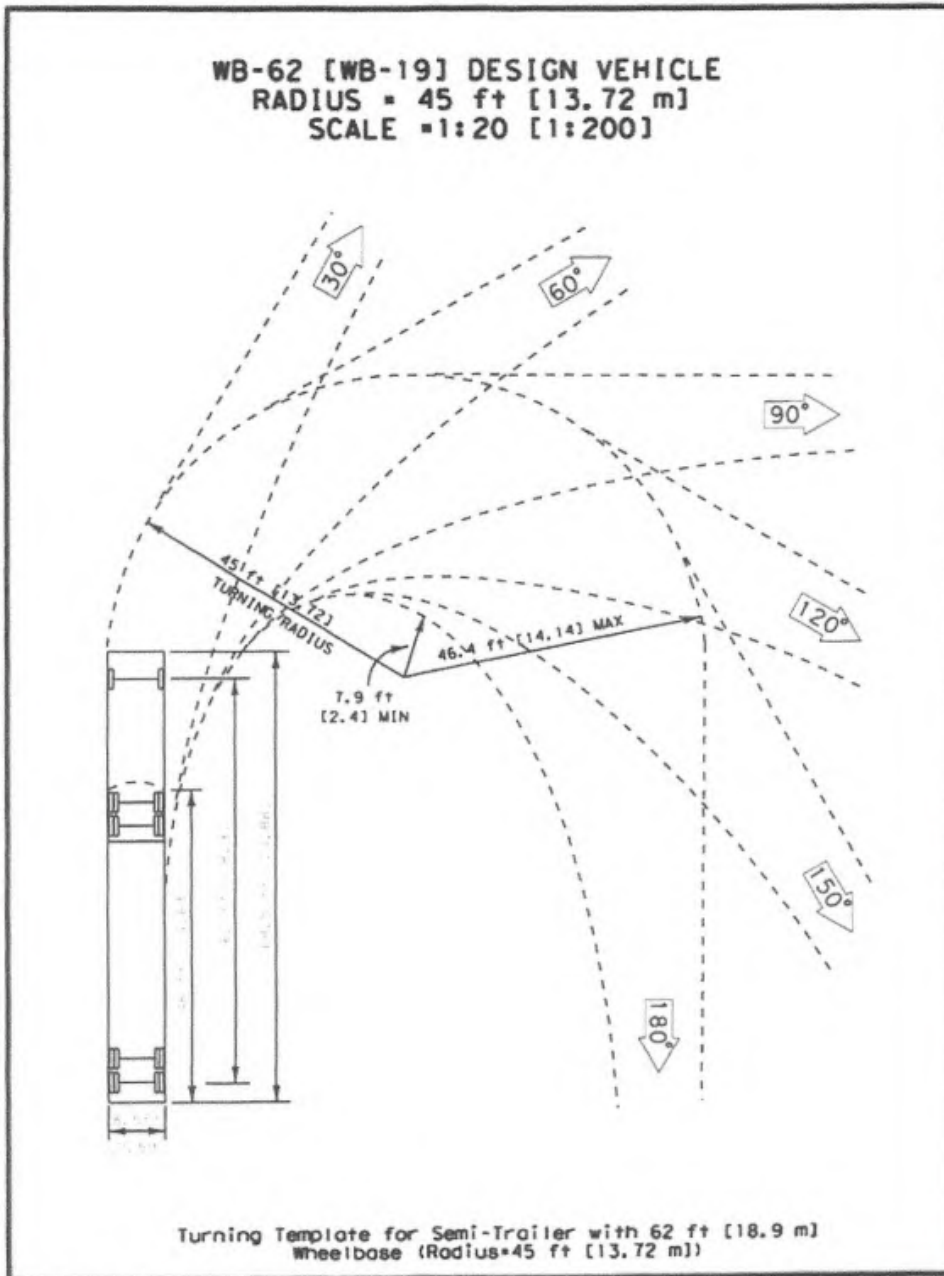


Figure 7-4. Turning Template for Semi-Trailer with 62 ft [18.9 m] Wheelbase, (not to scale). Click [here](#) to see a PDF of the image.

7/24/2019

7-1.png (596x805)

Exhibit 14

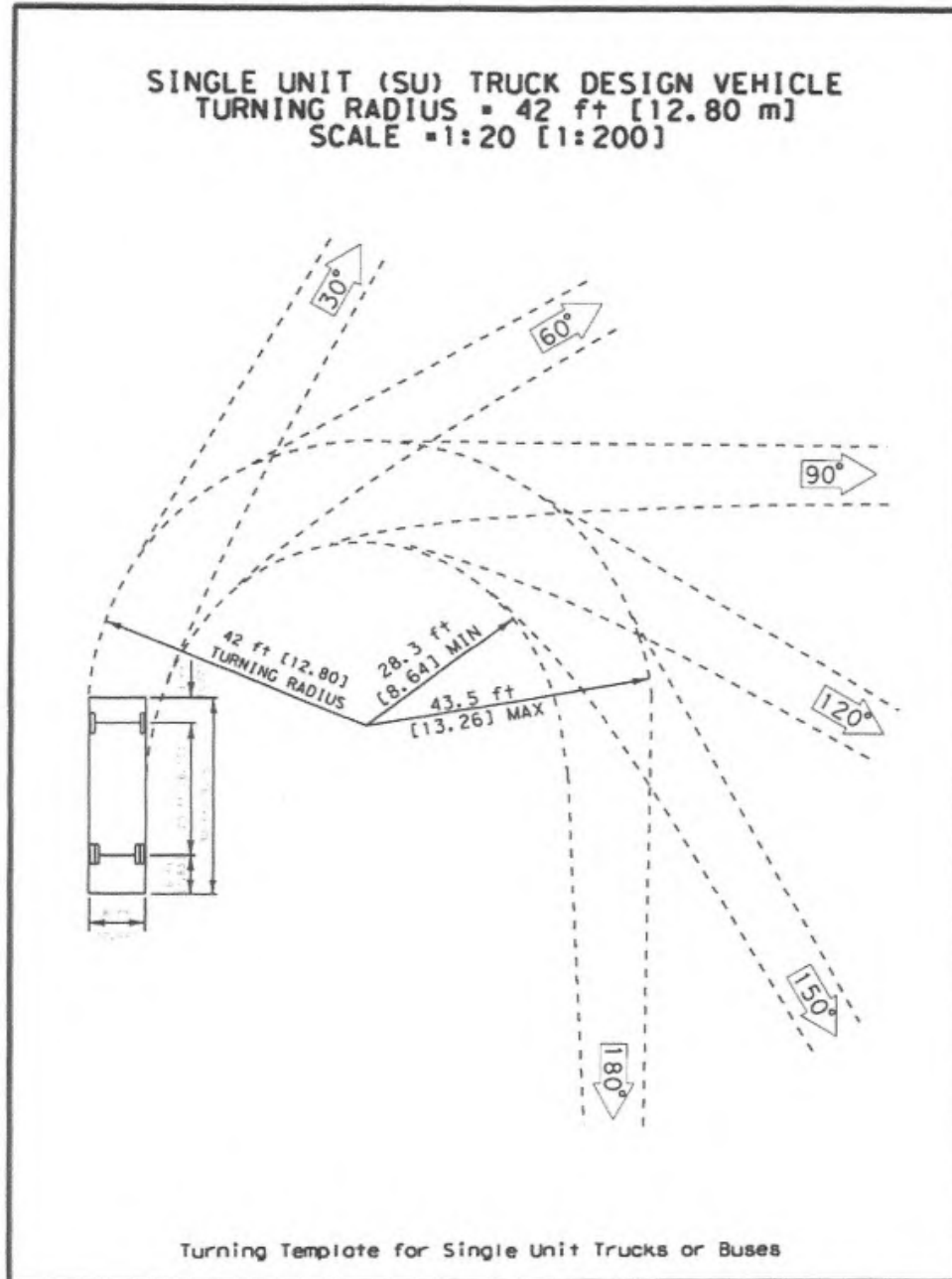


Exhibit 15

**CITY OF LA GRANDE
ORDINANCE NUMBER 3077
SERIES 2009**

AN ORDINANCE CONTROLLING VEHICULAR AND PEDESTRIAN TRAFFIC, PARADES AND PROCESSIONS AND ISSUANCE OF PERMITS; PROVIDING PENALTIES; AND REPEALING ORDINANCE NUMBER 2845, SERIES 1993; ALL AMENDING ORDINANCES AND ALL OTHER ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH; AND DECLARING AN EFFECTIVE DATE

THE CITY OF LA GRANDE ORDAINS AS FOLLOWS:

Section 1. This Ordinance may be cited as the City of La Grande Uniform Traffic Ordinance.

Section 2. APPLICABILITY OF STATE TRAFFIC LAWS.

Oregon Revised Statutes, Chapter 153, and the Oregon Vehicle Code, ORS Chapter 801 and 822, as now constituted, are adopted by reference. Violation of an adopted provision of those chapters is an offense against the City.

Section 3. DEFINITIONS

In addition to those definitions contained in the Oregon state Motor Vehicle Code, the following words or phrases, except where the context clearly indicates a different meaning, shall mean:

a. Alley

A street or highway primarily intended to provide access to the rear or side of lots or buildings in urban areas and not intended for through vehicular traffic.

b. Bicycle

A bicycle is a vehicle that:

1. Is designed to be operated on the ground on wheels;
2. has a seat or saddle for use of the rider;
3. is designed to travel with not more than three (3) wheels in contact with the ground;
4. is propelled exclusively by human power; and,
5. has every wheel more than fourteen inches (14") in diameter or two (2) tandem wheels, either of which is more than fourteen inches (14") in diameter.

c. Bicycle Lane

That part of the highway, adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

d. Bicycle Path

A public way, not part of a highway, which is designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

e. Block

The part of one side of a street lying between the two (2) nearest cross streets.

f. Central Business District

Exhibit 16

ORDINANCE NUMBER 3077
SERIES 2009
Page (8)

a. City Regulation of Special Movement of Oversized Load

The applicant shall submit an application to the City Manager or designee, showing the terminal points of the purported movement; the proposed route; the nature of the movement requested, including the weight and dimensions of the vehicle, load, machine, building, or structure to be moved; the time, date and duration of the proposed movement.

b. Special Movement Permit

A permit shall be required to move any vehicle, structure, or load on, or to access a street when, after preparation for movement, the vehicle, structure or load exceeds fourteen feet (14') in height, requires the use of guy wires, or could result in the blockage of a street. An approved application may serve as a permit, and a copy of the approved application shall be provided to the applicant.

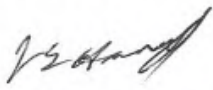
Section 17. TRUCK ROUTES

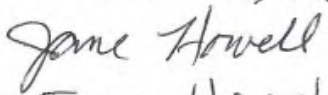
- a. It shall be unlawful for any person, firm, or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes.
- b. Any vehicle with a gross weight over 26,000, pounds specifically picking up deliveries or making deliveries to any business or residence located on a street that is not a truck route will be exempted if the vehicle is driven from the truck route to the destination in the shortest, most direct, and safest route.
- c. The use of Jacob brakes shall not be allowed within the city limits of La Grande, Oregon.
- d. Truck routes will be posted as follows:
 1. Walnut street north from the city limits to C Avenue;
 2. C Avenue east from Walnut Street to Gekeler Avenue;
 3. Gekeler Avenue east to the city limits;
 4. 12th street south from Gekeler Avenue to the city limits;
 5. 2nd Street south from the city limits to Adams Avenue;
 6. Monroe Avenue east from Spruce Street to Highway 82;
 7. Jackson Avenue east from Spruce Street, and
 8. Spruce Street south from the city limits to Monroe.

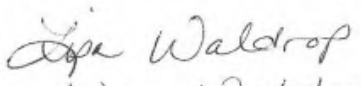
Section 18. IMPOUNDMENT AND DETENTION OF VEHICLES

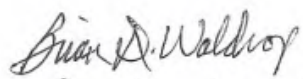
- a. Whenever a vehicle is placed in a manner or location that constitutes an obstruction to traffic or a hazard to public safety, a police officer or enforcement officer shall order the owner or operator of the vehicle to remove said vehicle. If the vehicle is unattended, the officer or enforcement officer may cause the vehicle to be towed and stored at the owner's expense. The owner shall be liable for the costs of towing and storing, notwithstanding that the vehicle was parked by another or that the vehicle was initially parked in a safe manner but subsequently became an obstruction or hazard.

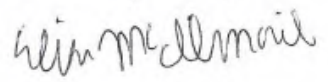
I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

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SIGNATURE

PRINTED NAME

ADDRESS

EMAIL



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SIGNATURE

PRINTED NAME

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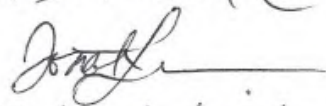

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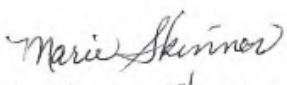

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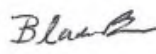

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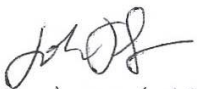
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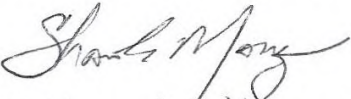
SIGNATURE 
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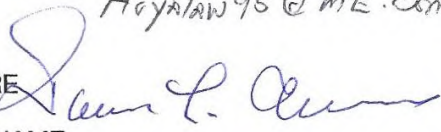
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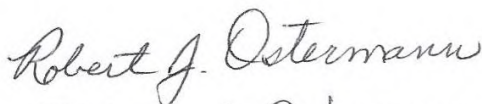
SIGNATURE 
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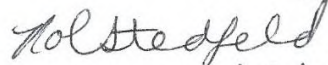
SIGNATURE 
PRINTED NAME Linda Snyder
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SIGNATURE 
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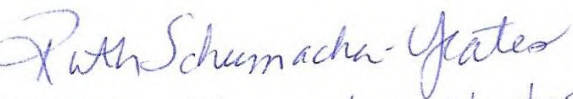
SIGNATURE 
PRINTED NAME Robin J. Ostermann
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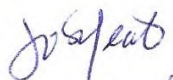
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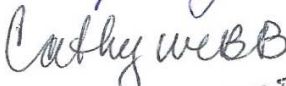
SIGNATURE 
PRINTED NAME Rita Allen
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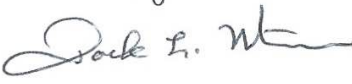
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PRINTED NAME LOIS BARRY
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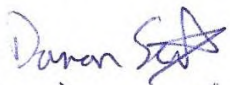
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PRINTED NAME Jack L. Martin
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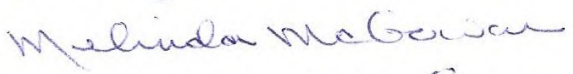
SIGNATURE 
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SIGNATURE 
PRINTED NAME Jean BAPH
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SIGNATURE *Gary D. Pierson*
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SIGNATURE *Angela Sherer*
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SIGNATURE *Robert J. Sherer*
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SIGNATURE *Merle E. Comfort*
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EMAIL

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SIGNATURE *Gerald D. Juniper*
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ADDRESS
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TARDAEWETHER Kellen * ODOE

From: sophy@tjfanghua.com
Sent: Friday, June 14, 2019 1:15 AM
To: B2H DPOComments * ODOE
Subject: communication tower/transmission tower/lighting pole tower/bionic tree tower you need and good price

Dear manager

Have a good day!

Glad to get your information in the internet.

We are manufacturer of communication tower,transmission tower,bionic tree tower,light tower,integrated base station and solar energy support.

And We have long been cooperating with ZTE and exporting to many countries.

We would like to take this opportunity to introduce our company and product,with the hope that we may work together in future!

If you to see more items,Pls visit our website.

Should any of these items be of interest to you, please let us know. We will be happy to give you a quotation upon receipt of your detailed requirements.

Look forward to hearing from you soon.

Tanks&B.regards

Ms.Sophy Wang

Sales Manager

2019-06-14

sophy@tjfanghua.com

Marketing Manager



Tianjin Fanghua Communication Engineering Co.,Ltd

ADD:Fengze Four Road 8,Balitai Town, Jinnan District, Tianjin ,China300350

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Email: sophy@tjfanghua.com

Website : www.tjfanghua.com

Our Alibaba Store : <https://tjfanghua.en.alibaba.com/>

ISO:9001:2008 ,20 Years Manufacturing Experience,Supplying ZTE , CHINA TOWER COMPANY , STATE GRID

ENERGY FACILITY SITING COUNCIL (EFSC)

Date: 6/20/19 Location: La Grande
REGISTRATION FOR PUBLIC COMMENT

PLEASE RETURN THIS FORM TO THE COUNCIL ASSISTANT
*See reverse for tips on giving testimony

Name: Jeri Watson

Address: 1906 Foley St, La Grande, OR

I represent (if applicable) _____
Print your name OR your organization/business name.

Send me future notifications about Council meetings via email.

My email address is: coolwface@com.com

I wish to address the Energy Facility Siting Council and/or

I wish to submit the following written comment:

PLEASE NOTE: If there are a large number of speakers, it may be necessary to limit the amount of time each speaker is allowed.

Page 142

1 But historically, like I said, the Oregon
2 Trail, we have to consider it. We have got the
3 procurement of land, and apparently no letters were
4 offered for the initial route before anybody had a
5 chance to respond. And now this new thing comes in and
6 we all get a surprise.
7 I think a lot of people have a lot more to say
8 about this than me; so I'm just going to yield back my
9 time.
10 HEARING OFFICER WEBSTER: Thank you.
11 Following Irwin Smutz, we have Jeri Watson,
12 and then I don't know if Idaho Power wants to -- okay.
13 So then we will hear from Idaho Power after that.
14 MR. IRWIN SMUTZ: My name is Irwin Smutz, and
15 I live at 59074 Foothill Road. My ranch borders the
16 game refuge. I have got two oil lines, two gas lines,
17 and two fiberoptic lines, and the power line that, I
18 think your alternative route, I think the preferred
19 route is going to be just above that power line.
20 I have two concerns: One of them is the fire
21 danger. That present power line set a fire a few years
22 ago close to Ladd Canyon. The people that ran the power
23 line, a long distance line, failed to keep the brush cut
24 underneath the line, and the tree grew up and that line
25 arced and started a fire.

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1 Also, in the site, the area where they are
2 going to put the proposed power lines through that you
3 are talking about is in an unstable area. My dad went
4 up and checked the cows when I was a boy, and he got up
5 to this real steep unstable area, and the ground had
6 shifted because of another line that came through, an
7 oil line, it shifted, and this pipe came out, out of the
8 ground 5 or 6 feet in the air and made a bend.
9 Fortunately, it did not break, or oil or gas or whatever
10 they put through that, would have ran down the hill.
11 Well, this proposed power line is going
12 through that area where that shift was. They cut
13 through shale type ground, and they kind of loosened the
14 thing up. So that's a thing that really kind of
15 concerns me. Of course, we have a lot of game of all
16 kinds, we border the game refuge.
17 But I would just like to share that this is
18 one problem that you would have. The building site
19 where all my buildings are on the ranch there are down,
20 of course, at the bottom of the hill, and I guess the
21 building site where my buildings are slid off the top of
22 the mountain some time in prehistoric history. And the
23 geologist out there told Dad, I guess the rest of it
24 will stay up there. But that line is going to be going
25 right across that unstable land.

Page 144

1 And also it was kind of hinted at by another
2 speaker, where the hospital is, that is really unstable,
3 too. They had to put in a huge amount of cement to try
4 to keep that thing from shifting, the new building that
5 they put there at the hospital.
6 The site that my house is on is also shifting.
7 I have a board fence and they have all pulled away from,
8 in places they have pulled away from the posts because
9 the building site is going down the hill. Well, that is
10 a thing that you are dealing with on the power line
11 going through that area.
12 So I just really appreciate you listening to
13 me, but I am concerned. These people have serious
14 concerns, it makes a really big difference. You can put
15 these things through and they'll pay so much a foot to
16 go through and then you put up with it for the rest of
17 your life.
18 Just an example, I went to put some fence
19 across all those pipe lines, and somebody came out and
20 told me I was not allowed to put any steel posts in the
21 fence going across that because some of the, I guess the
22 fiber optic lines or something were only underneath the
23 line about 4 inches they said.
24 So I really appreciate you folks listening.
25 And I just wanted to share that with you. I have had

Page 145

1 quite a bit of experience on things coming through my
2 land, and it does have everlasting consequences once
3 these things go through.
4 Thank you very much.
5 HEARING OFFICER WEBSTER: All right. Jeri
6 Watson.
7 MS. JERI WATSON: Hello. Long day. I really
8 appreciate you all being here. And I'm Jeri Watson,
9 J-e-r-i, W-a-t-s-o-n, and I live at 1906 Foley Street in
10 La Grande.
11 I've been here for about 40-some years. And I
12 moved here, I came from a city in California called
13 Torrance, and I moved here to teach school, knowing that
14 I wouldn't make the kind of salary here that I would
15 make in places that I was capable of going. I'm not
16 trying to be modest, but I'll just give you an idea of
17 my qualifications. I could teach, I'm certified in
18 special ed, high school, elementary school, I speak
19 three languages; one being Spanish. The others are
20 Japanese and obviously English. I was at the top of my
21 class at University of Southern California, and I really
22 could have gone anywhere if money was important to me.
23 Enough money to get by is important.
24 But my folks didn't want me to come here.
25 They said, You can't eat the scenery. But I live every

Page 146	<p>1 day. I have seen things like, I saw a newborn elk 2 nursing off its mom on the hillside outside of my house. 3 I could live my whole life someplace in a city and not 4 have those experiences. 5 So I really want to see this power line not 6 come through here because, one, I think it will partly 7 ruin things most certainly. I care more about kids than 8 anything, and it will certainly make our major outdoor 9 park that's wild inaccessible to them during the summer 10 when they are able to go there. And I don't know how 11 many summers that road to Morgan Lake will be really 12 difficult to use. It is a difficult road. If you 13 haven't experienced it, you should. 14 One of the teachers I taught with one time was 15 coming down in the summer, and his wheel caught, it gets 16 really muddy even this far from the edge. And his wheel 17 caught in that mud and got stuck and he rolled down into 18 that valley down there. And he moved his house, he 19 moved his family, he had kids, and he decided that road 20 was too dangerous for his family to be up there in the 21 wintertime. So it's not a good road, and I'm concerned 22 about the damage that will be done to it. 23 The other thing is that I am one of those that 24 believes that the technology is such that there are 25 other ways to meet this demand that is proposed,</p>	Page 148	<p>1 program where it was federally instituted, brought us 2 great wealth. And I believe that we can keep some of 3 that wealth. But we can't keep going to provide 4 electricity in the ways that we have, because -- I mean, 5 the water is renewable from the dams. But the coal 6 production and so forth, no, we have got to have other 7 ways, or my grandchildren and your grandchildren, they 8 are not going to have the kind of world we have. 9 And you people are government employees, and 10 because people have so many different ideas about who 11 should cut what and this is what I can do so that you 12 can do -- oh, you're traveling around the world. Well, 13 that's a lot of carbon footprints. So we all have these 14 different things. 15 So it's time for government, for you guys to 16 stand up and say, Is this really a good idea? Not just 17 for this community, but is it really necessary to do 18 this kind of power, to cause this kind of fire danger? 19 I know I'm kind of rambling here, and I didn't 20 have much time to prepare anything. But I was down in 21 Santa Rosa after the fire, I think it was 2015, I was 22 down there in January, and I saw -- my friend lived very 23 close to the devastated area in the town of Santa Rosa. 24 And I camped in Napa Valley and came over through Rincon 25 Valley, which was burned up.</p>
Page 147	<p>1 perceived in Idaho. And I do believe that Idaho Power 2 is doing the best job that they can do, as being 3 financially responsible for their ratepayers and their 4 shareholders. They are looking for the cheapest way to 5 do this. 6 But there is all kinds of wealth, and one of 7 the kinds of wealth we have is a world that is viable. 8 A world that's not too hot and not too cold. And the 9 alternative energy, things we have, like solar and 10 water, are so perfect for the area that they want to 11 serve, but it does cost more. So in order for it to not 12 cost more, they are going this route. 13 But I would like all of us to look a little 14 larger. I have all the kids I taught who are now having 15 children of their own. The kids I first taught, when I 16 first came here, some of them are grandparents now. I 17 came here because I care about connections. I care 18 about people and I care about animals and I care about 19 connections, and I want the human race to go on for a 20 while. 21 And I think that doing everything we can to 22 make that happen is incumbent upon all of us, even 23 though we have different ideas of what that might be. 24 I am hoping that as a government agency -- you 25 know, world edification under Franklin Roosevelt's</p>	Page 149	<p>1 I used to think when I looked on the news and 2 I saw that one house there and everything else that was 3 burned around it, and I looked at that one house and 4 thought, boy, were those people lucky. But when I got 5 to Sonoma County, and I saw that, and I saw the one 6 house remaining, and there is just charred foundations 7 everywhere, and chimneys, that's all that was there, and 8 I saw that one house that was standing, and I realized 9 they are not lucky. Everybody they were connected to is 10 gone. Most of their neighbors have a sign up to try to 11 sell their property. But who wants to buy it? 12 So we have to take care of the future. We 13 have to mitigate fire danger. And this place here is 14 too dry to take on any more risk. Please help us out 15 here. 16 Thank you. 17 HEARING OFFICER WEBSTER: Thank you. 18 Mr. Stokes. 19 MR. MARK STOKES: Good evening, everybody. 20 It's getting late. Chair Beyeler, Vice Chair Jenkins, 21 City Council member, staff, good evening. My name is 22 Mark Stokes. I'm an engineering project leader for 23 Idaho Power Company. My address is 1221 West Idaho 24 Street, Boise, Idaho 83702. 25 MR. DAVE STANISH: I'm Dave Stanish, also with</p>

Jeri Watson
1906 Foley St
La Grande, OR
97850

Sunday, August 4, 2019

Energy Facilities Siting Council
c / o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project

Dear Chair Beyler and Members of the Council

I am writing to the Council to point out the failure of the applicant to adequately address the seismic, geologic, and soil hazards of the site as required by OAR 345-022-0020 (1) (a). The Structural Standard 345-022-0020 requires a certain level of analysis for the site as a whole. The standard requires, as well, a more discreet survey for the site of each individual tower. The applicant has failed to meet the required standard for the tower sites located between mile posts 105 and 113

The proposed route crosses an active earthquake fault within a mile of the regional medical center (see Application Exhibit H pg. H12). From this point at mile post 105 through milepost 113 the line follows the active West Grande Ronde fault zone. This route traverses well documented existing slide areas (Schlicker and Deacon (1971))

The application references work by Geotechnical Engineers | Environmental Scientists Shannon and Wilson (Exhibit H Attachment H-1Appendix E) Shannon and Wilson state "the Cascadia Subduction Zone (CSZ) interplate events have the potential to produce the largest magnitude earthquake, up to 9.0 magnitude. However, this earthquake source is located at a distance of 280 miles or more from the proposed site boundary." They conclude by saying "Seismic shaking from a CSZ interplate event would attenuate over this distance and would therefore not represent the most significant earthquake hazard for the proposed facility. Crustal faults, which typically produce earthquakes of a maximum magnitude of 7.0, are located in much closer proximity to the proposed alignment and therefore represent the most significant seismic hazard to the proposed facility." (B2H-Draft Proposed Order pg. 69) I believe Shannon and

Wilson underestimate the impact of CSZ on this project. By looking at the Department of Geology and Mineral Industries (DOGAMI) Geo Hazards vuer at <https://gis.dogami.oregon.gov/maps/hazvu/> and limiting to the Cascade Earthquake Hazard the impact of the CSZ on the West Grande Ronde Fault can be more clearly seen. Shannon and Wilson made no reference to this information and are silent on the effect of shaking of this magnitude on a crustal fault lying under the Boardman to Hemingway transmission line in a high landslide hazard ares.

The combination of hazards found between mile posts 105 and 113 as documented by Schlicker and Deacon and the DOGAMI SLIDO website <https://gis.dogami.oregon.gov/maps/slido/> where the hazard is between "High - Landsliding likely" and "Very High existing landslide" make the current location unstable and not meeting the OAR Standard. The applicant has noted the problems but has failed to adequately indicate how they would mitigate the convergence of issues cited above.

The above discussion has not included the problems from development that Schlicker and Deacon anticipate in the conclusion to their 1971 report. They state on page 16 Areas of geologic hazard are outlined on the geologic map (pg. 17) and described in some detail in the report, colluvium and old landslides along the margins of

the valley that either are now moving slowly and intermittently or can fail in the future under development. Development of these areas is exactly what the applicant is asking for and should be denied.

Schlicker, H. J., and Deacon, R. J., 1971, Engineering geology of the La Grande area, Union County, 16 p, 1 map, scale 1:24,000.

Sincerely



Sunday, August 4, 2019

Energy Facilities Siting Council
c / o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97850

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project

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Schlicker, H. J., and Deacon, R. J., 1971, Engineering geology of the La Grande area, Union County, 16 p, 1 map, scale 1:24,000.

Sincerely



Ken Watson

1906 Foley St.

La Grande, OR. 97850

From: [sarah watson](#)
Sent: Wednesday, August 21, 2019 3:45 PM
To: [B2H DPOComments * ODOE](#)
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St. NE

Salem, Oregon 97301

FAILURE TO PROVIDE SITE CONDITIONS TO MINIMIZE THE RISK TO GOLDEN EAGLES RESULTING FROM THE PROPOSED TRANSMISSION LINE ROAD DEVELOPMENT

This project will go through the area surveyed for the Antelope Ridge Wind Development. Due to the lack of meaningful information being provided by IP in their application, it is necessary to go to the 2010 formal letter information summary regarding projected habitat impacts from that development in the area to be crossed by the B2H transmission line. ODFW comments regarding the surveys completed identified 4 active golden eagle nests and recommended no new roads be constructed within 1 mile (1/2 mile line of site) of the nests. Construction and maintenance activities should not occur within 1 mile line of sight (1/2 mile non line of site) of nest between January 1 and July 15.

In the event that ODFW no longer believes these recommended restrictions are valid, they need to explain how a reduced period and distance will continue to provide protection for golden eagles from roads being built at the site in order to comply with OAR 345-022-0060 and their rules.

Sincerely,

Sarah Watson

PO Box, 922, Union, Or. 97883

From: [sarah watson](#)
Sent: Wednesday, August 21, 2019 3:49 PM
To: [B2H DPOComments * ODOE](#)
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St. NE

Salem, Oregon 97301

email: B2H.DPOComments@Oregon.gov

SETBACKS FROM RAPTOR NEST SITES

A 0.5 mile setback area around all sensitive raptor nests which includes all permanent and temporary disturbances associated with the proposed project is necessary to meet the requirement that the project not result in adverse population-level impacts to these species.

The Applicant identifies Category 1 Habitat for nest sites of golden eagle, Swainson's Hawk, goshawk, and burrowing owl. However, the applicant considers these point habitats with no associated range. While this approach is convenient, it is inconsistent with historical regulatory measures (e.g. forestry practices) regarding sensitive and threatened and endangered wildlife species in Oregon. In the Columbia Basin, Category 1 habitat associated with Washington ground squirrel colonies were defined as being occupied area AND its associated use area. The area around a natal site is integral to the continued use of the site. Wildlife need more than a specific point to be successful. ODFW has previously recommended a ½ mile setback (no impact) around all sensitive raptor nest sites. This buffer needs to include all permanent and temporary disturbances associated with the proposed project. The applicant has provided no population data for the potentially affected raptor species—especially the low density raptors (e.g. burrowing owls, goshawk and golden eagle) to show that the impacts to these species are sustainable to local populations of these species.

The current application fails to provide information necessary to determine habitat Category. Absent information that will identify the location of Category 1 habitat, it is not possible to issue a site certificate that provides that no Category 1 habitat will be impacted

directly or indirectly by the development. This precludes a determination that the developer is able to site the transmission line in compliance with OARs 345-022-0060.

According to USFWS 501 FW 2, Appendix 2, the following information is necessary in order to determine habitat category determinations.

(2) "Identify those special biological features or the area(s) in question that are considered pertinent to the resource category determination (i.e. species, species life stages, species life requisites, species groups and species diversity considerations). Also identify any special vegetative and physical site conditions that enter into consideration."

(3) "In quantitative or qualitative terms, discuss the importance ascribed to the special features and conditions in number 2 above."

(4) "As appropriate, discuss considerations for scarcity, abundance, irreplaceability, and/or uniqueness. Also discuss the geographic area of consideration associated with these characteristics."

Reference: 501 FW 2, Appendix 2 Checklist-Resource Category Documentation

Sincerely,

Sarah Watson

PO Box 922, Union, Or. 97883

From: [sarah watson](#)
Sent: Wednesday, August 21, 2019 3:33 PM
To: [B2H DPOComments * ODOE](#)
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019

21 August 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

As I understand it, the applicant did not complete noise modeling on multiple noise sensitive properties within ½ mile of the development as required by OAR 340-035-0015(38). In fact, the closest noise modeling was performed at Hilgard, the junction of I-84 and 244, about 8 miles air miles away, with a train track near by. Applicant could scarcely have chosen a site less representative of the absolute silence typical of the Morgan Lake setting.

Page 145 (T-4-46) Baseline condition: "... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users..." Solitude, of course, suggests an absence of distraction from external stimuli including noise. Campers often comment on the tranquility of the park where a 5 mph speed limit is enforced to limit noise, and no shooting or motorized craft are allowed on the lake. Even when the campground is full, it's possible to picnic or hike beside the lake in absolute silence.

Noise Sensitive Property is "property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Obviously the noise corona of popping, humming transmission lines will interfere with the silence campers have every right to expect in a natural setting.

This transmission line is planned to be sited within 500' west of the park boundary, which would place it easily within less than 1/5 of a mile of overnight camp sites.

The applicant's ASC should be denied until all required and adequate noise modeling has been performed.

Sincerely,

Sarah Watson

PO Box 922, Union, Or. 97883

From: [sarah.watson](#)
Sent: Wednesday, August 21, 2019 4:02 PM
To: [B2H DPOComments * ODOE](#)
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order

August 21, 2019

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St. NE

Salem, Oregon 97301

email: B2H.DPOComments@Oregon.gov

ISSUE STATEMENT:

1. The developer did not do current surveys for wildlife to provide the necessary evidence to show he was compliant with OAR 345-022- 0060, but also did not use easily accessible studies completed by and for ODFW during the compilation of information for issuing a site certificate. The nest surveys completed for the Antelope Ridge Wind development in Union County, which was planned to be sited adjacent to this proposed transmission line found 75 different bird species nesting in the forested areas. The numbers of nesting birds was so high that the US Fish and Wildlife Service recommended no development in the forested areas. The Baseline Noise Surveys describe the route of the transmission line to be adjacent to the 230 KV line which is adjacent to the Elkhorn Wind Development. For this reason, the wildlife information and studies completed as a result of the Elkhorn and Antelope Ridge Wind Developments are relevant to and should be analyzed in terms of providing some baseline information to compare with current surveys. Recommendations and concerns documented in comments regarding these two developments are directly related to the area of impact of this transmission line.

2. The creation of a corridor through the middle of forest land is stated as a benefit to wildlife. There are multiple studies showing the negative impacts of creating corridors such as this as it provides opportunities for raptors and other predators to access prey. This should be widely known by the developers given the concerns they are required to address to attempt to minimize the use of transmission structures by raptors and other birds.

3. The entire section on Forested Land Analysis needs to be rewritten to accurately reflect the true impacts of this development including negative impacts to adjacent land and adjacent landowners such as impacts from the use of chemicals to control vegetation, erosion from development of the transmission line and roads, transmission lines are identified in multiple studies as a primary source of invasive weeds and it appears from this section that the developer plans to only spray for weeds once a year. That will assure that there will be multiple problems with invasive weeds as a result of this transmission line.

4. I am also concerned regarding the number of nests that will be destroyed by this transmission line as well as the lack of completed work indicating a commitment to identifying, addressing and mitigating for the wildlife impacts this development will have. The area mentioned above, in Union County, is known to serve as an important location for federally protected migratory birds. While the Oregon Department of Energy can legally refuse to address federally protected species under the threatened and endangered species rules, they are required to address them in the habitat mitigation rules. The developer has made literally no effort to identify and protect federally protected species under OAR 345-022-0060 or 0070. This is not an optional activity according to the opinion received from the Oregon Legislative Council.

Please do not allow a site certificate until all surveys are completed or reviewed and updated.

Sincerely,

Sarah Watson

PO Box 922, Union, Or. 97883

From: [sarah watson](#)
Sent: Wednesday, August 21, 2019 3:38 PM
To: [B2H DPOComments * ODOE](#)
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Energy Facilities Siting Council

c/o Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St, N.E.

Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

I respectfully request that this letter protesting issuance of a Site Certificate for the proposed Boardman to Hemingway Transmission Project be entered on the record.

Specifically, the applicant has failed to acknowledge the presence of a Federal and State-listed, Threatened species, and has failed to identify Category-1, Critical Habitat.

The Draft Proposed Order (DPO), p. 304, lines 20-26, fails to list Bull Trout, a listed State-Sensitive Threatened Species, also listed as Threatened by USFWS. OAR-345-021-0010 (1)(p) requires identification of all fish and wildlife at the proposed location, and identification of habitat classification categories, as set forth in OAR-635-415-0025, in order to comply with OAR-345-022-0060, requiring identification of habitat categories and required mitigation. The applicant has failed to comply with these requirements!

The Grande Ronde river watershed contains a well-documented population of Bull Trout. By statute, wherever a portion of a watershed contains a Threatened or Endangered species, the entire watershed is under federal protection. The Grande Ronde river watershed encompasses the entirety of Union county, and the majority of Wallowa county. As evaluated in the DPO, ASC Exhibit P, suitable habitat used by state-listed Threatened and Endangered species is designated pursuant to ODFW's Habitat Mitigation Policy, and

EFSC's Fish and Wildlife Habitat standards, as Category-1 Habitat, where any impact, direct or indirect is prohibited. There is NO mitigation for Category-1 Habitat!

The DPO, p. 304, line 32, through p. 307, line 21, acknowledges that there will be impact, but is unable to quantify it. Since any impact is prohibited, the magnitude of impact becomes irrelevant.

The applicant has failed to meet the requirements for issuance of a Site Certificate contained in OAR-345-022-0080, as noted above.

In view of the fact that sufficient recovery of the Bull Trout population to remove its Threatened status is reliably estimated to be a matter of decades, issuance of a **Site Certificate should be denied, with prejudice!**

Sincerely,

Sarah Watson

PO Box, 922, Union, OR

From: [sarah watson](#)
Sent: Wednesday, August 21, 2019 3:26 PM
To: [B2H DPOComments * ODOE](#)
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

August 21, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Dear Chair Beyeler and Members of the Council:

APPLICANT FAILED TO INCLUDE ALL REQUIRED SOURCES OF NOISE IN THEIR MODELING OF NOISE IMPACTS OF DEVELOPMENT

Idaho Power did not include any of the items listed in OAR 340-035-0035(l)(b)(B)(ii), which are only exempt from the noise measurement when the development occurs on a previously used site. When establishing ambient noise level for a new development on a site not previously used, it states: "Sources exempt from the requirements of section (l) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement."

The applicant's noise modeling only includes the noise generated from the transmission line itself. Noise modeling must be corrected to include (b) Warning Devices, (c) sounds created by road vehicles, (d) Sounds from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576 ; (e) bells, chimes, or carillons; (f) aircraft subject to pre-emptive federal regulations and (k) sounds created by the operation of road vehicle auxiliary equipment.

The application is incomplete. Without having the information regarding these additional noise sources, the department and the siting council lack the information regarding how many noise sensitive properties are impacted and by how much.

A proposed order cannot be issued until the developer submits all the information regarding the noise impacts of this development. This information must be available to decide if the standard is met or if it can be met with additional site conditions.

Sincerely,

Sarah Watson

PO BOX 922, Union, Or. 97883

From: [sarah watson](#)
Sent: Wednesday, August 21, 2019 3:55 PM
To: [B2H DPOComments * ODOE](#)
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St. NE

Salem, Oregon 97301

Aug. 21, 2019

SETBACKS FROM RAPTOR NEST SITES

A 0.5 mile setback area around all sensitive raptor nests which includes all permanent and temporary disturbances associated with the proposed project is necessary to meet the requirement that the project not result in adverse population-level impacts to these species.

The Applicant identifies Category 1 Habitat for nest sites of golden eagle, Swainson's Hawk, goshawk, and burrowing owl. However, the applicant considers these point habitats with no associated range. While this approach is convenient, it is inconsistent with historical regulatory measures (e.g. forestry practices) regarding sensitive and threatened and endangered wildlife species in Oregon. In the Columbia Basin, Category 1 habitat associated with Washington ground squirrel colonies were defined as being occupied area AND its associated use area. The area around a natal site is integral to the continued use of the site. Wildlife need more than a specific point to be successful. ODFW has previously recommended a ½ mile setback (no impact) around all sensitive raptor nest sites. This buffer needs to include all permanent and temporary disturbances associated with the proposed project. The applicant has provided no population data for the potentially affected raptor species—especially the low density raptors (e.g. burrowing owls, goshawk and golden eagle) to show that the impacts to these species are sustainable to local populations of these species.

The current application fails to provide information necessary to determine habitat Category. Absent information that will identify the location of Category 1 habitat, it is not

possible to issue a site certificate that provides that no Category 1 habitat will be impacted directly or indirectly by the development. This precludes a determination that the developer is able to site the transmission line in compliance with OARs 345-022-0060.

According to USFWS 501 FW 2, Appendix 2, the following information is necessary in order to determine habitat category determinations.

(2) "Identify those special biological features or the area(s) in question that are considered pertinent to the resource category determination (i.e. species, species life stages, species life requisites, species groups and species diversity considerations). Also identify any special vegetative and physical site conditions that enter into consideration."

(3) "In quantitative or qualitative terms, discuss the importance ascribed to the special features and conditions in number 2 above."

(4) "As appropriate, discuss considerations for scarcity, abundance, irreplaceability, and/or uniqueness. Also discuss the geographic area of consideration associated with these characteristics."

Reference: 501 FW 2, Appendix 2 Checklist-Resource Category Documentation

Sincerely,

Sarah Watson

PO Box 922, Union, Or. 97883

From: [sarah watson](#)
Sent: Wednesday, August 21, 2019 3:22 PM
To: [B2H DPOComments * ODOE](#)
Subject: Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

August 21, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97

Chair Beyeler and Members of the Council:

I am very concerned about the Boardman to Hemingway Transmission Project as it is proposed. My concerns are for the safety of myself and all of the citizens of La Grande if this line is permitted. My primary concerns are slope instability and wildfire hazard.

The proposed route sited to the west of La Grande is placed on a ridge noted to have instability and high risk for slides. The geologic study provided by Idaho Power references several studies (below).

Table H-2. USGS Quaternary Faults within 5 Miles of Project by County on page H-12 clearly shows that the project is placed right on an active fault in the West Grande Ronde Valley Fault Zone. In addition, in exhibit H, Geological Hazards and Soil Stability, Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated "severe." Below is part of the report:

5.2 La Grande Area Slope Instability

As part of our study, we reviewed DOGAMI's open file report: Engineering Geology of the La Grande Area, Union County, Oregon, by Schlicker and Deacon (1971). The study identified several landslides in the areas west and south of La Grande. The majority of the landslide features mapped by Schlicker and Deacon (1971) were similarly mapped as landslides or alluvial fans in Ferns and others (2010). The current SLIDO database uses the feature locations mapped in Ferns and others (2010). While the two map sets generally agree, there are differences in the mapped limits of some landslide and alluvial fan areas, and there is one landslide area in Schlicker and Deacon (1971), near towers 106/3 and 106/4, which is not included in SLIDO or Ferns and others (2010). The Landslide Inventory in Appendix E includes mapped landslide and alluvial fan limits from both SLIDO and Schlicker and Deacon (1971).

This slope instability is not inconsequential to a project like this. Recall in 2014, Oso, Washington, was the site of a catastrophic mudslide as the result of logging disturbance of the soil upslope from the town combined with significant rainfall. This resulted in 43 fatalities. We must learn from previous mistakes in not heeding the geologists' warnings. The area down slope from the proposed B2H line lies the Grande Ronde Hospital and Clinics, which employs hundreds of people and is the critical access hospital for this region. La Grande High School and Central Elementary School are also positioned down slope from the proposed towers. At least 100 homes are positioned down slope of the proposed towers. According to "Engineering Geology of the La Grande Area, Union County, Oregon" maps published by Schlicker, and Deacon (1971), the ENTIRE area of the hillside is deemed a "landslide area" in the La Grande SE quadrangle. This is not a safe place for a transmission line.

The next significant hazard to our community is wildfire. Oregon is ranked 8th Most Wildfire Prone state in the United States according to Verisk Wildfire Risk analysis. La Grande is ranked in the top 50 communities in Oregon with the greatest cumulative housing-unit exposure to wildfire as referenced in "Exposure of human communities to wildfire in the Pacific Northwest," by Joe H. Scott, Julie Gilbertson-Day and Richard D. Stratton (available at http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf). Finally the proposed route is in the vicinity of Morgan lake, the highest risk area (#1) in Union County in terms of wildland-urban interface, according to the County's Community Wildfire Protection Plan, August 10, 2005.

Cal Fire cites Pacific Gas and Electric equipment and power lines as the cause of numerous wildfires in the state in the last 2 years. This includes the Camp Fire in Butte County (2018), Tubbs Fire in Napa/Sonoma Counties (2017), Witch Fire in San Diego (2007), Valley Fire in Lake/Napa/Sonoma Counties (2015), Nuns Fire in Sonoma County (2017), which were all attributed to transmission.

The Boardman To Hemingway Transmission Line Project proposal places lines about 2000 feet or less than half a mile from the La Grande city limits, including medium density housing within the city as well as Grande Ronde Hospital. If a line from this proposed route were to spark a fire, La Grande residents would have little time to react. According to National Geographic, wildfires can move as fast as 6.7 mph in forests and 14 mph in grasslands. A fast-moving fire starting at the B2H lines could move to residential areas of La Grande and HOSPITAL in 10 minutes. This is frightening and an unacceptable risk for our citizens.

The current proposal for a Boardman to Hemingway transmission line does not adequately address the issue of landslides, basically by stating it will be mitigated somehow when the time comes to build. The proposal offers no analysis of wildfire risk, which is an unacceptable omission. All of the routes proposed are unsafe and create an unacceptable risk to the citizens of La Grande.

The Council should DENY the request for a site certificate.

Sincerely,

Sarah Watson

PO Box 922

Union, Or. 97883

From: [sarah watson](#)
Sent: Wednesday, August 21, 2019 3:14 PM
To: [B2H DPOComments * ODOE](#)
Subject: Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019

August 21, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR.

To: Chairmen Beyeler and Members of the Council

I appreciate the opportunity to comment on the Draft Project Order for the Boardman to Hemingway Transmission Project. I am very supportive of the Oregon California Trails Association (OCTA) and the work that they have done to protect the Oregon Trail, especially here in Oregon. OCTA is mentioned numerous times in **Exhibit S** and the **Historic Properties Management Plan and Programmatic Agreement**. OCTA does NOT believe that Exhibit S Historic Properties Management Plan is complete in 7.2.3 Field Crew, and offers this additional condition.

ADDITIONAL CONDITION #1 OCTA recommends that the Council add an Oregon Trail expert to the Cultural Resource Team. This Oregon Trail individual will have qualifications similar to Field crew members. For example, they will have an undergraduate degree in anthropology, archaeology, or in a field such as geology, engineering or history. It will not be necessary to have attended a field school. This individual will be recommended by the National OCTA President and agreed to by the Field Director.

The field surveys, even with SHPO and NPS data, have missed and/or mislabeled some sections of the emigrant trail. OCTA wants the public to know where the Trails are and I do too! OCTA over the years has marked the trail location with wooden signs, small triangles attached to trees, and more recently, carbonite posts and steel rails. Most private property owners are proud of the trail on their property, and after obtaining permission allow the public to walk and hike on the trail.

Idaho Power and their consultants have not acknowledged trail crossings shown on submitted Maps and do not acknowledge visual intrusion of the line for 10 miles per standards, and only upon ODOE's RAI's, put into documents some trail protections. This has been consistent from the BLM process to current day.

Considering the points above, Idaho Power does not comply with the state standards for cultural resources OAR 354-022-0090, or 345-022-0080, Scenic resources. **EFSC Must Deny the Site Certificate!**

Sarah Watson

PO Box 922, Union, Or. 97883
Email address: sandj0704@gmail.com

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:53 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019
Attachments: Scan 2019-8-15 17.38.19.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter signed by me and 54 other residents of La Grande expressing our concerns regarding the B2H Project and we request that EFSC deny the Site Certificate.

I have also sent a bound copy of this material by the US Postal Service.

Sincerely,

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the usage of the "Local Streets" ¹ specifically the Modelaire-Hawthorne Loop) ², hereafter referred to as the "loop", of La Grande to access the site entrance. This residential "loop" was constructed without sidewalks for a new development around the early 1960s.

According to OAR 345-022-0110, Public Services (pg. 5. April 2017) "The applicant...must address all permanent and temporary impacts of the facility on housing, traffic, safety, police and fire protection, health care and schools." ³

My impression from reviewing the application Page 17 ⁴ is that the applicant has not fully examined the final portion of the intended route nor does it fully recognize or address the need for traffic mitigation. This "loop" is the only access to/from thirty-six houses to the rest of the city. The area to the north of the "loop" is occupied by the Grande Ronde Hospital and Medical Clinic. Two blocks to the east is located the local high school and a grade school. ²

In June of 2016, the Grande Ronde Hospital petitioned the City to have a conditional use for a parking lot expansion project next to Hawthorne. The Conditional Use Permit was approved subject to the Condition of Approval that "No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is developed to residential standards and is not designed to support commercial traffic." ⁵

The La Grande Director of Public Works, Kyle Carpenter, provided information regarding the widths for the streets in question. The two streets range from 33 feet to 37 feet in width with no sidewalks. I personally measured the area where the unpaved stem of Hawthorne leaves the "loop" to go up the hill. At the junction it measures 32 feet curb cut to curb cut and narrows to 18-21 feet in width as it goes around the corner up the hill. 6 The Public Works Director also provided pictures of the mapping system showing the existing utilities located in the "loop". 7-8. It should also be noted that from the entrance to the "loop" at Sunset Drive to the entrance of the site the road has a 16% grade.

Attachment U2 9 from the application shows an "Aerial Lift Crane to be Used During Construction" and the Transportation and Traffic Plan on page 19 10 lists a number of other vehicles anticipated to be used. Article 6.6 — Public Street Standards for the City of La Grande Section 6.6.002 states that "Collector Streets are designed to withstand normal trucks of an HS20 loading. Larger trucks are to utilize Arterial Streets where at all possible." 11 The majority of vehicles listed on page 19 exceed that limit and would be using a Local Street in addition to Arterial and Collector Streets. According to the Public Works Director the two streets in the "loop" were designed as Local Streets for residential use, able to accept the pressures of HS20 for the purpose of an occasional need such as a weekly garbage truck or an emergency vehicle but for no more than 5% of the time. The paving construction of these over 50 year old streets in the "loop" was not designed for repetitive use by vehicles heavier than a normal car. These streets in the "loop" have not been repaved, only patched when necessary, since they were first constructed.

The application does not address the "loop" specifically, but 3.1.2 (pg. 19) 10 and Table 6 (pg.17) 12 of the Transportation and Traffic Plan indicate there would be numerous vehicles using this route. Not knowing exactly just which vehicles would be on the "loop" daily but making a conservative estimate of 50 round trips (100 single) it would be a constant parade with one truck every 7.2 minutes. This is unacceptable for numerous reasons including constant excessive noise.

Not only would weight of the vehicles be a problem but the narrowness of the "loop" streets and the ninety degree blind curves that would have to be executed would be either impossible or extremely dangerous considering the turning radius for many of these large vehicles. The

already dangerous situation for a number of driveways that exit onto these "loop" streets at blind curves would be exacerbated. 13-14

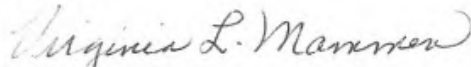
When considering only the traffic and safety issues listed above, the use of the "loop" as a part of the route for Idaho Power seems to be not only dangerous for the residents but unconscionable and irresponsible for Idaho Power to use such streets that are currently primarily for the neighborhood for walking (children to school, all ages for physical training), driving, or biking. I fear there are standards that are either not being considered or they are intentionally being ignored. There should be some common sense, courtesy and respect for the impact this project would impose on any neighborhood.

Finally, La Grande Ordinance Number 3077, which adopted Oregon State Traffic Laws by reference, states in Section 17 page 8 "It shall be unlawful for any person, firm or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes." Neither Modelaire/Hawthorne Loop nor Sunset Drive are posted as truck routes. 15-16

A site review and traffic plan must be completed prior to the cite certificate being issued and not 90 days prior to construction as stated.

For the above reasons I oppose the usage of the proposed route for the construction of the B2H transmission line.

Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon. 97850

gmammen@eoni.com

Exhibit 1

City of La Grande Ordinance Number 3242,
 Series 2018
 Page 236 of 312

**TABLE 1
 STREET STANDARDS**

Functional Classification	ADT Volume	Speed (mph)	# of Travel Lanes	Travel Lane Width	Turn Lane or Median Width	Bike Lanes	Min. Bike Lane Width	On-Street parking
Downtown Arterial	10,000	20	2-3	11'	11'			both sides
Arterial	10,000	40-55	2-5	12'	4-14'	optional ⁴	5'	none
Major Collector	2,000 - 10,000	25-45	2-3	11'	12'	required	5'	one or both sides
Minor Collector	1,000 - 2,000	25-35	2	11'	none	Optional ⁵	5'	one or both sides
Local Street	0 - 1,000	15-25	2	10'	none	none	none	one or both sides

Functional Classification	Sidewalks	Min. Sidewalk Width	Planting Strip Width ¹	Total Paved Width ²	Total ROW Width ³	Private Access Spacing
Downtown Arterial	required	12'	3'6" ⁶	49'	80'	200'
Arterial	required	5'	8'	36'-72'	80'-102'	200' - 400'
Major Collector	required	5'	8'	52'-60'	62'-90'	150' - 300'
Minor Collector	required	5'	8'	30'-48'	60'-78'	75' - 150'
Local Street	required	5'	8'	28'-36'	40'-66'	Each Lot

¹A portion of the required planting strip width may be used instead as additional sidewalk width or reduced right of way, as appropriate.

²The minimum of the paved width was calculated with the following assumptions:

Arterials: Two (2) travel lanes, four foot (4') median divider, no center turn lane, no bike lanes.

Major Collectors: Two (2) travel lanes, two (2) bike lanes, no center turn lane, parking on one (1) side.

Minor Collectors: Two (2) travel lanes, parking on one (1) side of street, no bike lanes.

Local Streets: Two (2) travel lanes, parking on one (1) side of street.

The maximum paved width for each street was calculated assuming the inclusion of all required and optional facilities. Minimum paved widths for each street are as required in Section 6.2.005 of this Code.

³These right-of-way width ranges are for new streets.

⁴Bike lanes should be provided on Arterials unless more desirable parallel facilities are designated and designed to accommodate bicycles.

⁵ Bike lanes should be provided on Minor Collectors where traffic volumes or other factors warrant. Otherwise, Minor Collectors should be designed and designated as shared roadway facilities with wide outside travel lanes of 14' on important bike routes.

Exhibit 2

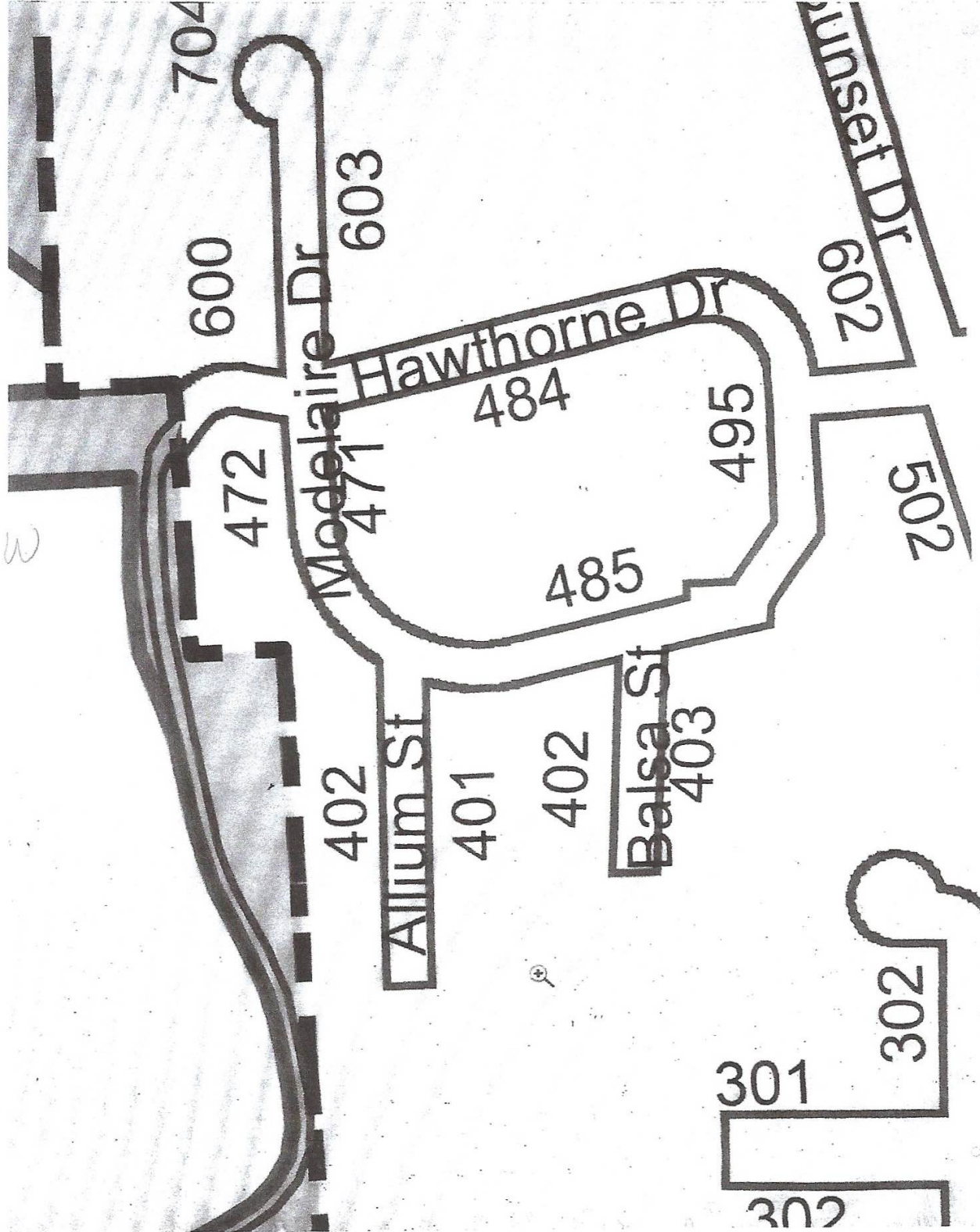


Exhibit 3

Public Services

ORAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

ORAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

ORAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (ORAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (ORAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

ORAR 345-024-0010 and 345-024-0015

This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety. Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

ORAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4

Idaho Power Responses to Comments and Requests for Additional Information on the B2H ApASC
 from the City of La Grande
 Compiled by ODOE. RAI's from the City of La Grande and Responses from IPC

U	U-Public Services include utilities such as road systems, water, sanitation services, power, and other amenities necessary for the construction.	Ordinance #2912, Series 1997 gives the City jurisdiction and control on all City street rights-of-way and Ordinance #3077, Series 2009, establishes the process and requirements for permits and licenses for uses of the streets that are not normal uses and may result in damages.	The project construction has two major road systems through La Grande that are proposed for this project – Morgan Lake Road via Gekeler Lane, 'C' Avenue, Walnut Street, and on up Morgan Lake Road. Roads along these routes are used by the ambulance service for accessing the hospital, the public transit system on its normal daily route, citizens to access locations within and outside this area and also for the school busing system for transporting kids to the La Grande Middle School, La Grande High School and Central Elementary School. In addition to the vehicular modes of travel, those routes are heavily used by bicyclists and pedestrians. The other route that would be utilized is the same route with the exception of turning onto Sunset Drive and up Hawthorne Street to a private gravel road that heads up the area above Deal Canyon. Two other routes that are not addressed but that would be obvious access routes for construction would be South 12th Street and South 20th Street. As a general rule, City streets are built with ninety degree angles, which may restrict some	To address the City's concerns regarding traffic and road use within the city's limits, Idaho Power has added the following proposed conditions to Exhibit K: <i>Land Use Condition 9: Prior to construction in Union County, the site certificate holder shall complete the following to address traffic impacts in the county:</i> <i>a. The site certificate holder shall finalize, and submit to the department for its approval, a final county-specific transportation and traffic plan. The protective measures described in the draft Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be included and implemented as part of the final county-specific plan, unless otherwise approved by the department;</i> <i>b. The site certificate holder shall work with the Union County Road Department and the City of La Grande Public Works Department to identify concerns related to Project construction traffic; and</i> <i>c. The site certificate holder shall develop traffic control measures to mitigate the effects of Project construction traffic.</i> <i>Land Use Condition 26: During construction in Union County, the site certificate holder shall conduct all work in compliance with the Union County-specific</i>
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Exhibit 5

103

IV. CONCLUSIONS

104 Based on the Findings of Fact above, the Planning Commission concludes that the application meets the
105 requirements established in LDC Articles 8.5 and other applicable codes and Ordinances.

106

107

V. ORDER AND CONDITIONS OF APPROVAL

108 Based on the conclusions above, the Planning Commission approves the Conditional Use Permit as
109 requested, subject to the following Conditions of Approval:

- 110 1. No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is
111 developed to a residential standards and is not designed to support commercial traffic.
- 112 2. Any existing driveway curb cuts along Hawthorn Drive bordering GRH's property, that are not used for
113 residential purposes, shall be removed and replaced with City standard improvements that exists
114 adjacent to such areas.
- 115 3. There is a storm sewer line extending through the project area that shall to be protected. Any
116 improvements that may affect the storm sewer line shall be reviewed and approved by the Public Works
117 Director.

118

119

VI. STANDARD CONDITIONS OF APPROVAL FOR LAND USE APPLICATIONS

- 120 1. **Revisions to a Valid Conditional Use Permit:** Any variations, alterations, or changes in a valid
121 Conditional Use Permit requested by the deed holder shall be considered in accordance with the
122 procedures of the Land Development Code as though a new Conditional Use Permit were being applied
123 for.
- 124 2. **Public Works Standards:** Where a development involves work within the public right-of-way, a Right-
125 of-Way Permit shall be obtained from the Public Works Department in advance of commencing with any
126 work in the right-of-way. All improvements within the public right-of-way shall be in conformance with the
127 most recent adopted City of La Grande "Engineering Standard Drawings and Specifications for
128 Construction Manual."
- 129 3. **Building Permits:** The City of La Grande Building Department shall be contacted early in the process
130 and in advance of development to coordinate and obtain required building, plumbing, electrical and/or
131 mechanical permits. All required permits shall be acquired in advance of construction.

132

133

VI. OTHER PERMITS AND RESTRICTIONS

134 The applicant and property owner is herein advised that the use of the property involved in this application
135 may require additional permits from the City of La Grande or other local, State or Federal Agencies.

136 The City of La Grande land use review, approval process and any decision issued does not take the place of,
137 or relieve the applicant of responsibility for acquiring such other permits, or satisfy any restrictions or
138 conditions thereon. The land use decision herein does not remove, alter, or impair in any way the covenants
139 or restrictions imposed on this property by deed or other instrument.

140 The land use approvals granted by this decision shall be effective only when the rights granted herein have
141 been exercised and commenced within one (1) year of the effective date of the decision. In case such right
142 has not been exercised and commenced or an extension obtained, the approvals granted by this decision
143 shall become null and void. A written request for an extension of time shall be filed with the Planning
144 Department at least thirty (30) days prior to the expiration date of the approval.

145

146

Exhibit 6

7/25/2019

Gmail - Modelaire Roadway Specifications



Virginia Mammen <4gmammen@gmail.com>

Modelaire Roadway Specifications

3 messages

Kyle Carpenter <KCarpenter@cityoflagrande.org>
To: "gmammen@eoni.com" <gmammen@eoni.com>

Fri, Jul 12, 2019 at 1:51 PM

I have attached a couple pictures of our mapping system that will give you a sense of where existing utilities are in Modelaire and Hawthorne. As for the widths of the roadways, I took measurements in multiple places, and found the following:

- Modelaire Drive (F Avenue) between Sunset Blvd and Hawthorne Drive is approximately 33 feet wide with a grade of about 5 Percent.
- Hawthorne Drive is approximately 32 feet wide at the bottom near the intersection of Modelaire/F Avenue and widens to about 34 feet where it intersects Modelaire at the top of the hill. The grade heading up hill is approximately 15.5 Percent.
- Modelaire Drive is generally 36 feet wide with some minor variability generally less than a foot (35' to 37'). On the southernmost segment of the roadway where the majority of the elevation gain is observed the grade is approximately 16 Percent.

Let me know if there are any other specifications of these roadways that you are interested in that I have missed. Have a great weekend and thanks for the treats, the guys were very appreciative.

Kyle Carpenter, PE

Public Works Director

City of La Grande

Public Works

Ph: (541) 962-1325

Fax: (541) 963-4844

2 attachments



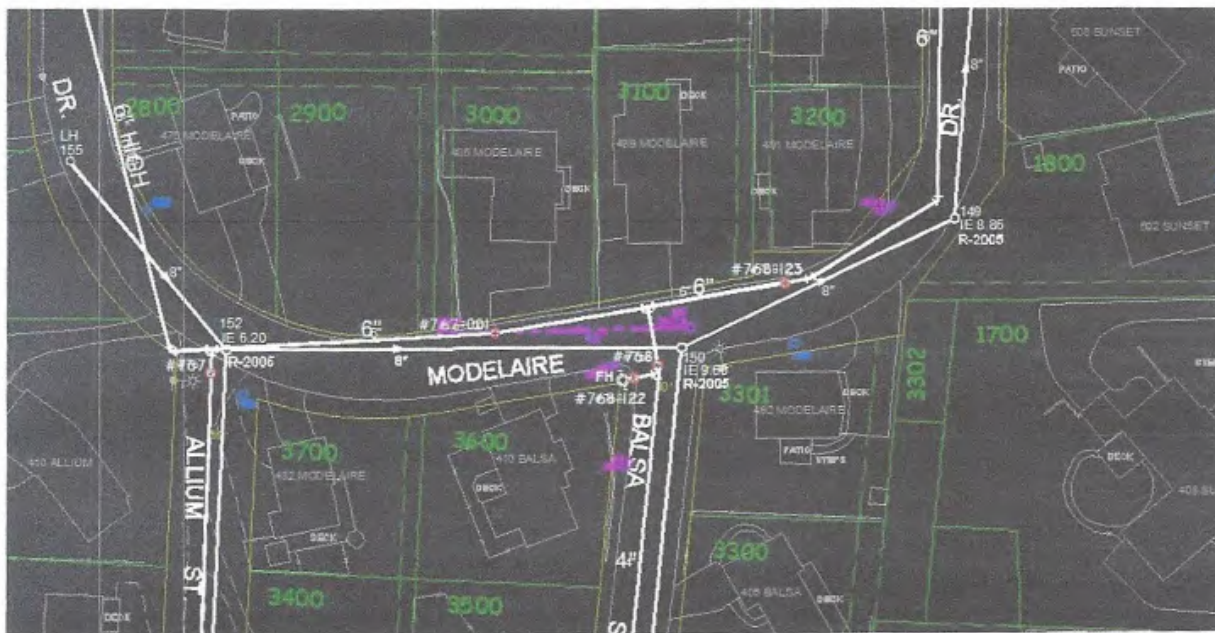
Hawthorne.jpg
150K

Modelaire.jpg
120K

7/25/2019

0 (1067x555)

Exhibit 7



7/25/2019

0 (1397x451)

Exhibit 8



Exhibit 9

attachment U2

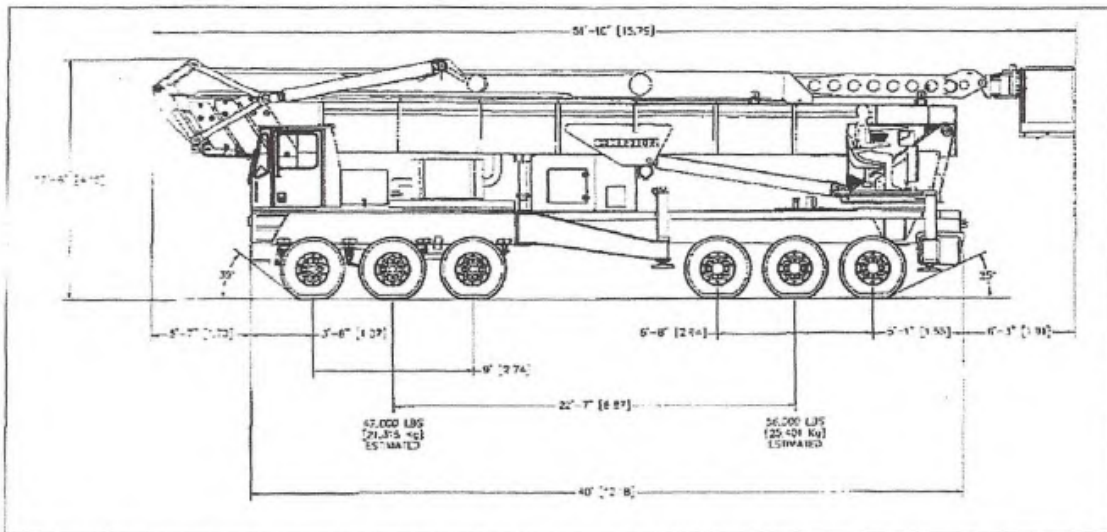


Figure 2. Example Aerial Lift Crane to be Used During Construction (Roadable Length 52 Feet; Width 8 Feet 6 Inches)

Exhibit 10

The following is a summary of anticipated equipment to be used for each transmission-line construction activity.

- Survey work: pickup trucks or ATVs.
- Timber removal: pickup trucks, feller bunchers, dump trucks, wood chippers.
- Road construction: pickup trucks, bulldozers, motor graders, and water trucks.
- Hole digging, installation of directly embedded structures, or foundation installation: pickup trucks, 2-ton trucks, digger derrick trucks, hole diggers, bulldozers, concrete trucks, water trucks, cranes, hydro cranes, wagon rock drills, dump trucks, and front-end loaders.
- Hauling lattice steel members, tubular poles, braces, and hardware to the structure sites: steel haul trucks, carry alls, cranes, and forklifts.
- Assembly and erection of structures: pickup trucks, 2-ton trucks, carry alls, cranes, and a heavy lift helicopter.
- Wire installation: pickups, wire reel trailers, diesel tractors, cranes, 5-ton boom trucks, splicing trucks, three drum pullers, single drum pullers, tensioner, sagging dozers, carry-alls, static wire reel trailers, bucket trucks, and a light duty helicopter.
- Final cleanup, reclamation, and restoration: pickup trucks, 2-ton trucks, bulldozers, motor graders, dump trucks, front-end loaders, hydro-seed truck, and water trucks.

The highest level of traffic will be when the wire stringing operations begin while several other operations are occurring at the same time, which will likely include ROW clearing, installing foundations, hauling steel, and assembling and erecting structures. For the station work, the highest level of traffic will be during site grading and foundation installation. For the communication station sites, the highest level of traffic will be during grading and site preparation.

Detailed estimates of trips generated by transporting Project construction equipment will be provided by the construction contractor prior to construction.

3.1.3 Traffic Related to Timber Removal

In forested areas, the Project will require removal of timber from the Project ROW and for construction and improvement of access roads. Specific timber harvest plans have not been finalized. Logs from timber clearing may be transported to nearby sawmills. Decisions regarding transportation routes for harvested timber will be made following completion of a timber harvest plan, and the number of log truck tips will be estimated when the timber harvest plan has been finalized. Logging slash will remain onsite if possible. For additional discussion regarding removal of timber in forested areas, see Exhibit K, Attachment K-2, ROW Clearing Assessment.

3.1.4 Impacts to V/C Ratios

Based on the estimated trip generation numbers in Tables 4 and 6, a maximum of approximately 1,294 daily one-way vehicle trips are expected within any one construction spread. To facilitate traffic and other analyses, the two construction spreads are divided into smaller sections based on similar construction windows and seasonal weather restrictions. Not all construction sections will have the same number of concurrent construction activities, depending on how the construction contractor sequences and executes the Project. Some sections will have fewer daily vehicle trips. For the purposes of the traffic analysis, the spreads are divided into five sections with multi-use areas that could have additive traffic impacts. The sections are assumed to have approximately equal levels of activity. The 1,294 daily one-way trips per spread divided over five sections of more concentrated traffic results in 259 daily one-

Exhibit 11

City of La Grande Ordinance Number 3242,
Series 2018
Page 252 of 312

ARTICLE 6.6 – PUBLIC STREET STANDARDS

SECTION 6.6.001 - PURPOSE

Upon the request of the La Grande City Council, a variety of street design standards have been reviewed and are now incorporated in the Land Development Code.

SECTION 6.6.002 - CLASS I IMPROVEMENT STANDARDS

This classification will cover those streets that are designed to meet the standards for an expected life of twenty (20) years or more. The attached drawings shall be the minimum standard for those streets in this classification. All streets designated as Federal Aid Urban Streets (F.A.U.) shall be constructed under these design standards. Streets in this designation shall be constructed with sidewalks when at all possible in an effort to increase pedestrian safety. Collector streets are designed to withstand normal trucks of an HS 20 loading. Larger trucks are to utilize Arterial streets where at all possible. This level of development shall be the ultimate goal for all streets within the City of La Grande.

Possible means of financing available for this Class shall be methods A, B, C, D, E, F, G, and H in Section 6.6.006.

A. Advantages

1. The construction life is extended to a period above other City standards.
2. The visible aesthetics in relationship to having curbs and a blacktop surface with landscaping or concrete driveways and a sidewalk is generally appealing to the public.
3. Easy maintenance for the Public Works Department for cleaning and minor repair.
4. Storm sewer drainage is confined within the bounds of the curbs during minor flooding periods.
5. Parking is restricted to a solid barrier, that being the curb; this restricts parking in the area on the back side of the curb and confines travel to the street surface.
6. Defined areas for possible cross walks, signs, power poles, and other utilities that are restricted to the outside areas behind the curbs.
7. It allows for a wide range of financing methods and is to City standards for a ten (10) year Bancroft bonding.
8. Provides a dust free surface.

B. Disadvantages

1. The extreme high level of cost that is incurred with this type of development.

SECTION 6.6.003 - CLASS II IMPROVEMENT LEVEL

Streets constructed in this classification shall be constructed to the same standards as Class I Streets with the exception of the form of drainage system. These streets shall meet the standards as shown on the attached drawing. This level of construction shall be only utilized in substitution for Class I Streets when it is determined by the City Council at the recommendation of the City Engineer or Engineering Superintendent, that an adequate drainage system cannot be installed for a Class I Street.

Exhibit 12

Table 6. Construction Vehicle Trips per Day per Construction Spread

Construction Crew Type	Construction Vehicles					
	Light Construction Vehicles			Heavy Construction Vehicles		
	Number of Pickups/ Mechanic Trucks (per day)	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)	Number of Other Vehicles	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)
Substation Construction	20	2	40	5	2	10
ROW Clearing	9	4	36	5	4	20
Roads/ Pad Grading	9	4	36	9	2	18
Foundations	9	2	18	5	8	40
Tower Lacing (assembly)	27	2	54	0	0	0
Tower Setting (erection)	20	2	40	0	0	0
Wire Stringing	9	4	36	9	4	36
Restoration	3	2	6	0	0	0
Blasting	5	4	20	0	0	0
Material Delivery	20	8	160	12	2	24
Mechanic and Equipment Mgmt.	5	6	30	0	0	0
Refueling	0	0	0	5	4	20
Dust Control	0	0	0	5	4	20
Construction Inspection	5	8	40	0	0	0
Concrete Testing	5	4	20	0	0	0
Environmental Compliance	9	6	54	0	0	0
Surveyors	5	3	30	0	0	0
Totals	—	—	620	—	—	188

Exhibit 13

7/24/2019

Roadway Design Manual: Minimum Designs for Truck and Bus Turns

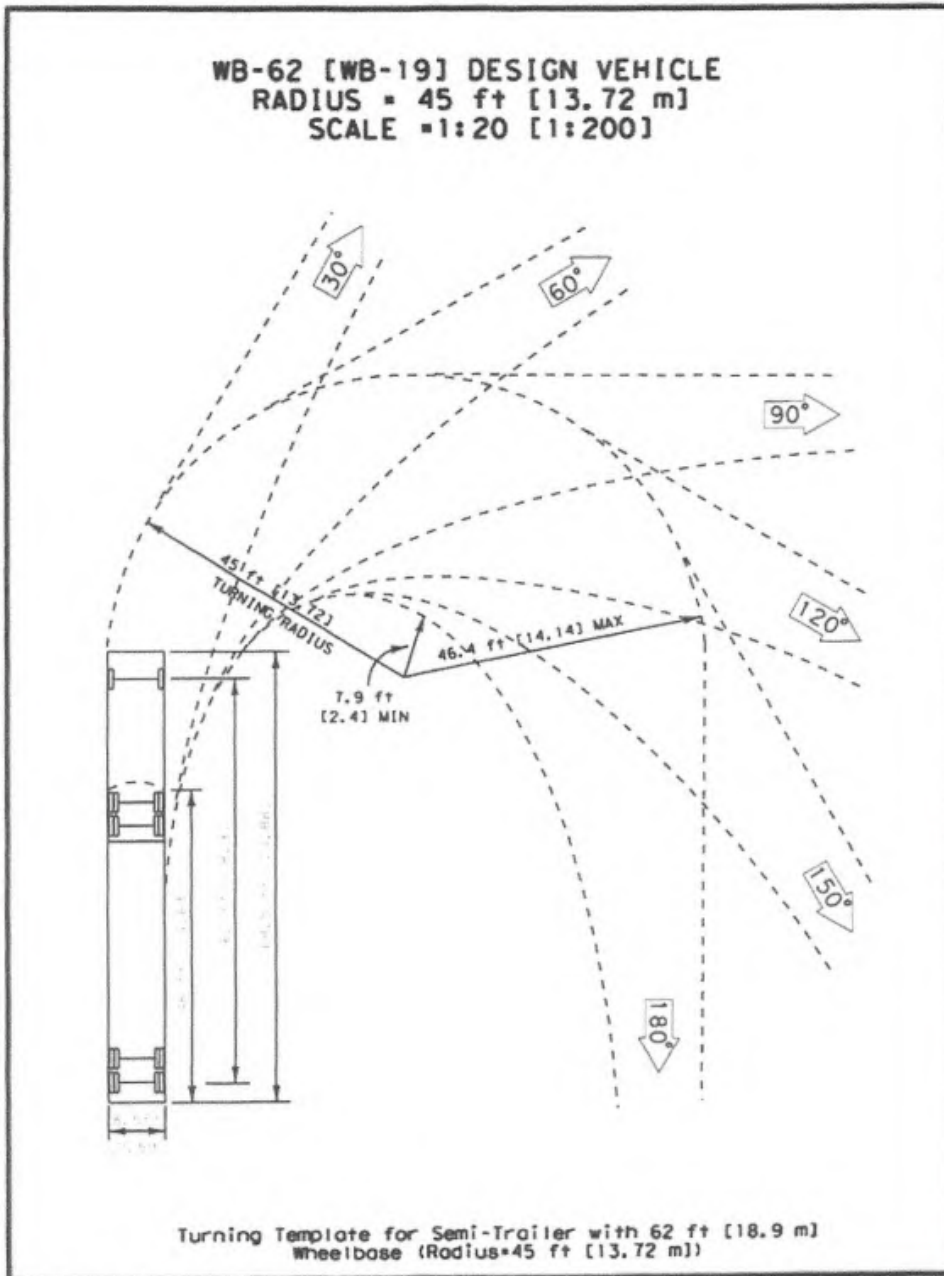


Figure 7-4. Turning Template for Semi-Trailer with 62 ft [18.9 m] Wheelbase, (not to scale). Click [here](#) to see a PDF of the image.

7/24/2019

7-1.png (596x805)

Exhibit 14

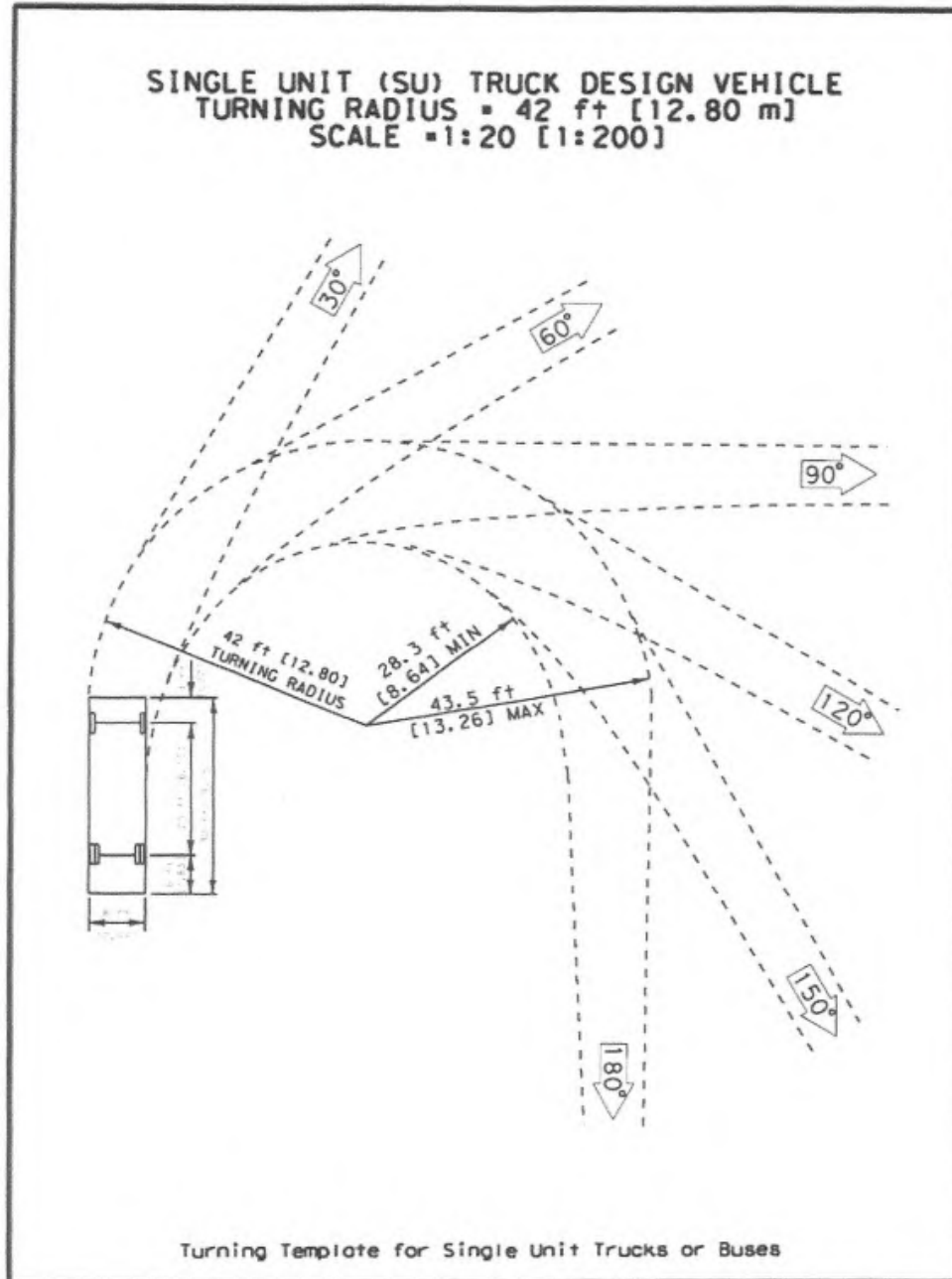


Exhibit 15

**CITY OF LA GRANDE
ORDINANCE NUMBER 3077
SERIES 2009**

**AN ORDINANCE CONTROLLING VEHICULAR AND PEDESTRIAN TRAFFIC, PARADES
AND PROCESSIONS AND ISSUANCE OF PERMITS; PROVIDING PENALTIES; AND
REPEALING ORDINANCE NUMBER 2845, SERIES 1993; ALL AMENDING ORDINANCES
AND ALL OTHER ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH;
AND DECLARING AN EFFECTIVE DATE**

THE CITY OF LA GRANDE ORDAINS AS FOLLOWS:

Section 1. This Ordinance may be cited as the City of La Grande Uniform Traffic Ordinance.

Section 2. APPLICABILITY OF STATE TRAFFIC LAWS.

Oregon Revised Statutes, Chapter 153, and the Oregon Vehicle Code, ORS Chapter 801 and 822, as now constituted, are adopted by reference. Violation of an adopted provision of those chapters is an offense against the City.

Section 3. DEFINITIONS

In addition to those definitions contained in the Oregon state Motor Vehicle Code, the following words or phrases, except where the context clearly indicates a different meaning, shall mean:

a. Alley

A street or highway primarily intended to provide access to the rear or side of lots or buildings in urban areas and not intended for through vehicular traffic.

b. Bicycle

A bicycle is a vehicle that:

1. Is designed to be operated on the ground on wheels;
2. has a seat or saddle for use of the rider;
3. is designed to travel with not more than three (3) wheels in contact with the ground;
4. is propelled exclusively by human power; and,
5. has every wheel more than fourteen inches (14") in diameter or two (2) tandem wheels, either of which is more than fourteen inches (14") in diameter.

c. Bicycle Lane

That part of the highway, adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

d. Bicycle Path

A public way, not part of a highway, which is designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

e. Block

The part of one side of a street lying between the two (2) nearest cross streets.

f. Central Business District

Exhibit 16

ORDINANCE NUMBER 3077
SERIES 2009
Page (8)

a. City Regulation of Special Movement of Oversized Load

The applicant shall submit an application to the City Manager or designee, showing the terminal points of the purported movement; the proposed route; the nature of the movement requested, including the weight and dimensions of the vehicle, load, machine, building, or structure to be moved; the time, date and duration of the proposed movement.

b. Special Movement Permit

A permit shall be required to move any vehicle, structure, or load on, or to access a street when, after preparation for movement, the vehicle, structure or load exceeds fourteen feet (14') in height, requires the use of guy wires, or could result in the blockage of a street. An approved application may serve as a permit, and a copy of the approved application shall be provided to the applicant.

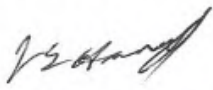
Section 17. TRUCK ROUTES

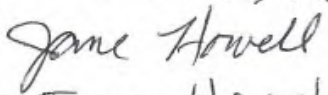
- a. It shall be unlawful for any person, firm, or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes.
- b. Any vehicle with a gross weight over 26,000, pounds specifically picking up deliveries or making deliveries to any business or residence located on a street that is not a truck route will be exempted if the vehicle is driven from the truck route to the destination in the shortest, most direct, and safest route.
- c. The use of Jacob brakes shall not be allowed within the city limits of La Grande, Oregon.
- d. Truck routes will be posted as follows:
 1. Walnut street north from the city limits to C Avenue;
 2. C Avenue east from Walnut Street to Gekeler Avenue;
 3. Gekeler Avenue east to the city limits;
 4. 12th street south from Gekeler Avenue to the city limits;
 5. 2nd Street south from the city limits to Adams Avenue;
 6. Monroe Avenue east from Spruce Street to Highway 82;
 7. Jackson Avenue east from Spruce Street, and
 8. Spruce Street south from the city limits to Monroe.

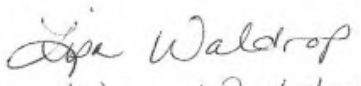
Section 18. IMPOUNDMENT AND DETENTION OF VEHICLES

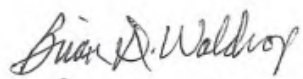
- a. Whenever a vehicle is placed in a manner or location that constitutes an obstruction to traffic or a hazard to public safety, a police officer or enforcement officer shall order the owner or operator of the vehicle to remove said vehicle. If the vehicle is unattended, the officer or enforcement officer may cause the vehicle to be towed and stored at the owner's expense. The owner shall be liable for the costs of towing and storing, notwithstanding that the vehicle was parked by another or that the vehicle was initially parked in a safe manner but subsequently became an obstruction or hazard.

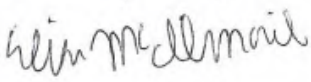
I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

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SIGNATURE

PRINTED NAME

ADDRESS

EMAIL

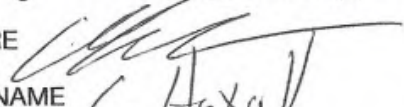

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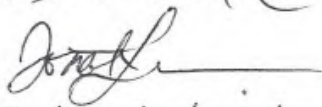

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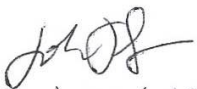
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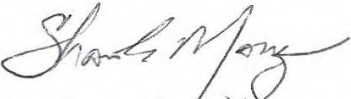
SIGNATURE 
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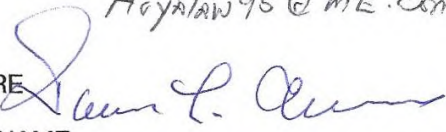
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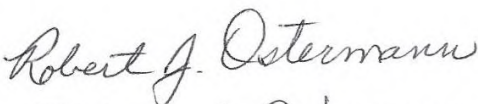
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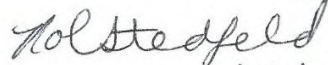
SIGNATURE 
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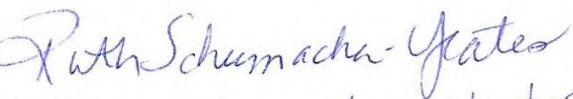
SIGNATURE 
PRINTED NAME Robin J. Ostermann
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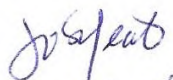
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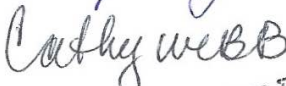
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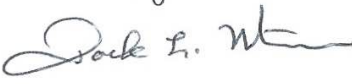
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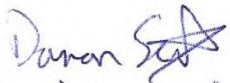
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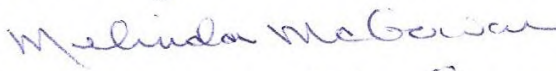
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SIGNATURE *Gary D. Pierson*
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ADDRESS
EMAIL

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Merle E. Comfort*
PRINTED NAME MERLE E. COMFORT
ADDRESS 2009 SCORPIO DRIVE LA GRANDE OR 97850
EMAIL MERLECOMFORT@GMAIL.COM

SIGNATURE *Robin L. Maille*
PRINTED NAME Robin Maille
ADDRESS 401 Cedar St., La Grande
EMAIL r.maille@icloud.com

SIGNATURE *Bruce C Kevan*
PRINTED NAME *Bruce C*
ADDRESS 1511 W Ave LG
EMAIL bruce.kevan@lagrandesd.org

SIGNATURE *Carol S. Summers*
PRINTED NAME CAROL S. SUMMERS
ADDRESS 2811 Belketer Ln - La Grande, OR
EMAIL carolsummers1935@gmail.com

SIGNATURE *Caroline Kaye Juniper*
PRINTED NAME Caroline Kaye Juniper
ADDRESS 406 NTH St. LaGrande - OR 97850
EMAIL

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Gerald D. Juniper*
PRINTED NAME *Gerald Darwin Juniper*
ADDRESS *406 4th St. LaGrande OR. 97850*
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
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SIGNATURE
PRINTED NAME
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EMAIL

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:28 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposal Order 5/23/2019
Attachments: Scan 2019-8-15 17.14.06.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter sign by me and 46 other residents of La Grande expressing our concerns regarding the B2H Project and requesting that EFSC Deny the Site Certificate.

I have also sent a bound copy of this material by US Postal Service.

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, Oregon. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the predicted noise levels resulting from construction and operation of the proposed Boardman to Hemingway Transmission Line Project. I would like to address the noise coming from the blasting and rock breaking specifically above the area at the top of Modelaire Drive 1 both to the north and the south of that area and also the construction traffic noise that that will impact the west hills and the area below.

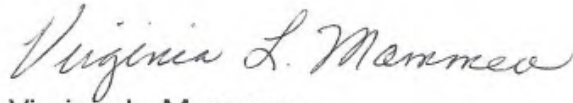
In Exhibit X page X-9 3.3.1.1 2 blasting and rock breaking is mentioned saying that "Modern blasting techniques include the electronically controlled ignition of multiple small explosive charges in an area of rock that are delayed fractions of second, resulting in a total event that is generally less than a second. Impulse (instantaneous) noise from blasts could reach up to 140dBA at the blast location or over 90 dBA within 500 feet." This sounds oh so "don't worry about it, it will be OK just over in a split second." Living in this area off Modelaire Drive, I don't find this at all comforting. And the fact that this will be overseen by properly licensed personnel and all of the necessary authorizations doesn't help anything either.

The area in question, which for such inordinate construction is extremely close to many residents, has been my home for over 50 years and during

related medical problems and exhibit various reactions to loud noises.¹⁰ These children also live in the neighborhoods to be affected by the noise so they would be impacted coming and going to school, at home and also while at school. To impose the constant possibility of loud noises is cruel, disrespectful and totally unacceptable. ¹¹

For a project like this involving blasting and heavy machinery noise so close to homes, schools, and medical facilities impacting hundreds of peoples' daily lives, the day to day agitation, wondering what is coming next, fear and being on constant alert are not just addressed by some type of mitigation but must be addressed by a route that is much less impactful to peoples' safety, sanity, and health.

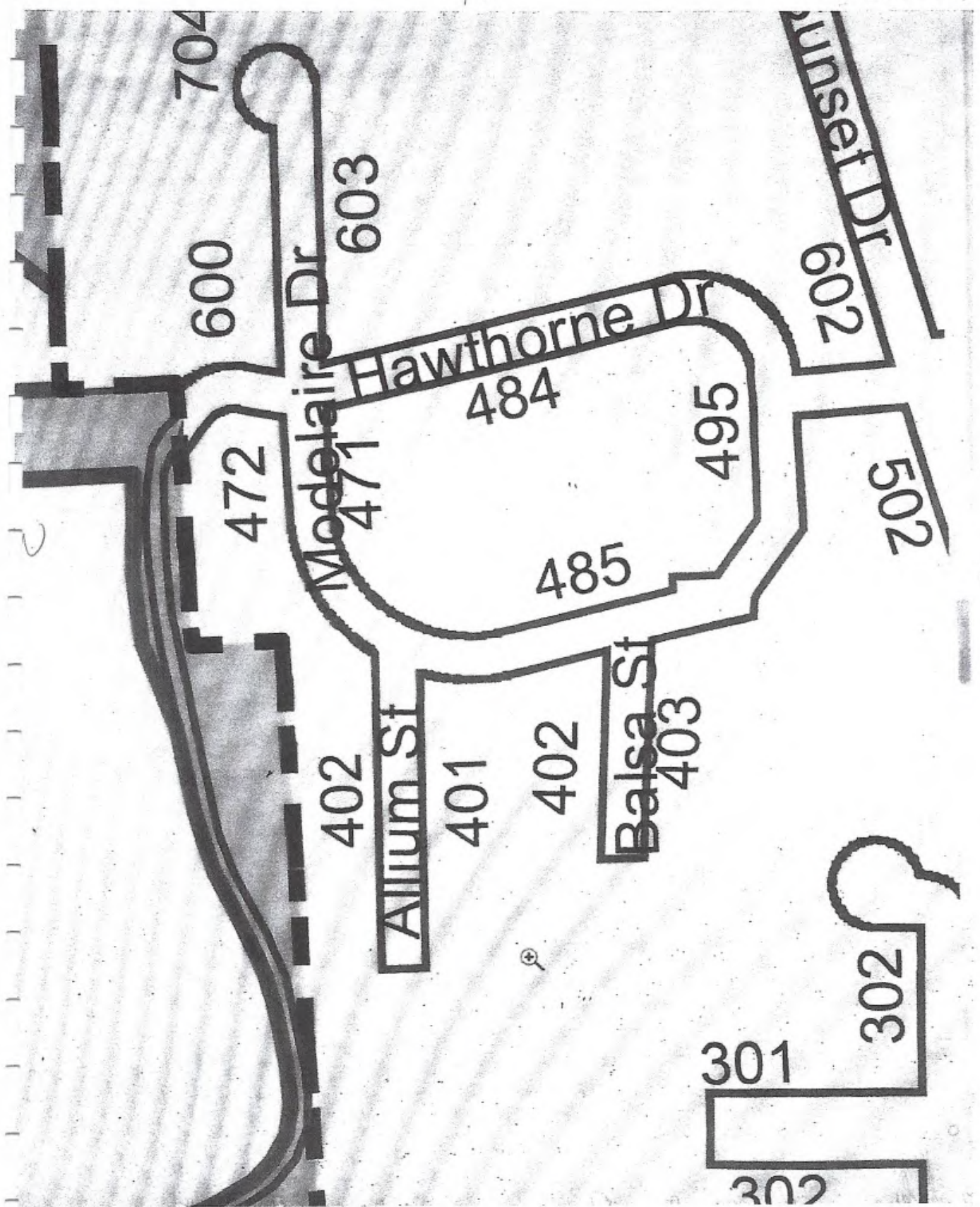
Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

gmammen@eoni.com

Exhibit 1



N

2

11

5

Exhibit 2

Boardman to Hemingway Transmission Line Project

Exhibit X

1 **3.3 Predicted Noise Levels**

2 OAR 345-021-0010(1)(x)(A): Predicted noise levels resulting from construction and operation
3 of the proposed facility.

4 **3.3.1 Construction Noise**

5 **3.3.1.1 Predicted Construction Noise Levels**

6 Project construction will occur sequentially, moving along the length of the Project route, or in
7 other areas such as near access roads, structure sites, conductor pulling sites, and staging and
8 maintenance areas. Overhead transmission line construction is typically completed in the
9 following stages, but various construction activities may overlap, with multiple construction
10 crews operating simultaneously:

- 11 • Site access and preparation
- 12 • Installation of structure foundations
- 13 • Erecting of support structures
- 14 • Stringing of conductors, shield wire, and fiber-optic ground wire

15 The following subsections discuss certain construction activities that will periodically generate
16 audible noise, including blasting and rock breaking, implosive devices used during conductor
17 stringing, helicopter operations, and vehicle traffic.

18 **Blasting and Rock Breaking**

19 Blasting is a short-duration event as compared to rock removal methods, such as using track rig
20 drills, rock breakers, jackhammers, rotary percussion drills, core barrels, or rotary rock drills.
21 Modern blasting techniques include the electronically controlled ignition of multiple small-
22 explosive charges in an area of rock that are delayed fractions of second, resulting in a total
23 event duration that is generally less than a second. Impulse (instantaneous) noise from blasts
24 could reach up to 140 dBA at the blast location or over 90 dBA within 500 feet.

25 Lattice tower foundations for the Project typically will be installed using drilled shafts or piers;
26 however, if hard rock is encountered within the planned drilling depth, blasting may be required
27 to loosen or fracture the rock to reach the required depth to install the structure foundations.
28 Final blasting locations will not be identified until an investigative geotechnical survey of the
29 analysis area is conducted during the detailed design.

30 The contracted blasting specialist will prepare a blasting plan that demonstrate compliance with
31 applicable state and local blasting regulations, including the use of properly licensed personnel
32 and the acquisition of necessary authorizations. The Framework Blasting Plan is set forth in
33 Exhibit G, Attachment G-5.

34 **Implosive Devices**

35 An implosive conductor splice consists of a split-second detonation with sound and flash.
36 Implosive splicing activities are anticipated to be limited to daytime hours. A blasting plan will be
37 developed by an individual certified and licensed to perform the work. The plan will
38 communicate all safety and technical requirements including, but not limited to, delineation of
39 the controlled access zone and distance away from residences.

Exhibit 3

Public Services

OAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

OAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

OAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (OAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (OAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

OAR 345-024-0010 and 345-024-0015

- This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety.
- Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

OAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4a

8/5/2019

Oregon Secretary of State Administrative Rules

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Chapter 340

Division 35

NOISE CONTROL REGULATIONS

340-035-0035

Noise Control Regulations for Industry and Commerce

(1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 7, except as otherwise provided in these rules. [Table not included. See ED. NOTE.]

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind energy facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies. [Table not included. See ED. NOTE.]

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b)-(f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind energy facility may conduct measurements to determine the actual ambient L10 and L50 background level.

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with wind speed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient background level" does not include noise generated or caused by the wind energy facility.

(III) The noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 8), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. The easement or covenant must authorize the wind energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

Exhibit 4b

8/5/2019

Oregon Secretary of State Administrative Rules

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

Exhibit 5a

Controlling the Adverse Effects of Blasting

This module addresses the control of offsite impacts that result from blasting, namely:

- vibrations,
- airblast, and
- flyrock.

Much of the information in the module is derived from the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The performance standards apply to all surface coal mines. Similar standards have been adopted on some State and local levels and applied to non-coal blasting operations such as quarrying and construction.

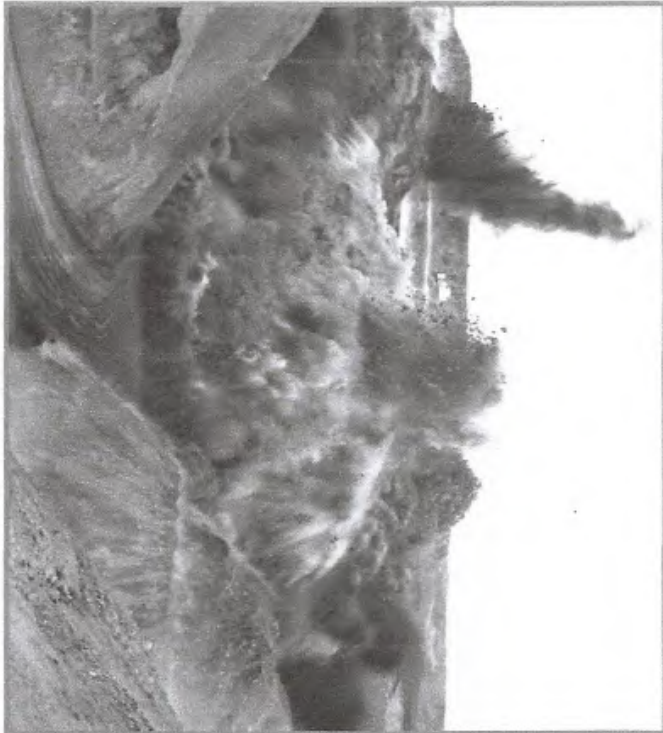
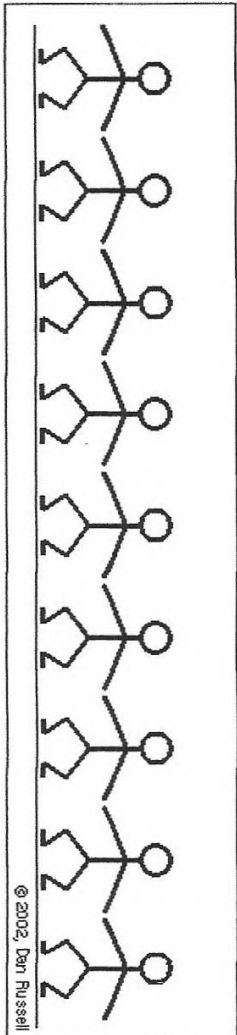


Exhibit 5b

Part I: Ground Vibrations, Airblast, and Flyrock

Explosive energy is used to break rock. However, the use of this energy is not 100-percent efficient. Some of the energy escapes into the atmosphere to generate *airblast or air vibrations*. Some of the energy also leaves the blast site through the surface soil and bedrock in the form of *ground vibrations*.



Both air and ground vibrations create waves that disturb the material in which they travel. When these waves encounter a structure, they cause it to shake. Ground vibrations enter the house through the basement and airblast enters the house through the walls and roof.

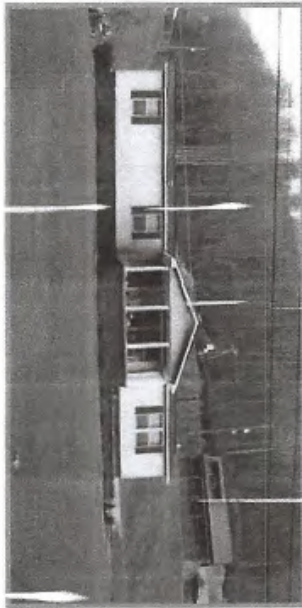
Airblast may be audible (noise) or in-audible (concussion). When outside a house the blast may be heard because of the noise, however noise has little impact on the structure. The concussion wave causes the structure to shake and rattles objects hanging on walls or sitting on shelves. This "interior noise" will alarm and startle people living in the house.

Flyrock is debris ejected from the blast site that is traveling through the air or along the ground. Flyrock the single most dangerous adverse effect that can cause property damage and personal injury or death.

Exhibit 5g

Blasting Impacts on Structures

Both above-ground and below-ground structures are susceptible to vibration impacts. Structures can include onsite mine offices and buildings, as well as offsite residences, schools, churches, power-transmission lines, and buried pipelines. Some of these structures may include historic or cultural features sensitive to even low levels of vibrations.



It is important to understand:

1. the causes of ground vibrations and airblast, and
2. what practices can be followed to control and minimize the adverse effects

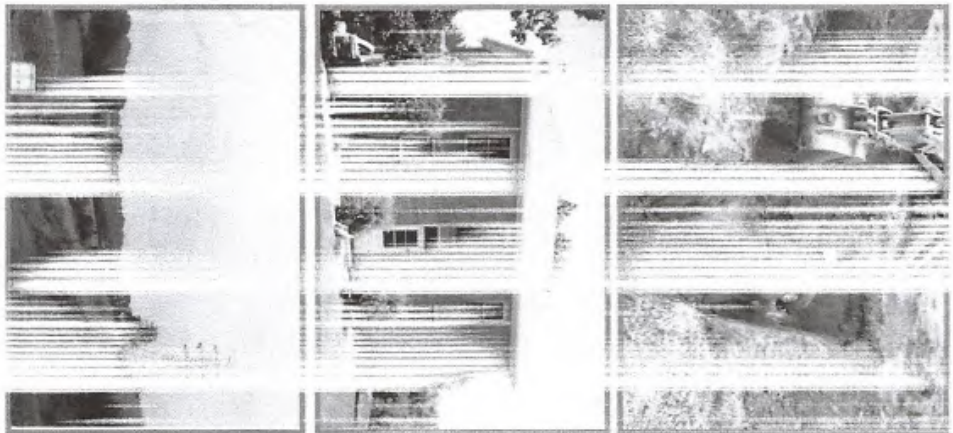
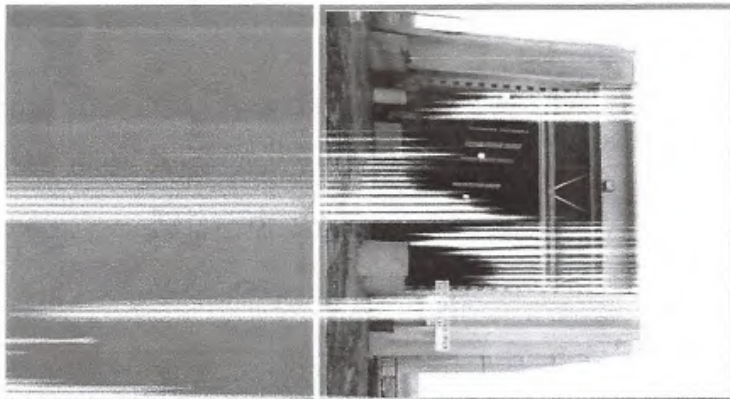
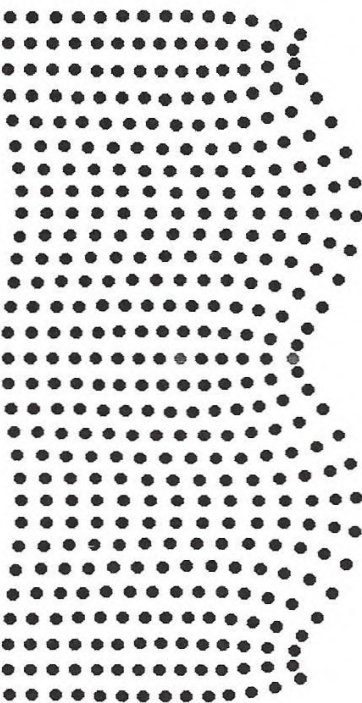


Exhibit 5d

Ground Vibrations

Ground vibrations propagate away from a blast site as Rayleigh (or surface) waves. These waves form a disturbance in the ground that displaces particles of soil or rock as they pass by. Particle motions are quite complicated. At the ground surface (free boundary), measured particle motions have the greatest displacements, and displacements decrease with depth (see the illustration below). At a depth of between 20 to 50 feet below ground surface, particle displacements are barely detectable. Structures that are well coupled to the ground tend to move with this motion; structures buried in the ground are less affected by surface motions.



©1999, Daniel A. Russell

Ground vibrations are measured in terms of **particle velocity** and are reported in inches per second (ips) or the speed at which a particle of soil or rock moves.

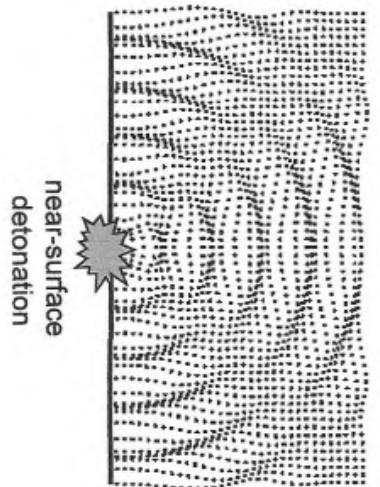
At typical blasting distances from residential structures, the ground only moves with displacements equal to the thickness of a piece of writing paper. In terms of displacement, this equates to hundredths of an inch; visually, such movement cannot be detected.

Airblast

Exhibit 5 e

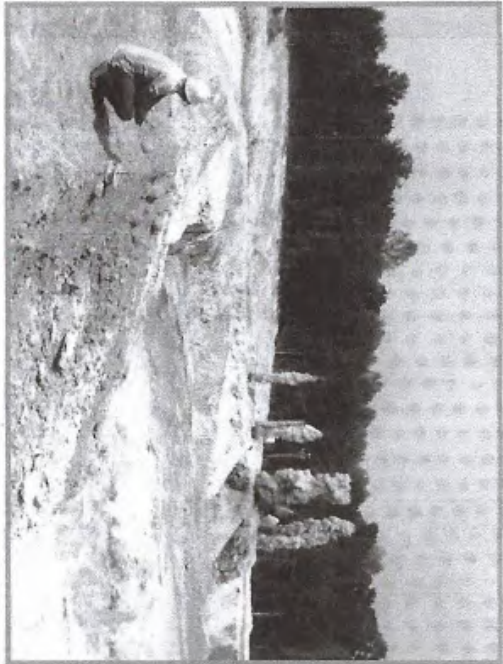
Airblast is measured as a pressure in pounds per square inch (psi) and is often reported in terms of **decibels (dB)**.

Airblast is a pressure wave that that may be audible or inaudible. Elevated airblast levels are generated when explosive energy in the form gases escape from the detonating blast holes. Energy escapes either through the top stemming or through fractures in the rock along the face or at the ground surface.



Airblast radiates outward from the blast site in all directions and can travel long distances. Sound waves travel much slower (1,100 ft/s) than ground vibrations (about 5,000 – 20,000 ft/s). Hence, airblast arrives at offsite structures later than do ground vibrations.

Both ground vibrations and airblast cause structures to shake structures. Occupants in structures that are located far from a blast may experience shaking from vibration and airblast as two separate, closely spaced events. This can be particularly bothersome, as it prolongs the duration of structure shaking and leads the property owner to think that two separate blasts occurred.



Structure Response

Exhibit 5 F

As ground and air vibrations reach a structure, each will cause it to shake. Structure response is dependant on the vibration characteristics (frequency and amplitude) and structure type.

Ground Vibrations enter the house through the basement. This is like shaking the bottom of a flag pole. Movement at the top of the pole depends on how (frequency) and how hard (amplitude) the bottom of the pole is shaken. If shaken at just the right pace, or at the pole's natural frequency, the top will move significantly compared to the bottom. Motion at the top is amplified from the bottom motion.

All blast damage studies have measured incoming ground vibrations at the ground surface. The observed structure amplifications were typically between 1 to 4 times the ground vibration. Structure response below ground level is the same or less than the incoming vibrations

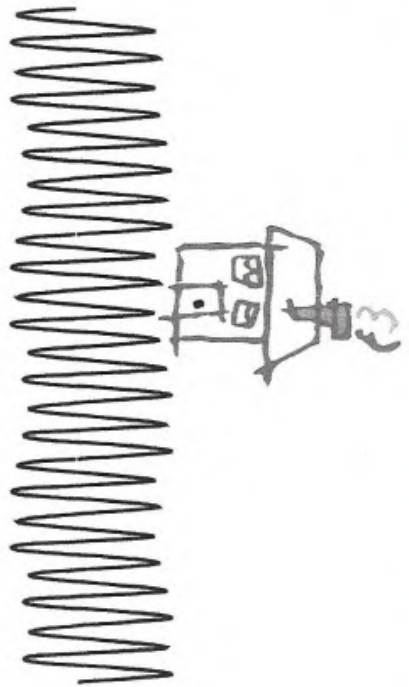
Airblast enters the house through the roof and walls. Like ground vibrations, the frequency and amplitude of the vibrations affect structure response. However the low frequency events (concussion) that most strongly affect structures is normally only a one or two cycle event.

Due to the different arrival times of ground and air vibrations, occupants may feel two distinct impacts on the house.

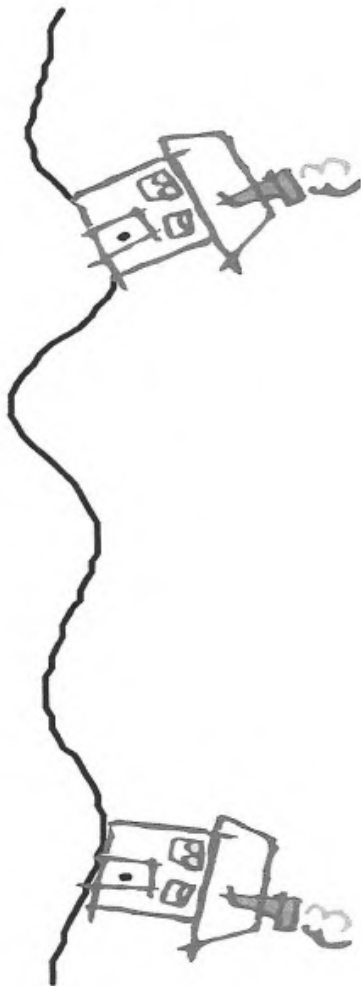


Ground Vibration Structure Response

Exhibit 5g



On the other hand, low-frequency wave cycles are long as compared with the dimensions of structures. Accordingly, low frequencies tend to efficiently couple energy into structures and to promote higher-amplitude, long-duration shaking.



High frequencies do not promote structure shaking. The length of a single high-frequency wave cycle is short as compared with the dimension of a structure. A structure does not significantly respond to high frequencies.

8/4/2019



Harvard Health Publishing
HARVARD MEDICAL SCHOOL

Trusted advice for a healthier life

A noisy problem - Harvard Health

Exhibit 16
CART | FREE HEALTHBEAT SIGNUP | SHOP | SIGN IN

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What can we help you find?



HEART
HEALTH

MIND &
MOOD

PAIN

STAYING
HEALTHY

CANCER

DISEASES &
CONDITIONS

MEN'S
HEALTH

WOMEN'S
HEALTH

LICENSING

Harvard Men's Health Watch

A noisy problem

People often become more sensitive to noise as they age, which can affect their mental and physical health.

Published: March, 2019



Image: © Juanmonino/Getty Images

Are you more sensitive to noises than you used to be? Do certain sounds now feel too loud and jarring? Don't worry; it's actually quite normal.

Age-related hearing loss is common among older adults and affects about two-thirds of men in their 70s and 85% of men ages 80 and older. Although it's not clear why, this can also make people hypersensitive to sounds that they used to tolerate easily, which in turn can affect their well-being.

"Exposure to noises from crowds, traffic, and other everyday sounds can become harder to tolerate and increase stress levels, leading to anxiety and a reduction in overall quality of life," says Dr. Stephanie Tompkins, an audiologist with Harvard-affiliated Massachusetts Eye and Ear. "As your sensitivity to noises increases, this can lead to greater isolation, too, as you may try to avoid potentially noisy places and situations."

Exhibit 7a

8/4/2019

Hospital Noise: How Noise Reduction Helps Patients Heal



UVM Medical Center Blog (<https://medcenterblog.uvmhealth.org>) » Blog (<https://medcenterblog.uvmhealth.org/blog/>) »
Quiet in the Hospital: How Noise...

Quiet in the Hospital: How Noise Reduction Helps Patients Heal

on June 7, 2018 (<https://medcenterblog.uvmhealth.org/innovations/hospital-noise-reduction/>) in Innovation (<https://medcenterblog.uvmhealth.org/category/innovations/>) by UVM Medical Center (<https://medcenterblog.uvmhealth.org/author/uvmmedcenter/>)

Noise. It is present in almost every aspect of our lives. From the traffic in the streets, to the fan that provides us white noise in the background to sleep, noise exists. Unfortunately, like stress, too much of it can have a negative impact on a person's health and rest. Some sounds we do like to hear, such as birds chirping, signaling spring in Vermont, but what about sounds in a hospital?

Many of us get admitted to hospitals when we are too sick to take care of ourselves at home. We expect exceptional care from physicians and nurses and, of course, to rest in order to help our bodies heal. We understand that some noises in a hospital are necessary for care; however, others simply aren't.

The Sounds of a Hospital

Many organizations, including the UVM Medical Center, have high tech equipment, which greatly assists in the delivery of care to our patients, but can also be noisy. Sometimes, healthcare providers are the source of the noise as we interact and communicate with our patients and other health team members.

Another factor is visits from families and friends during visiting hours. It is difficult when one's roommate is trying to rest in the opposite bed. Yet, we need to be cognizant of noise in patient care areas as sounds can be magnified and misinterpreted, increasing agitation and even confusion for some patients.

We become accustomed to the noise; our patients are not.

The Research on Noise, Quiet, and Healing

8/4/2019

Hospital Noise: How Noise Reduction Helps Patients Heal

Exhibit 76

Research has shown that noise plays a negative role in healing and that decreasing noise in patient care areas aids in healing processes and helps facilitate speedier recoveries for patients. Patients are able to heal, sleep better and recover more quickly when able to rest. A quieter environment can also help decrease burnout for hospital staff.

Studies show that patients are more likely to develop negative side effects from a noisy hospital, such as sleep disturbances, elevated blood pressure and heart rate, and increased use of pain medications.

Noise can also increase annoyance levels for staff. One study indicated noise, such as talking inside and outside patient rooms, is the most common source of noise as well as visitors' voices, TVs, and behaviors of other patients.

Research concluded that best practices to eliminate noise from talking included staff education about noise reduction, public indicators such as sound monitors, a quiet time protocol, and lower cost environmental fixes, such as fixing noisy doors and squeaky wheels. Lastly, by introducing scripting with routine monitoring, patients' perception of quietness increased and the perception of noise decreased.

How We Address Noise at the UVM Medical Center

We introduced the "Culture of Quiet" Organizational initiative. The Nursing Professional Governance Patient and Family Experience Global council continued this work. After convening a small task force of nurses and assessing current quiet strategies, we introduced the following tactics:

- Many hospital units have designated 'quiet hours' with automatically dimming of lights at quiet hour intervals.
- Signage is visible in most patient care areas to help keep patients, family, and visitors aware. Throughout the hospital, you will see signs with a relaxing pair of Adirondack chairs and the sun setting with details on when a unit has quiet hours.
- Many semi-private rooms have windows in doors, so doors can be closed allowing for patient rest.
- We offer headphones for TVs and earplugs to help minimize sounds.
- In-patient kits contain a sleeping mask and other comfort items that can be provided at time of admission. Each kit contains a card and explains, 'the best healing occurs in a quiet environment.'
- New education material is available for staff, patients and visitors-just ask to review the next time visiting.
- Some units offer white noise machines, others have this built in.
- Noisy equipment such as wheels and doors can be tagged and replaced.
- Our facility and distribution staff have changed their cleaning and supply delivery schedules to accommodate patient care.
- Healthcare teams within the hospital are focusing efforts to cluster patient care to minimize interruptions to provide restful moments.

How you can help us.

We ask patients and visitors to hold us accountable when sounds are too loud. We want our community to alert us when noise levels are high and we will do what we can to minimize sound. In turn, we ask that all members of the healthcare team, patients, family, and friends be aware to keep voices soft, cell phones on vibrate, and hold each other accountable for these are the times of the day when our patients take pause to rest and positively impact their healing.

8/4/2019

Dangerous Decibels: Hospital Noise More Than a Nuisance | RN.com

Exhibit 8a

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Dangerous Decibels: Hospital Noise More Than a Nuisance

By Diane Sparacino, Staff Writer

Imagine a world where hospitals have become so noisy that the annoyance has topped hospital complaints, even more than for the tasteless, Jell-O-laden hospital food (Deardorff, 2011). If you're a nurse, you know that we're already there – with noise levels reaching nearly that of a chainsaw (Garcia, 2012). In fact, for more than five decades, hospital noise has seen a steady rise (ScienceDaily, 2005).

But it wasn't always that way. At one time, hospitals were virtually noise-free like libraries – respected spaces, preserved as quiet zones. The culture was such that a loud visitor might be silenced by a nurse's purposeful glare or sharply delivered "Shhh!" As early as 1859, the importance of maintaining a quiet environment for patients was a topic for discussion. In Florence Nightingale's book, "Notes on Nursing," she described needless noise as "the most cruel absence of care" (Deardorff, 2011).

Fast forward to 1995, when the World Health Organization (WHO) outlined its hospital noise guidelines, suggesting that patient room sound levels not exceed 35 decibels (dB). Yet since 1960, the average daytime hospital noise levels around the world have steadily risen to more than double the



Exhibit 8b

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acceptable level (from 57 to 72 dB), with nighttime levels increasing from 42 to 60 dB. WHO found that the issue was not only pervasive, but high noise levels remained fairly consistent across the board, despite the type of hospital (ScienceDaily, 2005).

Researchers at Johns Hopkins University began to look into the noise problem in 2003. They maintained that excessive noise not only hindered the ability for patients to rest, but raised the risk for medical errors. Other studies blamed hospital noise for a possible increase in healing time and a contributing factor in stress-related burnout among healthcare workers (ScienceDaily, 2005).

Technology is, of course, partly to blame. State-of-the-art machines, banks of useful alarms, respirators, generators, powerful ventilation systems and intercoms all add up to a lot of unwanted racket. When human voices are added to the mix, (i.e., staff members being forced to speak loudly over the steady din of medical equipment), it's anything but a restful environment. For the recovering patient in need of sleep, that can be a real issue (Deardorff, 2011).

Contributing to the problem, experts say, are the materials used in hospitals. Because they must be easily sanitized, surfaces cannot be porous where they could harbor disease-causing organisms. Rather than using noise-muffling materials like carpet, acoustic tiles and other soft surfaces, hospitals have traditionally been outfitted using smooth, hard surfaces – especially in patient rooms. Good for cleanliness – not so great for dampening sounds, which tend to bounce around the typical hospital (Deardorff, 2011).

Which brings us to the most recent research, published January 2012 in the *Archives of Internal Medicine*. In the report, Jordan Yoder, BSE, from the Pritzker School of Medicine, University of Chicago, and his colleagues associated elevated noise levels with "clinically significant sleep loss among hospitalized patients," perhaps causing a delay in their recovery time (Garcia, 2012). During the 155-day study period, researchers examined hospital sound levels. The numbers far exceeded (WHO) recommendations for average hospital-room noise levels, with the peak noise at an average 80.3 dB - nearly as loud as a chainsaw or electric sander (85 dB), and well over the recommended maximum of 40 dB. And while nights tended to be quieter, they were still noisier than recommended allowances, with "a mean maximum sound level of 69.7 dB" (Garcia, 2012).

Perhaps most interestingly, the researchers broke down the sources of noise into categories: "Staff conversation (65%), roommates (54%), alarms (42%), intercoms (39%), and pagers (38%) were the most common sources of noise disruptive reported by patients" (Garcia, 2012). "Despite the importance of sleep for recovery, hospital noise may put patients at risk for sleep loss and its associated negative effects," they wrote. In addition, researchers found that the intensive care and surgical wards had some work to do in dampening noise levels, with ICU peaking at 67 dB and 42 dB for surgical areas. Both far exceeded WHO's 30 dB patient room recommendation (Garcia, 2012).

Besides patient sleep deprivation, which itself can lead to a multitude of health problems including high blood sugar, high blood pressure and fatigue, studies have reported that elevated noise levels can increase heart and respiratory rates, blood pressure and cortisol levels. Recovery room noise causes patients to request more pain medication, and preterm infants "are at increased risk for hearing loss, abnormal brain and sensory development, and speech and language problems when exposed to prolonged and excessive noise" (Deardorff, 2011).

There is still more research to be done, of course, but Yoder and his colleagues had good news, as well; much of the hospital noise they identified is modifiable, suggesting that hospitals can take steps to successfully create a quieter environment for both patients and healthcare providers (Garcia, 2012).

Exhibit 3

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Around the country, "quiet campaigns" have been launched by hospitals in an attempt to dampen nighttime noise. Besides dimming lights and asking staff to keep their voices down at night, they are working to eliminate overhead paging systems, replace wall and/or floor coverings – even the clang of metal trashcans. Northwestern's Prentice Women's Hospital in Chicago was built with noise reduction in mind, replacing the idea of centralized nursing stations with the advent of smaller, multiple stations (Deardorff, 2011)

Billed as "one of the nation's largest hospital construction projects," Palomar Medical Center in North San Diego County is a state-of-the-art facility that has been designed "to encourage quietness," according to Tina Pope, Palomar Health Service Excellence Manager. Slated to open its doors this August, the hospital will feature a new nursing call system to route calls directly to staff and help eliminate the need for overhead paging, de-centralized nursing stations and clear sig lines, allowing staff to check on patients without having to leave unit doors open. With measures already in place including "Quiet Hospital" badges on staff and posters at the entrance of every unit, a "Quiet at Night" campaign (9 p.m. – 6 a.m.), and a "Quiet Champions" program that encourages staff to report noise problems, Palomar is one of a growing number of hospitals working toward a new era of quiet.

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8/6/2019

<https://knops.co/magazine/noise-and-ptsd/>

Exhibit 9
a



Noises Are Truly Horrible For People Who Have PTSD

20 Mar '2018 [Sound](#)

Noise is a really big issue for PTSD survivors: people who have mental health problems because of their traumas. How are they connected?

Almost everybody has experienced a trauma. But some traumas are more scarring than others and can even result in long-lasting mental disorders like **PTSD**, which can have an extreme impact on someone's life. It's a disorder that can develop in the brain after a horrifying experience, like war or a car crash.

Symptoms

The symptoms of PTSD are, to say the least, not pleasant. They range from nightmares about the traumatic events, disturbing thoughts and feelings, anxiety, trying to avoid anything that has something to do with the traumatic event, and an increase in the fight-or-flight response.

Around ten percent of the population suffers from PTSD, according to data from **NCBI**, a part of the US National Library of Medicine. And, remarkably enough, that percentage is the same for people who suffer from tinnitus (the sound of a constant beep in your ears). The NCBI clearly sees a link between the two.

PTSD survivors also suffer from the Exaggerated Startle Syndrome, with anxiety and actions in an extreme and irrational way too loud noises and bangs. And then there are the sounds that remind them of the sounds during the traumatic events, which can trigger memories of the

Exhibit 9b

8/6/2010

trauma or flashbacks.



Fear

PTSD can also cause a general fear of sounds: phonophobia, or a fear of some specific sounds: misophonia. Survivors of the disorder also are generally much more sensitive to sounds and perceive them as much louder than other people would.

All of this makes the life of people with PTSD very hard. If you think you are suffering from this, consult your doctor. Really, please do it. For yourself, and for the ones you love.

Do you have PTSD and would you like to tell your experiences to us? We are always very open and interested to hear what you have to say. And again: if you haven't done it yet, visit your doctor, please. Thank you!

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8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

Exhibit 10a



Front Psychol. 2013; 4: 578.

PMCID: PMC3757288

Published online 2013 Aug 30. doi: [10.3389/fpsyg.2013.00578](https://doi.org/10.3389/fpsyg.2013.00578)

PMID: [24009598](https://pubmed.ncbi.nlm.nih.gov/24009598/)

Does noise affect learning? A short review on noise effects on cognitive performance in children

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This article was submitted to Developmental Psychology, a section of the journal Frontiers in Psychology.

Received 2013 May 14; Accepted 2013 Aug 12.

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Abstract

The present paper provides an overview of research concerning both acute and chronic effects of exposure to noise on children's cognitive performance. Experimental studies addressing the impact of acute exposure showed negative effects on speech perception and listening comprehension. These effects are more pronounced in children as compared to adults. Children with language or attention disorders and second-language learners are still more impaired than age-matched controls. Noise-induced disruption was also found for non-auditory tasks, i.e., serial recall of visually presented lists and reading. The impact of chronic exposure to noise was examined in quasi-experimental studies. Indoor noise and reverberation in classroom settings were found to be associated with poorer performance of the children in verbal tasks. Regarding chronic exposure to aircraft noise, studies consistently found that high exposure is associated with lower reading performance. Even though the reported effects are usually small in magnitude, and confounding variables were not always sufficiently controlled, policy makers responsible for noise abatement should be aware of the potential impact of environmental noise on children's development.

Keywords: noise, cognitive performance, cognitive development, children, speech perception, listening comprehension, irrelevant sound effect, classroom acoustics

8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

EXHIBIT 1012

In everyday life, cognitive tasks are often performed in the presence of task-irrelevant environmental noise. Accordingly, numerous studies on noise effects on performance have been conducted since the middle of the 20th century (for reviews see Hellbrück and Liebl, 2007; Szalma and Hancock, 2011), showing that—depending on characteristics of sounds and tasks—noise of low to moderate intensity may in fact evoke substantial impairments in performance.

Most of these studies were conducted with adults. The present review, however, will focus on studies including children. Children are especially vulnerable to harmful effects of environmental noise, as cognitive functions are less automatized and thus more prone to disruption. We will report findings concerning effects of acute noise on performance in concurrent auditory and non-auditory tasks, as well as effects of chronic noise on children's cognitive development.

Effects of acute noise on children's performance in auditory tasks

Psychoacoustic studies have consistently shown that children's speech perception is more impaired than adults' by unfavorable listening conditions. The ability to recognize speech under conditions of noise or noise combined with reverberation improves until the teenage years (Johnson, 2000; Wightman and Kistler, 2005; Talarico et al., 2007; Neuman et al., 2010). With stationary noise makers, signal-to-noise ratios (SNRs) have to be 5–7 dB higher for young children when compared to adults in order to achieve comparable levels of identification of speech or nonspeech signals, with adult-like performance reached at about 6 years of age (Schneider et al., 1989; Fallon et al., 2000; Werner, 2007). However, with maskers that vary over time, i.e., with trial-by-trial variation of the maskers' spectral composition (Oh et al., 2001; Hall et al., 2005; Leibold and Neff, 2007) or with fluctuating maskers such as single-talker speech (Wightman and Kistler, 2005), adult-like performance is usually not reached before the age of 10 years. Furthermore, children are less able than adults to make use of spectro-temporal and spatial cues for separation of signal and noise (Wightman et al., 2003; Hall et al., 2005). These findings demonstrate that children are especially prone to *informational* masking, i.e., masking that goes beyond energetic masking predicted by filter models of the auditory periphery.

Studies identified a range of linguistic and cognitive factors to be responsible for children's difficulties with speech perception in noise: concerning the former, children are less able than adults to use stored phonological knowledge to reconstruct degraded speech input. This holds for the level of individual phonemes, as children's phoneme categories are less well specified than adults' (Hazan and Barrett, 2000), but also for the lexical level since children's phonological word representations are more holistic and less segmented into phoneme units. Therefore the probability of successfully matching incomplete speech input with stored long-term representations is reduced (Nittrouer, 1996; Metsala, 1997; Mayo et al., 2003). In addition, young children are less able than older children and adults to make use of contextual cues to reconstruct noise-masked words presented in sentential context (Elliott, 1979). Concerning attention, children's immature auditory selective attention skills contribute to their difficulties with speech-in-noise perception. Children's susceptibility to informational masking has been attributed to deficits in focusing attention on auditory channels centered on signal frequencies, while ignoring nonsignal channels (Wightman and Kistler, 2005). Behavioral and ERP measures from dichotic listening paradigms provide evidence that auditory selective attention improves throughout entire childhood (Doyle, 1973; Pearson and Lane, 1991; Coch et al., 2005; Wightman et al., 2010; Gomes et al., 2012).

Owing to the mediating role of linguistic competence and selective attention, children with language or attention disorders are still more impaired than normally developing children by noise in speech perception tasks (Geffner et al., 1996; Ziegler et al., 2005, 2009). A stronger noise effect is also evident for children tested in their second language when compared to native children (Crandell and Smaldino,

8/4/2018



Walk Donate Q

Exhibit 11a

Autism & Anxiety: Parents seek help for extreme reaction to loud noise

September 5, 2018

Our 12-year-old son has autism, mild intellectual disability and anxiety attacks so severe that we end up in the emergency room. Loud noises are the worst – for example the school fire alarm, thunderstorms, a balloon popping, fireworks. Any help would be greatly appreciated.



This week's "Got Questions?" answer is by Judy Reaven, a clinical psychologist and associate professor of psychiatry and pediatrics at the University of Colorado School of Medicine and Children's Hospital Colorado, in Denver. Dr. Reaven's conducted research on the effectiveness of cognitive-behavioral therapy for anxiety in adolescents with autism, with the support of an [Autism Speaks research grant](#).

Editor's note: The following information is not meant to diagnose or treat and should not take the place of personal consultation, as appropriate, with a qualified healthcare professional and/or behavioral therapist.

Thanks for the great question. It certainly sounds like your family is experiencing a very difficult situation. Anxiety symptoms and reactions are very common in individuals with autism spectrum disorder (ASD). They can interfere with functioning across home, community and school settings.

Although your son's reaction sounds more severe than most, many people with autism struggle with a range of fears, phobias and worries. These can range from a debilitating fear of, say, spiders or the dark to chronic anxiety about making mistakes or being late.

Fortunately, recent research suggests that anxiety in children and adults who have autism is quite treatable. Often, these individuals are helped by the same or similar strategies that work well in treating anxiety in the general population.

These approaches include cognitive behavior therapy, or CBT. Cognitive-behavioral approaches are well-established, evidenced-based treatments that have become the gold standard of psychosocial treatments for anxiety. [My own research](#) and that of my colleagues has demonstrated the helpfulness of modifying cognitive-behavioral approaches to address the special needs of those who have autism.

Where to begin?

You describe a number of fears that may be related to sensory sensitivities. I recommend that you begin by consulting an occupational therapist who can assess whether your son's extreme sensitivities to noises are part of a broader sensory processing disorder. If this is the case, and if your son's fears are exclusively triggered by sensory stimuli, then his symptoms may be best addressed by a sensory-focused intervention. Many occupational therapists who specialize in autism receive special training in this area.

It's common for children with ASD and anxiety to become extremely frightened in response to sensory stimuli. Perhaps – like many individuals with autism – your son also has difficulty telling you what's scaring him. Instead, he may show his fear with extreme avoidance of a situation.

8/4/2011

For example, he might refuse to go to school after a fire drill. He might become fearful of birthday parties after being frightened by a balloon that popped unexpectedly. Other signs of extreme distress can include yelling, crying, clinging and general agitation. Because your son may have difficulty communicating, it's important to observe his behavior for these signs of distress. This can help you determine what's triggering his fears.

Avoidance versus learning to cope

Many parents go to great pains to protect their children by avoiding agitating situations. This approach is sometimes appropriate and even necessary. However, it denies individuals the opportunity to learn how to manage anxiety-provoking situations on their own.

By helping your son learn to manage his fear, you can prepare him for an unpredictable world so that he can participate in it to the maximum extent possible.

Given the severity of your son's anxiety symptoms, I suggest that you seek professional support in addition to the strategies offered here. Families whose children have milder symptoms of anxiety can try these strategies on their own – seeking professional help if symptoms worsen.

Tackling one fear at a time

I suggest making a list of your child's major fears and worries. Try to rank order them from mild to severe. To encourage success, I'd start with a mild-to-moderate fear before taking on his extreme reaction to loud noises.

Key components of a cognitive behavioral approach include introducing coping strategies such as deep breathing and "helpful thoughts" that can help a person manage fearful reactions.

For example, you can teach your son to take deep slow breaths to help manage his body's physical anxiety reactions.

"Helpful thoughts" are statements that your son can say to himself when faced with a situation that makes him anxious. For example, you can coach to your son to say, "This is a loud noise. I don't like it, but I can handle it."

To help your son to learn these strategies, I suggest you model taking deep breaths while repeating a "helpful thought" out loud.

Graded exposure

The most important step is to help your son face his fears a little at a time. We call this "graded exposure." For example, explain to your son that the two of you are going to listen to a recording of thunder. The first time, you might play the recording at a soft volume, then gradually increase the volume over time as he demonstrates increased comfort with the sounds

Or you might try watching a video of a balloon pop – perhaps with the volume off the first time. Then he can watch a real balloon pop while standing some distance away. Over time, he can move closer and closer to the balloon.

After such exercises, you can present him with small rewards for being brave and "facing fears." Remember that even a small act of bravery – such as listening to a recording of thunder for 10 seconds – represents an important step toward handling fears. It deserves to be acknowledged.

Although graded exposure may seem counterintuitive, research indicates that this strategy is the single most effective strategy for getting over a particular fear.

I wish you and your son the very best. Please let us know how you're doing with an email to GotQuestions@autismspeaks.org.

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Pages

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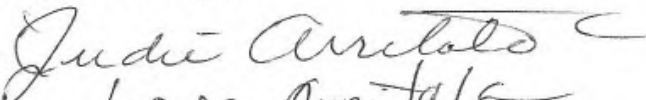


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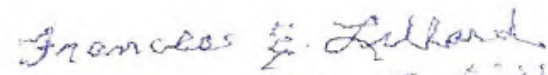
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I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

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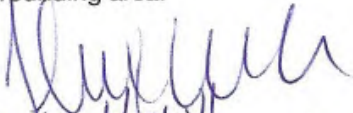
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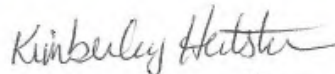
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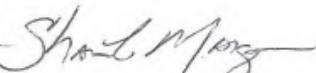
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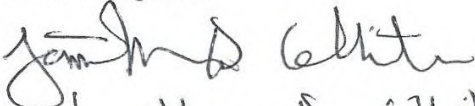
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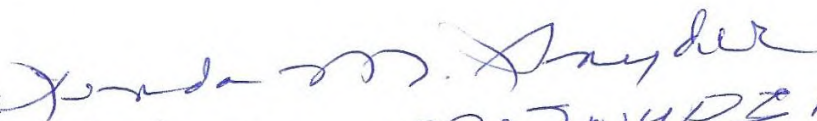
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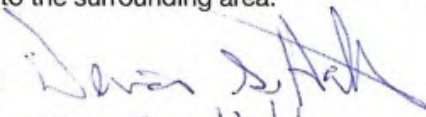
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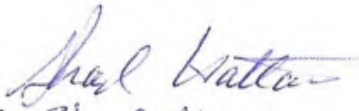
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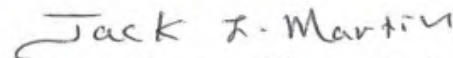
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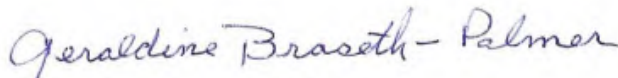
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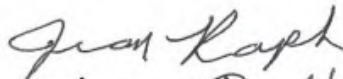
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1509 Madison Ave LaGrande, OR 97850

EMAIL

jraph19@gmail.com

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Damon Sexton*
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SIGNATURE *Coy Sexton*
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SIGNATURE *Melinda McGowan*
PRINTED NAME Melinda McGowan
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SIGNATURE
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SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Lois Barry*
PRINTED NAME LOIS BARRY
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SIGNATURE *Cathy Webb*
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SIGNATURE *JoAnn Marlette*
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I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Lynn Wheeler Duncan*
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SIGNATURE *Gary D. Pierson*
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SIGNATURE *Anne G. Cavinato*
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SIGNATURE *Joe Horst*
PRINTED NAME JOE HORST
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SIGNATURE *Angela Sherer*
PRINTED NAME Angela Sherer
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EMAIL asherer@frontier.com

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Merle E Comfort*
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SIGNATURE *Robin L. Maille*
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SIGNATURE *Gerald D. Juniper*
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EMAIL

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Robert J. Sherer*
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EMAIL jeanfrewing@gmail.com

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

Chair Beyeler and Members of the Council:

I am very concerned about the Boardman to Hemingway Transmission Project as it is proposed. My concerns are for the safety of myself and all of the citizens of La Grande if this line is permitted. My primary concerns are slope instability and wildfire hazard.

The proposed route sited to the west of La Grande is placed on a ridge noted to have instability and high risk for slides. The geologic study provided by Idaho Power references several studies (below).

Table H-2. USGS Quaternary Faults within 5 Miles of Project by County on page H-12 clearly shows that the project is placed right on an active fault in the West Grande Ronde Valley Fault Zone. In addition, in exhibit H, Geological Hazards and Soil Stability, Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated "severe." Below is part of the report:

5.2 La Grande Area Slope Instability

As part of our study, we reviewed DOGAMI's open file report: Engineering Geology of the La Grande Area, Union County, Oregon, by Schlicker and Deacon (1971). The study identified several landslides in the areas west and south of La Grande. The majority of the landslide features mapped by Schlicker and Deacon (1971) were similarly mapped as landslides or alluvial fans in Ferns and others (2010). The current SLIDO database uses the feature locations mapped in Ferns and others (2010). While the two map sets generally agree, there are differences in the mapped limits of some landslide and alluvial fan areas, and there is one landslide area in Schlicker and Deacon (1971), near towers 106/3 and 106/4, which is not included in SLIDO or Ferns and others (2010). The Landslide Inventory in Appendix E includes mapped landslide and alluvial fan limits from both SLIDO and Schlicker and Deacon (1971).

This slope instability is not inconsequential to a project like this. Recall in 2014, Oso, Washington, was the site of a catastrophic mudslide as the result of logging disturbance of the soil upslope from the town combined with significant rainfall. This resulted in 43 fatalities. We must learn from previous mistakes in not heeding the geologists' warnings. The area down slope from the proposed B2H line lies the Grande Ronde Hospital and Clinics, which employs hundreds of people and is the critical access hospital for this region. La Grande High School and Central Elementary School are also positioned down slope from the proposed towers. At least 100 homes are positioned down slope of the proposed towers. According to "Engineering Geology of the La Grande Area, Union County, Oregon" maps published by Schlicker, and Deacon (1971), the ENTIRE area of the hillside is deemed a "landslide area" in the La Grande SE quadrangle. This is not a safe place for a transmission line.

The next significant hazard to our community is wildfire. Oregon is ranked 8th Most Wildfire Prone state in the United States according to Verisk Wildfire Risk analysis. La Grande is ranked in the top 50 communities in Oregon with the greatest cumulative housing-unit exposure to wildfire as referenced in "Exposure of human communities to wildfire in the Pacific Northwest," by Joe H. Scott, Julie Gilbertson-Day and Richard D. Stratton (available at http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf). Finally the proposed route is in the vicinity of Morgan lake, the highest risk area (#1) in Union County in terms of wildland-urban interface, according to the County's Community Wildfire Protection Plan, August 10, 2005.

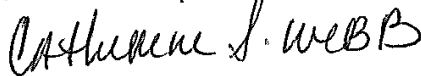
Cal Fire cites Pacific Gas and Electric equipment and power lines as the cause of numerous wildfires in the state in the last 2 years. This includes the Camp Fire in Butte County (2018), Tubbs Fire in Napa/Sonoma Counties (2017), Witch Fire in San Diego (2007), Valley Fire in Lake/Napa/Sonoma Counties (2015), Nuns Fire in Sonoma County (2017), which were all attributed to transmission.

The Boardman To Hemingway Transmission Line Project proposal places lines about 2000 feet or less than half a mile from the La Grande city limits, including medium density housing within the city as well as Grande Ronde Hospital. If a line from this proposed route were to spark a fire, La Grande residents would have little time to react. According to National Geographic, wildfires can move as fast as 6.7 mph in forests and 14 mph in grasslands. A fast-moving fire starting at the B2H lines could move to residential areas of La Grande and HOSPITAL in 10 minutes. This is frightening and an unacceptable risk for our citizens.

The current proposal for a Boardman to Hemingway transmission line does not adequately address the issue of landslides, basically by stating it will be mitigated somehow when the time comes to build. The proposal offers no analysis of wildfire risk, which is an unacceptable omission. All of the routes proposed are unsafe and create an unacceptable risk to the citizens of La Grande.

The Council should DENY the request for a site certificate.

Sincerely,



Name:

CATHERINE S. WEBB

Address:

1708 Cedar St.
La Grande, OR. 97850

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St, N.E.
Salem, OR 97301

Via E-Mail: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

I respectfully request that this letter protesting issuance of a Site Certificate for the proposed Boardman to Hemingway Transmission Project be entered on the record.

Specifically, the applicant has failed to acknowledge the presence of a Federal and State-listed, Threatened species, and has failed to identify Category-1, Critical Habitat.

The Draft Proposed Order (DPO), p. 304, lines 20-26, fails to list Bull Trout, a listed State-Sensitive Threatened Species, also listed as Threatened by USFWS. OAR-345-021-0010 (1)(p) requires identification of all fish and wildlife at the proposed location, and identification of habitat classification categories, as set forth in OAR-635-415-0025, in order to comply with OAR-345-022-0060, requiring identification of habitat categories and required mitigation. The applicant has failed to comply with these requirements!

The Grande Ronde river watershed contains a well-documented population of Bull Trout. By statute, wherever a portion of a watershed contains a Threatened or Endangered species, the entire watershed is under federal protection. The Grande Ronde river watershed encompasses the entirety of Union county, and the majority of Wallowa county. As evaluated in the DPO, ASC Exhibit P, suitable habitat used by state-listed Threatened and Endangered species is designated pursuant to ODFW's Habitat Mitigation Policy, and EFSC's Fish and Wildlife Habitat standards, as Category-1 Habitat, where any impact, direct or indirect is prohibited. There is NO mitigation for Category-1 Habitat!

The DPO, p. 304, line 32, through p. 307, line 21, acknowledges that there will be impact, but is unable to quantify it. Since any impact is prohibited, the magnitude of impact becomes irrelevant.

The applicant has failed to meet the requirements for issuance of a Site Certificate contained in OAR-345-022-0080, as noted above.

In view of the fact that sufficient recovery of the Bull Trout population to remove its Threatened status is reliably estimated to be a matter of decades, issuance of a **Site Certificate should be denied, with prejudice!**

Sincerely, 

Printed Name: CATHERINE S. WEBB
Address: 1708 CEDAR ST.
UT GRANDE, OR 97850

August 12, 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

Page 62 (T-57) ASC refers to “extensive work in the siting study of the Morgan Lake Alternative.” I doubt it was extensive because it is entirely inaccurate:

Page 145 (T-4-46) Morgan Lake Park is described as 204 acres, containing one lake, which is developed with primitive campsites and fishing docks.

Morgan Lake Park actually contains two lakes. Morgan Lake covers 70 acres; the other, Twin Lake, [also known as Little Morgan Lake] is in plain sight, within 300’ of Morgan Lake; it covers 27 acres.

Twin Lake is undeveloped, a wild life and bird sanctuary, home to nesting bald eagles. It is designated as protected wetlands. In their application, Idaho Power conveniently omits any references to Twin Lake.

Page 156, (T-4-6) ASC purports to be a map of Morgan Lake Park. According to the map legend, the purple cross hatch amoeba-shaped area is Morgan Lake Park. That’s wrong. The purple cross hatch is Morgan Lake. The actual boundaries of the 204 acre park are not indicated. Obviously, it’s difficult to believe “extensive work on this siting study” ever occurred.

The applicant also used aerial photography to identify and avoid, where practical, irrigation pivots, houses, barns, private runways, other structures (e.g., wind turbines), and land use features. The corridors were adjusted using topographic maps to avoid or minimize distance across very steep slopes and other physical features less desirable for transmission line construction and operation. The corridors were again checked against the constraint and opportunity geographic information system (GIS) database to avoid, where possible, exclusion areas and areas of high permitting difficulty such as potential Oregon Department of Wildlife (ODFW) Category 1 habitats. The applicant then grouped the alternative corridors into 14 regions and evaluated on the basis of permitting difficulty, construction difficulty and mitigation costs. Using the constraint database, which incorporated the eight siting factors, the applicant reviewed the alternatives to determine the most reasonable corridor within each region. (DPO p. 11)

It is distressing to think that this is only one of many errors in Idaho Power’s ASC. If the IPC surveying and engineering staffs are unable to detect a 27 acre lake within a 204 acre park, it’s disquieting to imagine the difficulties in identifying and analyzing less obvious and life-threatening situations like fault zones, slide areas and other potential dangers to public safety

If this slipshod effort is typical of IPC's careful attention to engineering a route, it may also explain IPC's egregious error in choosing to site the B2H on their preferred Mill Creek or alternative Morgan Lake route rather than on the carefully studied and analyzed BLM Environmentally Preferred route.

Following the DEIS, Idaho Power made a hasty and ill-advised effort to avoid litigation threatened by individuals whose remote properties and summer cabins would have been impacted by the line. If Idaho Power had chosen to follow the BLM Environmentally Preferred route, miles to the west of La Grande, rather than in the immediate view of 13,000 La Grande residents, there might have been ten people at the public meetings in La Grande, rather than the hundreds who have consistently appeared to protest various serious problems associated with the routes proposed for the B2H. The haste of this effort is evident in the abundant errors of omission and misinformation typical of the B2H ASC and DPO which will be addressed in a separate comment.

Catherine S Webb

Signature CATHERINE S. WEBB
Name: 1708 Cedar St.
Address: LaGrande, OR 97850

August 12, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

Via E-MAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project
9/28/2018; Draft Proposed Order 5/23/2019

To: Chairmen Beyeler and Members of the Council

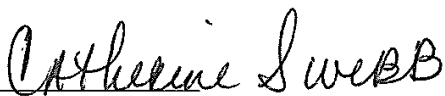
I appreciate the opportunity to comment on the Draft Project Order for the Boardman to Hemingway Transmission Project. I am very supportive of the Oregon California Trails Association (OCTA) and the work that they have done to protect the Oregon Trail, especially here in Oregon. OCTA is mentioned numerous times in **Exhibit S** and the **Historic Properties Management Plan and Programmatic Agreement**. OCTA does NOT believe that Exhibit S Historic Properties Management Plan is complete in 7.2.3 Field Crew, and offers this additional condition.

ADDITIONAL CONDITION #1 OCTA recommends that the Council add an Oregon Trail expert to the Cultural Resource Team. This Oregon Trail individual will have qualifications similar to Field crew members. For example, they will have an undergraduate degree in anthropology, archaeology, or in a field such as geology, engineering or history. It will not be necessary to have attended a field school. This individual will be recommended by the National OCTA President and agreed to by the Field Director.

The field surveys, even with SHPO and NPS data, have missed and/or mislabeled some sections of the emigrant trail. OCTA wants the public to know where the Trails are and I do too! OCTA over the years has marked the trail location with wooden signs, small triangles attached to trees, and more recently, carbonite posts and steel rails. Most private property owners are proud of the trail on their property, and after obtaining permission allow the public to walk and hike on the trail.

Idaho Power and their consultants have not acknowledged trail crossings shown on submitted Maps and do not acknowledge visual intrusion of the line for 10 miles per standards, and only upon ODOE's RAI's, put into documents some trail protections. This has been consistent from the BLM process to current day.

Considering the points above, Idaho Power does not comply with the state standards for cultural resources OAR 354-022-0090, or 345-022-0080, Scenic resources. **EFSC Must Deny the Site Certificate!**


Signature
Printed name: CATHERINE S. WEBB
Mailing address: 1708 CEDAR ST.
LAGRANDE, OR 97850

Email address:
phone number: (optional)

August 16, 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

I am a resident of LaGrande. I relocated here because of the rural environment and numerous outdoor opportunities present. I regularly go up to Morgan Lake for birdwatching, wildflower searches, and solitude. I have walked the east side trail at Morgan Lake. I know the park well, and I especially cherish the absolute silence of this secluded natural area.

I have studied DPO Attachment X-4, pp. 3-5. I notice that every location in Union County which would be crossed by the B2H Morgan Lake Alternate Route was monitored with the same noise sensitive receptor (NSR) at milepost 11. This single NSR would provide exactly -- and unrealistically -- the same reading for the Husky Truck Stop, where heavy freight trucks from adjacent I-84 stop for gas and park for the night with diesel engines rumbling, and Morgan Lake Park, several miles to the west at the top of a relatively isolated two lane county road.

At Morgan Lake Park, the camp host closes the gate each night at 10:00 to ensure quiet. Visitors often comment on the tranquility of the park where a 5 mph speed limit is enforced to limit noise, no generators or shooting is allowed, and no motorized craft are permitted on the lake. Even when the campground is full, it's possible to picnic, fish, hike or camp while enjoying the absolute silence of the surroundings. The Morgan Lake Park Recreational and Development Plan even cautions against loud voices that might disturb park visitors:

2. Breaching the public Peace. No person in Morgan Lake Park shall engage in abusive, insulting ... language or engage in any disorderly conduct or behavior tending to breach the public peace. Park visitors shall conduct themselves in a quiet and peaceful manner consistent with the natural atmosphere in which the park is set. (25/33)

I am profoundly concerned that the applicant has failed to include noise monitoring at Morgan Lake Park campground, a noise sensitive property within ½ mile of the development as required by OAR-340-035-0015(38). Noise Sensitive Property is "property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries."

Morgan Lake Park, an overnight campground, is unquestionably a place where people expect to sleep, and furthermore, to sleep undisturbed. Eight towers supporting buzzing,

popping, snapping transmission lines will circle the campground; the closest being .32 and .38 miles; the furthest one mile. I see no opportunity for mitigation in this case.

Division 22

GENERAL STANDARDS FOR SITING FACILITIES

Energy Facility Siting Council - Chapter 345

345-022-0100

Recreation

(1) Except for facilities described in section (2), to issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities in the analysis area as described in the project order. The Council shall consider the following factors in judging the importance of a recreational opportunity:

(a) Any special designation or management of the location:

See the Morgan Lake Recreational Use and Development Plan (above), and ASC p. 145 (T-4-46): Baseline condition: "... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users...

(b) The degree of demand:

From the City of La Grande's current web site: *Morgan Lake: Atop a mountain just a few minutes' driving time from the heart of the city, Morgan Lake offers a quiet, motor-free respite from daily cares, with camping, fishing and hiking opportunities. ... Morgan Lake is located just a few miles outside of La Grande and provides the citizens of Union County an inexpensive, easily accessible area for a broad range of outdoor recreational activities, including fishing, camping and nature hikes.*

City records show that in summer, an average of 200 vehicles use the Morgan Lake Road daily. Camping has become so popular that new campsites were added in 2017 (now total of 12) and the overnight limit decreased from 7 nights to 3 nights. Campers are often turned away.

(c) Outstanding or unusual qualities:

c) A free 204 acre park with two natural lakes, located at the top of the hills within a 10-15 minute drive of 13,000 city residents is definitely unusual. Because it is often 10 degrees cooler than the town below, it is a welcome respite from summer heat.

(d) Availability or rareness:

See (c) above, and "Morgan Lake Park is an important opportunity primarily because of its unique designation status as a city park, rareness, and special qualities" per OAR 345-021-0010(1)(t)(A) Attachment T-3, Table T-3-1 (p. T-13).

(e) Irreplaceability or irretrievability of the opportunity.

Applicant rates Morgan Lake Park as “*somewhat irreplaceable*,” a curious designation. “Irreplaceable” is an absolute: synonyms are “unique, unrepeatable, incomparable, unparalleled, priceless, invaluable.” Irreplaceability, like pregnancy, is either/or, not “somewhat.” There is no question that Morgan Lake Park is irreplaceable.

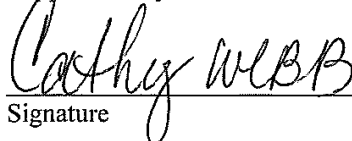
Despite all of the information listed above which clearly indicates that Morgan Lake Park is an “important recreational opportunity,” applicant’s conclusion is that the “impact on recreation” of multiple towers supporting buzzing, popping, snapping transmission lines, some within .3 miles of Morgan Lake Park’s overnight camping area, will be “less than significant.” Commission should not allow applicant to leap to spurious self-serving conclusions when the preponderance of evidence indicates the contrary.

When organized La Grande opposition made applicant’s proposed Mill Creek Route seem untenable, applicant offered the city of La Grande \$100,000 mitigation if they would support the Morgan Lake Alternate Route. At a La Grande City Council meeting, the Park Department Director, Stu Spence, was asked what he could use that money for. He could only suggest “perhaps an additional restroom or more porta potties.” Clearly this is a park that does not need mitigation for development, quite the contrary. It should be protected from intrusions. Development, as the park plan indicates, should be minimal.

Mitigation for an industrial intrusion into the silence of a natural park setting is not possible. To preserve this rare and beautiful natural recreational opportunity, it is essential that EFSC deny approval of B2H construction on the Morgan Lake Alternate Route. This alternate route was proposed in case the Mill Creek Route, which poses many serious potential problems as well – including geologic and fire hazards, unacceptable impacts on local residences, the Oregon Trail, and natural resources among many others – was not approved.

The Commission should not be constrained by the false choice of applicant’s chosen routes. In the unlikely event that the B2H is needed, the BLM Environmentally Preferred Route would avoid virtually all of the impacts of the Mill Creek and Morgan Lake routes.

I urge the Commission to deny both of applicant’s routes until, at a minimum, there is a Supplementary Environmental Impact Study (SEIS) of applicant’s proposed routes.



Signature

Name: Cathy Webb

Mailing address: 1708 Cedar St., LaGrande, OR 97850

Kellen Tardaewether, Senior Siting Analyst
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RECEIVED

AUG 22 2013

DEPARTMENT OF ENERGY

SETBACKS FROM RAPTOR NEST SITES

A 0.5 mile setback area around all sensitive raptor nests which includes all permanent and temporary disturbances associated with the proposed project is necessary to meet the requirement that the project not result in adverse population-level impacts to these species.

The Applicant identifies Category 1 Habitat for nest sites of golden eagle, Swainson's Hawk, goshawk, and burrowing owl. However, the applicant considers these point habitats with no associated range. While this approach is convenient, it is inconsistent with historical regulatory measures (e.g. forestry practices) regarding sensitive and threatened and endangered wildlife species in Oregon. In the Columbia Basin, Category 1 habitat associated with Washington ground squirrel colonies were defined as being occupied area AND its associated use area. The area around a natal site is integral to the continued use of the site. Wildlife need more than a specific point to be successful. ODFW has previously recommended a ½ mile setback (no impact) around all sensitive raptor nest sites. This buffer needs to include all permanent and temporary disturbances associated with the proposed project. The applicant has provided no population data for the potentially affected raptor species—especially the low density raptors (e.g. burrowing owls, goshawk and golden eagle) to show that the impacts to these species are sustainable to local populations of these species.

The current application fails to provide information necessary to determine habitat Category. Absent information that will identify the location of Category 1 habitat, it is not possible to issue a site certificate that provides that no Category 1 habitat will be impacted directly or indirectly by the development. This precludes a determination that the developer is able to site the transmission line in compliance with OARs 345-022-0060.


According to USFWS 501 FW 2, Appendix 2, the following information is necessary in order to determine habitat category determinations.

(2) "Identify those special biological features or the area(s) in question that are considered pertinent to the resource category determination (i.e. species, species life stages, species life requisites, species groups and species diversity considerations). Also identify any special vegetative and physical site conditions that enter into consideration."

(3) "In quantitative or qualitative terms, discuss the importance ascribed to the special features and conditions in number 2 above."

(4) "As appropriate, discuss considerations for scarcity, abundance, irreplaceability, and/or uniqueness. Also discuss the geographic area of consideration associated with these characteristics."

Reference: 501 FW 2, Appendix 2 Checklist-Resource Category Documentation


Signature
Printed Name: CATHERINE S. WEBB
Address: 1708 CEDAR ST. LA GRANDE, OR 97850

Kellen Tardaewether
Senior Siting Analyst
Energy Facility Siting Council
Oregon Department of Energy
550 Capitol St. NE 1st Floor
Salem, Oregon 97301

Dear Ms. Tardaewether:

NOXIOUS WEED COMMENTS

The draft Noxious Weed Management Plan Section B2 of Application does not meet the requirements of the following Administrative Rules which must be addressed prior to the issuance of a Site Certificate for the Boardman to Hemingway Transmission line. The plan must comply with OAR 345-022-0060, Habitat Standard, requiring that the plan not result in infestations of noxious weeds and resulting damage to wildlife habitat; OAR 345-22-0070, Threatened and Endangered Species, requiring the protection of Threatened and Endangered species including the potential for habitat degradation resulting in species reduction, OAR 345-22-0110, Public Services due to the impact of local weed control services being required to address unmanaged infestations of noxious weeds, OAR 345-22-0030, Land Use due to impacts of invasive weeds on all private lands including those designated as farm and/or forest use which would significantly impact farm income and adjacent farm and forest property.

Union County submitted 31 notes and changes required of the Noxious Weed Plan on August 22, 2017. It was as a result of a meeting between the Morrow, Umatilla and Union County weed supervisors and incorporated previous concern of Malheur and Baker county weed supervisors. These comments are submitted due to the need to address each of the changes required to the Noxious Weed Plan.

Following are issues taken from the draft Weed Management Plan which need to be corrected to comply with Oregon state law and/or EFSC rules:

Page B2-2

Idaho Power claims to be only responsible for weeds within Right of Way and up to 50 feet from right of way in Malheur County. IPC claims no responsibility for weeds outside the ROW or those present before the project. Absent 100% assurance that no noxious weeds at the site of the development will be allowed to go to seed, the weeds at the site will disperse to areas outside the ROW.

Idaho Power Management Plan: (B2-13) Problematic statements which are not consistent with the statutes and rules requiring control of noxious weeds.

- Pre construction weed surveys only planned for areas to be disturbed during construction. (Weed surveys also need to occur for areas adjacent to the development as well as control sites to determine if more weed infestations are occurring at locations impacted by the development.)
- Surveys will be completed by the Construction Contractors. (Surveys need to be completed by a third party not impacted by the results.)
- Will document existing infestation of noxious weeds adjacent to the project and adjacent uses that could contribute to proliferation of noxious weeds. (B2-14). (Plan to use this information to avoid responsibility for addressing infestations of these noxious weeds within the ROW in spite of the fact that disrupting habitat will increase the likelihood of infestations which may otherwise not occur. The information needs to be used to determine current conditions

- and establish whether or not the development has resulted in increased numbers or types of noxious weeds present.)
- IPC claims they are only responsible for controlling new noxious weed populations that are demonstrated to be the result of project construction, operation or maintenance. (i.e. new infestation in an area disturbed by project activities that cannot be attributed to adjacent existing infestations or introduction by a source outside the control of IPC) (Ignores the fact that disruption of the habitat is a major factor in new infestations).
 - IPC will not be responsible for control of pre-existing noxious weed populations outside the Project ROW. IPC will not be responsible for noxious weeds introduced by activities other than Project Construction and O&M (eg. Recreational use, gazing, other construction projects, etc) or natural occurrences (eg. Fire, or noxious weeds outside the ROW or any existing access roads not improved by the Project.
(Development, improvement of, and use of roads for access to the area will promote the introduction of and increased occurrence of noxious weed infestations. The development will damage native habitat and will result in ongoing equipment use of the area in the ROW will result in increased weed infestations and the transport of weed varieties from other areas. Habitat impacts for the life of the project will result in opportunities for invasive weed infestations. The developer is responsible for these impacts unless they can document that the impacts of the development were not the cause or a contributing cause of the infestation.
 - (B2-15) The developer plans to have vehicle movement outside the right-of-way in predesignated access, contractor-acquired access, public roads, overland travel routes, or crossings to streams approved by applicable land-management agency or landowner. (The developer is responsible for noxious weed control in any areas where new roads are developed, existing roads are modified by the developer, overland travel routes, including streams crossed. There appears to be a presumption that overland travel outside designated corridors does not contribute to noxious weed spread. This is categorically incorrect.)
* (B2-20) Noxious weed control efforts will be conducted for 3 to 5 years following construction. Would extend beyond 3-5 years if: disturbed areas are not meeting preconstruction conditions and adjacent land uses are not deemed to be the primary cause of the introduction and/or persistence of noxious weed species within areas disturbed by the Project and/or maintenance activities have caused or contributed to the spread or establishment of noxious weeds.
(Disturbed habitat is a primary causal factor of invasive weed infestations. Adjacent land uses will not be a primary causal factor. No matter what the results of the initial years of noxious weed control efforts, the control efforts need to continue for the life of the project. Ongoing maintenance of the transmission line, the use of vehicles in the ROW, access to the area provided by the ROW, etc. will mean that the development will increase the likelihood of invasive weed infestations for the life of the project.)
 - (B2-21) IPC will conduct ongoing monitoring and focused control of noxious weed infestations inside of the ROW, as needed, for the life of the BLM ROW and the USFS special-use authorization. (Planning to do this monitoring and control for the life of the project only for areas on BLM or USFS lands)

SOME OF THE PROBLEMS

1. Ongoing monitoring for the life of the project only is done on BLM and USFS

land, not private land or state land.

B2-21

2. The construction contractor will develop the final weed management plan and do the surveys. The draft plan included in the application documents that the developer does not intend to comply with state law or administrative rules as noted in the detailed comments received from me and others concerned with this issue. The plan should be developed by a third party contractor not directly impacted by it's requirements.
3. Monitoring of private property does not continue for the life of the project.
4. IPC not taking responsibility for infestations occurring from adjacent lands even though they have disturbed the habitat increasing the opportunities for infestations.
5. IPC not taking responsibility for any infestations which result from increased access to area due to ROW allowing recreational vehicles to access area.
6. IPC not planning monitoring and treatment timeframes that will preclude the dispersal of seeds from the area.
7. IPC is not taking responsibility for weeds dispersed from the transmission line to the adjoining property.
8. IPC providing no control plots to determine if the existence of the transmission line ROW results in more noxious weeds in adjacent private property.

State Statutes and rules:

ORS 569.390 requires the owner or occupant of land containing noxious weeds is responsible for assuring that no noxious weed are permitted to produce seed.

ORS 569.390 states that no machinery shall be moved over any public road without first thoroughly cleaning it.

OAR 345-025-0016 states "In the site certificate, the Council shall include conditions that address monitoring and mitigation to assure compliance with the standards contained in OAR Chapter 35, Division 22 and Division 24.

EFSC does not have the authority to overrule state statutes relating to noxious weed management.

Federal Issues:

Executive Order 13112 (1999) requires Prevent introduction of such species, detect and control such species, monitor population of such species, not authorize, fund, or carry out actions likely to cause the introduction or spread of invasive species in the United States or elsewhere unless the benefits of the action clearly outweigh the harm and the agencies take steps to minimize the harm.

US Department of Agriculture, Forest Service

Invasive species management activities on National Forest System lands shall be conducted according to the following objectives: prevention, early detection and rapid response, control and management, restoration.

BLM Manual 9015 (BLM 1992) BLM must manage noxious weeds and undesirable plants on BLM lands by preventing establishment and spread of new infestations, reducing existing population levels and managing and controlling existing stands.

The above information provides adequate documentation of the problems with increased noxious weed impacts to wildlife habitat, adjacent farm and forest lands, etc. The applicant has not provided a management plan that provides adequate monitoring, management and treatment of the area of impacts of noxious weeds due to the development.

DEVELOPMENT
RECEIVED

The attached article from the Iowa City Noxious Weed Commissioner provides the cost of failure to address this issue in dollars, loss of biological diversity and land lost to weeds.

Please require the developer to correct the Weed Management Plan to incorporate my concerns as well as those identified by the Counties. These changes are necessary to comply with requirements of Oregon Statutes as well as the Administrative Rules of EFSC and other state agencies who are charged with addressing Noxious Weeds.

Sincerely,

Catherine Webb
CATHERINE S. WEBB
1708 Cedar St.
LA GRANDE, OR 97850

RECEIVED

AUG 23 2019

DEPARTMENT OF ENERGY

TARDAEWETHER Kellen * ODOE

From: Cynthia Weber <cweber19572@gmail.com>
Sent: Tuesday, August 20, 2019 8:56 AM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

August 20, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018;
Draft
Proposal Order May 23, 2019.

Chair Beyeler and Members of the Council:

We are very concerned about the Boardman to Hemingway Transmission Project as it is proposed. Our concerns are for the safety of myself and all of the citizens of La Grande if this line is permitted. My primary concerns are slope instability and wildfire hazard.

The proposed route sited to the west of La Grande is placed on a ridge noted to have instability and high risk for slides. The geologic study provided by Idaho Power references several studies (below).

Table H-2. USGS Quaternary Faults within 5 Miles of Project by County on page H-12 clearly shows that the project is placed right on an active fault in the West Grande Ronde Valley Fault Zone. In addition, in exhibit H, Geological Hazards and Soil Stability,

Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated "severe." Below is part of the report:

5.2 La Grande Area Slope Instability

As part of our study, we reviewed DOGAMI's open file report: Engineering Geology of the La Grande Area, Union County, Oregon, by Schlicker and Deacon (1971). The study identified several landslides in the areas west and south of La Grande. The majority of the

landslide features mapped by Schlicker and Deacon (1971) were similarly mapped as landslides or alluvial fans in Ferns and others (2010). The current SLIDO database uses the feature locations mapped in Ferns and others (2010). While the two map sets generally agree, there are differences in the mapped limits of some landslide and alluvial fan areas, and there is one landslide area in Schlicker and Deacon (1971), near towers 106/3 and 106/4, which is not included in SLIDO or Ferns and others (2010). The Landslide Inventory in Appendix E includes mapped landslide and alluvial fan limits from both SLIDO and Schlicker and Deacon (1971).

This slope instability is not inconsequential to a project like this. Recall in 2014, Oso, Washington, was the site of a catastrophic mudslide as the result of logging disturbance of the soil upslope from the town combined with significant rainfall. This resulted in 43 fatalities. We must learn from previous mistakes in not heeding the geologists' warnings. The area down slope from the proposed B2H line lies the Grande Ronde Hospital and Clinics, which employs hundreds of people and is the critical access hospital for this region. La Grande High School and Central Elementary School are also positioned down slope from the proposed towers. At least 100 homes are positioned down slope of the proposed towers. According to "Engineering Geology of the La Grande Area, Union County, Oregon" maps published by Schlicker, and Deacon (1971), the ENTIRE area of the hillside is deemed a "landslide area" in the La Grande SE quadrangle. This is not a safe place for a transmission line.

The next significant hazard to our community is wildfire. Oregon is ranked 8 th Most Wildfire Prone state in the United States according to Verisk Wildfire Risk analysis. La Grande is ranked in the top 50 communities in Oregon with the greatest cumulative housing-unit exposure to wildfire as referenced in "Exposure of human communities to wildfire in the Pacific Northwest," by Joe H. Scott, Julie Gilbertson-Day and Richard D. Stratton (available at http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf). Finally the proposed route is in the vicinity of Morgan lake, the highest risk area (#1) in Union County in terms of wildland-urban interface, according to the County's Community Wildfire Protection Plan, August 10, 2005.

Cal Fire cites Pacific Gas and Electric equipment and power lines as the cause of numerous wildfires in the state in the last 2 years. This includes the Camp Fire in Butte County (2018), Tubbs Fire in Napa/Sonoma Counties (2017), Witch Fire in San Diego (2007), Valley Fire in Lake/Napa/Sonoma Counties (2015), Nuns Fire in Sonoma County (2017), which were all attributed to transmission.

The Boardman To Hemingway Transmission Line Project proposal places lines about 2000 feet or less than half a mile from the La Grande city limits, including medium density housing within the city as well as Grande Ronde Hospital. If a line from this proposed

route were to spark a fire, La Grande residents would have little time to react. According to National Geographic, wildfires can move as fast as 6.7 mph in forests and 14 mph in grasslands. A fast-moving fire starting at the B2H lines could move to residential areas of La Grande and HOSPITAL in 10 minutes. This is frightening and an unacceptable risk for our citizens.

The current proposal for a Boardman to Hemingway transmission line does not adequately address the issue of landslides, basically by stating it will be mitigated somehow when the time comes to build. The proposal offers no analysis of wildfire risk, which is an unacceptable omission. All of the routes proposed are unsafe and create an unacceptable risk to the citizens of La Grande.

The Council should **DENY** the request for a site certificate.

Sincerely,
Bob and Cindy Weber
60993 Wood Road (Morgan Lake Area)
La Grande, OR 97850

FF



Stacy Webster
65212 Webster Rd.
LA Grande, OR 97850

PORTLAND, OR 972
17 AUG 2019 PM 4 L



Energy Facilities Siting Council
of Kellen Tardagewether
Oregon Dept of Energy
590 Capitol St. NEGY
Salem, OR 97301

Date: August 12, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301

RECEIVED
AUG 20 2019
Department of Energy

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My name is Stacia Webster. I'm a resident of La Grande, and I represent the 5th generation of seven generations that have owned, maintained, and/or utilized the Webster property, which looking west from La Grande, is on the horizon behind what is referred to as Table Mountain. I appreciate the opportunity to comment on the Draft Project Order for the Boardman to Hemingway Transmission Project.

As a child I loved to camp, and "help" my Grandfather, Lawson Webster and Father, Gary Webster work cattle on this land. As an adult I have come to appreciate this property as not only pristine pasture land, but also for the historical value it holds; not only family history, but as land through which the Oregon Trail passes. In fact, visible ruts and rock cairns are scattered throughout this property

I am very supportive of the Oregon California Trails Association (OCTA) and the work that they have done to protect the Oregon Trail, especially here in Oregon. OCTA is mentioned numerous times in Exhibit S and the Historic Properties Management Plan and Programmatic Agreement. OCTA does NOT believe that Exhibit S Historic Properties Management Plan is complete in 7.2.3 Field Crew, and offers this additional condition.

ADDITIONAL CONDITION #1 OCTA recommends that the Council add an Oregon Trail expert to the Cultural Resource Team. This Oregon Trail individual will have qualifications similar to Field crew members. For example, they will have an undergraduate degree in anthropology, archaeology, or in a field such as geology, engineering or history. It will not be necessary to have attended a field school. This individual will be recommended by the National OCTA President and agreed to by the Field Director. The field surveys, even with SHPO and NPS data, have missed and/or mislabeled some sections of the emigrant trail. OCTA feels it is important that the public know where the Trails are

located, and I couldn't agree more! OCTA over the years has marked the trail location with wooden signs, small triangles attached to trees, and more recently, carbonite posts and steel rails.

Like most land owners, my family has always been proud to have the trail run through their property. The Oregon Trail is not only a historical site for Union County, but is a State historical site, and should be protected as a part of our heritage. My father guided many groups interested in history through our land, and after obtaining permission, allowed Boy Scout, Public School, and Historical Society Groups, to walk and hike on the trail. Amazingly, Idaho Power and their consultants have not acknowledged trail crossings shown on submitted Maps and do not acknowledge visual intrusion of the line for 10 miles per standards, and only upon ODOE's RAI's, put into documents some trail protections. This has been consistent from the BLM process to current day. In fact, one representation of the proposed power line actually shows a tower sitting directly on the trail.

Considering the points above, Idaho Power does not comply with the state standards for cultural resources OAR 354-022-0090, or 345-022-0080, Scenic resources. EFSC Must Deny the Site Certificate!

The Oregon National Historic Trail will be significantly affected by the B2H Transmission Line. The Draft Proposed Order identifies significant impacts to the Oregon Trail in several Exhibits, including Exhibit C:

Property Location and Maps; Exhibit L: Protected Areas; Exhibit R: Scenic Aesthetic Values; Exhibit S: Cultural Resources; Exhibit T: Recreational Facilities; and Exhibit X: Noise.

B2H crosses the Oregon Trail at least 8 times. EFSC has done a reasonable job of protecting the Trail during construction and operation, if the proposed requirements are followed, except at the Oregon Trail Interpretive Center at Flagstaff Hill. The B2H Transmission Line should be buried for approximately 2 to 2 ½ miles to comply with the exhibits indicated above. Idaho Power has from the early years refused to do any significant analysis for this option. IPC uses cost as the reason for stating that undergrounding is not feasible. Cost is not a specific standard, and costs are the responsibility of the Oregon Public Utilities Commission during rate considerations. EFSC has determined that IPC has the Financial ability even if some partners choose Not to participate, so reasonable cost should not be a determining factor for EFSC.

EFSC should refuse to approve the Draft Project Order for the following reasons:

1. Does not comply with Noise Standards as no measurements were done at the Oregon Trail viewpoint or walking trails endpoint near milepost 146. Perhaps not a "Noise Sensitive Property," in the context of residential sleeping areas; however, certainly for tourists and visitors to the Interpretive Center and hiking trails noise will be disturbing. Map 23 in Attachment X-1 does not even show the Oregon Trail.

2. Within OAR 345-022-0040 Protected Areas and ODEQ standards 340-035-0000-0100, this area should have been monitored and modeled as a Noise Sensitive Property and was not.
3. Does not comply with Scenic Values from the Blue Mountains Parkway and Oregon Trail Interpretive Center. The OR 86 encourages drivers to STOP and read interpretive signs, so viewer perception and resource change cause significant decrease of scenic vales. IPC says no significant impact.
4. The DPO does not comply with Exhibit L Protected Areas. The BLM ACEC at Flagstaff Hill has not considered undergrounding for the protection of the Oregon Trail. No analysis found the pristine, Class 1 swales of the Oregon Trail within the ACEC located at: Lat 44.813762 Long -117.750194 or 44° 48' 48.26"N 117° 75' 57.97"W. IPC proposes to build a new constructed road over the Oregon Trail in the area identified in the location above.
5. The DPO does not meet the standards required for Exhibit T Recreational Facilities, OAR 345-022-0100, especially at the Flagstaff Hill interpretive center, because of:
 - a. It is a BLM ACEC area managed for public tourism
 - b. It is the single most visited tourist facility in Baker County
 - c. The quality of the facility is outstanding
 - d. There is no other place where the Oregon Trail can be seen and interpreted.
6. The cost estimates of IPC do not compare with those of the Edison Electric Institute, January 2013 publication "Out of Sight, Out of Mind, An Updated Study of the Undergrounding of Power Lines." This article suggests that for 2.5 miles of rural undergrounding, the cost will be \$67,500,000. This is almost half the IPC estimate. The Oregon Trail along the route of the B2H has the most damaging affects to its critical historic elements.

Once the ruts of the Oregon Trail are destroyed they cannot be reconstructed or mitigated back to life. Once gone, always gone. The only easily accessible public facility in Oregon is the Flagstaff Hill Interpretive Center near Baker City. The B2H must be buried to preserve this important site. Considering the reasons above and the unconscionable desecration of our national treasure, the Council Must Deny the site certificate for the Boardman to Hemingway Transmission project.

I am also very concerned about the risks to our communities during construction of the proposed transmission line. I take particular exception to the Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN. The document states; "This plan framework serves as baseline document to guide development of the complete Blasting Plan developed with the Plan of Development before issuance of the site certificate and commencement of construction." On page 7, at 3.4, Design Feature 32 states; "Watering facilities (tanks, natural springs and/or developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction and/or maintenance activities to their pre-disturbed condition as required by the landowner or land-management agency. Should construction and/or maintenance activities prevent use of a watering facility while livestock are grazing in that area, then the

Applicant will provide alternate sources of water and/or alternate sources of forage where water is available." The stated purpose of blasting is to "crack" rocks to facilitate geotechnical drilling. Introducing new or expanded fissures/cracks into rock may alter the flow direction or amount of water to existing natural springs or wells. Since there is no indication that Idaho Power will determine "predisturbed" water flow from wells or springs, how will the landowner prove that flow has been reduced? Without an agreed upon baseline, negotiation or legal action will be required. In the case of private landowners, that will mean legal expenses that may not be available.

Four generations ago, this land was purchased by my Great-Great Grandfather for use as summer pasture, and is still used as such today. Though we no longer run our own livestock in this pasture, the rent my 85 year-old mother collects from other ranchers (who now use this for summer pasture), supplements her limited income. If in the process of blasting and construction, the natural springs that run through this pasture are reduced or destroyed, this land will be rendered useless for summer grazing, and that income stream will cease to exist for my mother. In point of fact, the land would become worthless.

Prior to the issuance of a Site Certificate, EFSC should require the additional condition:

ADDED CONDITION TO BLASTING PLAN, DESIGN FEATURES:

Idaho Power will determine baseline flow of natural springs or wells within ¼ mile of blasting site.

Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN on page 5 at 3.3 Safety Procedures, 3.3.3 Fire Safety: Posting fire suppression personnel at the blast site during high-fire danger periods and prohibiting blasting during extreme fire danger periods is not sufficient to minimize fire risk.

Idaho Power has written terminology, "high-fire danger periods" and "extreme fire danger periods" without definition or concurrence with Oregon Department of Forestry. Fire Suppression Personnel have been previously identified in the Fire Suppression and Prevention Plan as a "watchman." This is not only inadequate, but ridiculous!

As we saw in the multiple fires that raged through California last year, forest fires can spread rapidly, (particularly when driven by dry, hot winds), destroying thousands of acres and homes, and costing billions of dollars. In 1973 a wildfire began in the forested mountains west of La Grande. It was fueled by dry grasses and timber, and pushed by strong winds, and spread rapidly through our Deal Canyon pasture, threatening the western edge of La Grande. Homes stretching along the entire southwestern edge of La Grande were evacuated, along with the Grande Ronde Hospital, in fear that the fire would spread to La Grande proper. Homes along Morgan Lake road were set ablaze so fast that some residents literally ran out the front door as the back door was burning. The fire spread so fast that my

Grandfather and Father did not have time to move cattle out of the pasture, but in a desperate attempt to save their animals, could only cut the fence line and hope for the best. Our increasingly warmer climate has made our forests a tinderbox during the summer months. Our local fire fighters abilities would not be adequate, and additional fire fighting support would be slow in reaching our remote location, were a similar wildfire to be sparked at blast sites.

ADDED CONDITION TO BLASTING PLAN, FIRE SAFETY:

During blasting Idaho Power will provide a water tender staffed by a crew of at least two personnel.

In this letter I have sited historical, economic, and environmental reasons why the Boardman to Hemingway Transmission Project should NOT be allowed to proceed now, or in the future. There are many other reasons I could site at this time, but I have confidence that others will be addressing these issues. I implore you to consider each letter and testimonial carefully. Yes, many contain sentimental, emotional, and personal stories, but our feelings about this land SHOULD BE considered. No amount of mitigation can compensate for, or replace the dreams of John Van Blockland, my Great-Great Grandfather, when he arrived (via the Oregon Trail) in the Grande Ronde Valley and planted roots here. Nothing can compensate for, or replace the dreams the weary travelers had as they camped on our (future) land, overlooking the valley, and left us a heritage we dare not forget, or shall we say, blast out of existence.

Thank you for your careful consideration in this most significant matter,
Respectfully,



Stacia Jo Webster

65212 Webster Rd.

La Grande, OR 97850

staciajwebster@gmail.com

541-963-6834

ESTERSON Sarah * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:17 PM
To: B2H DPOComments * ODOE
Subject: Stop B2H!!

August 10, 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Email: B2H.DPOComments@Oregon.gov

Dear Chair Beyeler and Members of the Council:

Morgan Lake Park, analyzed as part of the Morgan Lake Alternative - (Attachment T-3, Table T-2, p. T-3-2; Table T-3-1, p. T-13) and Summary of Impacts, pp. T-27-28, 43, (T-4-51-56), inaccurately describes features of the park itself and severely underestimates the permanent impact of development on this unique city park.

See OAR 345-021-0010 (1) (T) (A) (B) (D) & OAR 345-022-0100

Morgan Lake Park is an important opportunity primarily because of its unique designation status as a city park, rareness, and special qualities per OAR 345-021-0010(1)(t)(A) Attachment T-3, Table T-3-1 (p. T-13)

Page 62 (T-57) refers to “extensive work in the siting study of the Morgan Lake Alternative.” That is doubtful because it is completely inaccurate:

Page 145 (T-4-46) Morgan Lake Park is described as 204 acres, containing one lake, which is developed with primitive campsites and fishing docks.

Morgan Lake Park actually contains two lakes. Morgan Lake covers 70 acres; the other, Twin Lake, [also known as Little Morgan Lake] is in plain sight, within 300’ of Morgan Lake; it covers 27 acres.

Twin Lake is undeveloped, a wild life and bird sanctuary, home to nesting bald eagles. In their application, Idaho Power omits any references to Twin Lake.

Page 156, (T-4-6) purports to be a map of Morgan Lake Park. According to the map legend, the purple cross hatch area is Morgan Lake Park. That’s wrong. The purple cross hatch is Morgan Lake. The actual boundaries of the 204 acre park are not indicated. Obviously, it’s difficult to believe “extensive work on this siting study” ever occurred.

2) b. A specific example of unsupported conclusion:

Page 145 (T-4-46) Baseline condition: "... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users..."

Page 146 (T-4-47) "The landscape character is natural appearing. Scenic integrity is high as the human developments are harmonious with the landscape."

Page 49 (T-44) "Vegetation will block views of the towers from most locations in the park." In reality, one tower would dominate the entrance to the park, all 130' in plain view. Within the Park, the trees bordering the lake are no more than 80' high. 130' transmission towers will rise more than 50' above those trees, dominating the current landscape.

Idaho Power does not provide a graphic representation of Morgan Lake Park, with the accurate height of existing trees, and elevation of towers above the trees. It simply concludes that the inescapable sight of 500 kV transmission lines and towers around a natural lake setting will have "no significant impact" on Morgan Lake Park.

This is the park whose baseline "should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users" [because 50 years ago, no one ever imagined anything larger than a human being, might ever intrude]..."

I urge the Commission to deny this application for a site certificate until each comment submitted and sent to the Commission by August 22 has been thoroughly analyzed, and Idaho Power has provided credible evidence to support each of its conclusions of "no significant impact."

Name: Sarah Ann Wehrle

Mailing Address:
1603 L Ave
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:23 PM
To: B2H DPOComments * ODOE
Subject: STOP B2H!!

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St, N.E.
Salem, OR 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

I respectfully request that this letter protesting issuance of a Site Certificate for the proposed Boardman to Hemingway Transmission Project be entered on the record.

Specifically, the applicant has failed to acknowledge the presence of a Federal and State-listed, Threatened species, and has failed to identify Category-1, Critical Habitat.

The Draft Proposed Order (DPO), p. 304, lines 20-26, fails to list Bull Trout, a listed State-Sensitive Threatened Species, also listed as Threatened by USFWS. OAR-345-021-0010 (1)(p) requires identification of all fish and wildlife at the proposed location, and identification of habitat classification categories, as set forth in OAR-635-415-0025, in order to comply with OAR-345-022-0060, requiring identification of habitat categories and required mitigation. The applicant has failed to comply with these requirements!

The Grande Ronde river watershed contains a well-documented population of Bull Trout. By statute, wherever a portion of a watershed contains a Threatened or Endangered species, the entire watershed is under federal protection. The Grande Ronde river watershed encompasses the entirety of Union county, and the majority of Wallowa county. As evaluated in the DPO, ASC Exhibit P, suitable habitat used by state-listed Threatened and Endangered species is designated pursuant to ODFW's Habitat Mitigation Policy, and EFSC's Fish and Wildlife Habitat standards, as Category-1 Habitat, where any impact, direct or indirect is prohibited. There is NO mitigation for Category-1 Habitat!

The DPO, p. 304, line 32, through p. 307, line 21, acknowledges that there will be impact, but is unable to quantify it. Since any impact is prohibited, the magnitude of impact becomes irrelevant.

The applicant has failed to meet the requirements for issuance of a Site Certificate contained in OAR-345-022-0080, as noted above.

In view of the fact that sufficient recovery of the Bull Trout population to remove its Threatened status is reliably estimated to be a matter of decades, issuance of a Site Certificate should be denied, with prejudice!

Sincerely,

Sarah Wehrle, DPT

1603 L Ave
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:31 PM
To: B2H DPOComments * ODOE
Subject: STOP B2H!!!!

August 22, 2019

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

To: Chairmen Beyeler and Members of the Council

Thank you for the opportunity to comment and object.

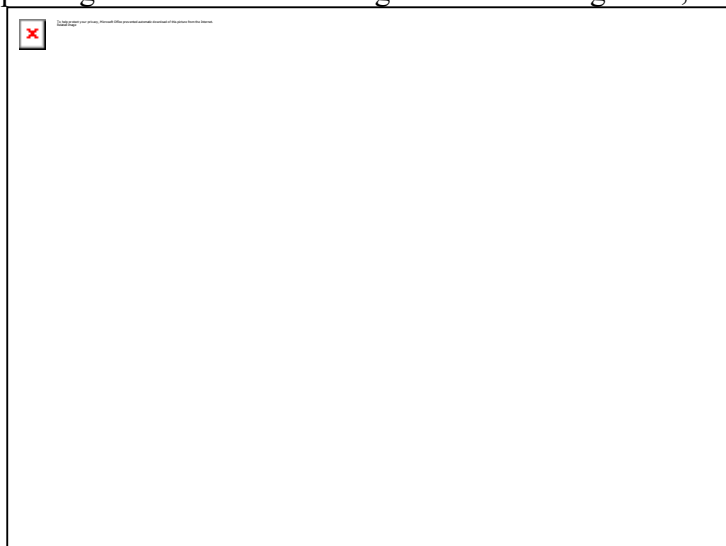
In eastern Oregon there are no 500-kV transmission lines. B2H is very large, sometimes three time the size of current lines in the area.

Exhibit W Retirement, 3.1 Estimated Useful Life:

Idaho Power claims that the transmission line will remain in service for perpetuity. There are no references or hard data to support this optimistic estimate. In fact, 500-kV long distance transmission lines were first built in the 1960s. This same argument is being used for the "Sams Valley Reinforcement Projects" by PacifiCorp. Over the last 50 years, wind power, solar power, local distributed energy, including new battery storage will certainly affect long distance transmission lines. Cancellation of 500-kV projects such as Cascade Crossing and Colusa-Sutter in California, are specific illustrations of changes being made by forward thinking executives.

Exhibit W Retirement, 3.2 Site Restoration Activities:

On page W-3, IPC is required to "remove foundations for each support structure to a depth of one (1) foot below grade, depending on ground slope." There will be over 4400 cement foundations, most at four feet diameter, but some up to eight feet in diameter. Regrowth of native grasses, shrubs and trees will require more



than one foot of soil.

The requirement of one foot has been used on other energy facilities, but B2H is much larger than any other facilities constructed to date in eastern Oregon. IPC does not say how they will remove the reinforced

concrete, but mechanical equipment will certainly leave cement chunks in the ground to be covered with some top soil. Weather erosion will soon show the remaining rebars and foundation.

ADDED CONDITION #1: Foundations will be removed to depth of three feet below grade.

Exhibit W Retirement and Financial Assurance Condition 1: This formula of required bonding will leave the public exposed to risk of returning the lands to preconstruction condition. Most damage will be done in the early stages of construction, such as ground disturbance for roads and right-of-way and foundation preparation. In (d.) bond or letter of credit amendments should be based upon qualified appraisal.

ADDED CONDITION #2: IPC will contract with a qualified construction appraiser to determine amount of construction completed at each six (6) month period. This amount will be used for bond or letter of credit adjustment if the amount is equal or more than \$250,000 from straight line formula.

Exhibit W Retirement and Financial Assurance Condition 2: A bond or letter of credit purpose, is to protect the public from the RISK of not having the site restored to a useful non-hazardous condition. EFSC is recommending that the Council approve the assumption that the risk to the public is ZERO (0) for 50 years, then remain under-insured for the next 50 years. If EFSC and IPC feel that the risk is zero, then the cost of the bond should be low. The risk should be moved to the bank, not forced upon the public. The fact that it may have an operating life of 100 years does not remove the risk that it is there and would need removal and ROW recondition.

ADDED CONDITION #3: On the date that the facility is placed in service, the bond or letter of credit will be set at the final appraised amount of restoration. This amount will be adjusted, by qualified appraisal, at least every 5 years.

Sincerely,

Sarah Wehrle, DPT
1603 L Ave
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:34 PM
To: B2H DPOComments * ODOE
Subject: STOP B2H!!!

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

COMMENT REGARDING THE FAILURE TO PROVIDE HABITAT MITIGATION FOR IMPACTS TO MIGRATORY BIRDS

The Oregon Department of Energy and Energy Facility Siting Council have failed to honor federal laws regarding protected species. This does not eliminate the requirement that site certificates provide mitigation for habitat loss due to ODOE and EFSC authorized energy developments.

In their letter to Don Gonzales, BLM, dated Mar. 19, 2015, (contained in the EIS material), the US Fish and Wildlife Service identified necessary mitigation requirements for habitat impacts to federally protected Migratory Birds resulting from the "(e.g. permanent removal of more than 800 acres of forested habitat, plus additional danger trees removed outside of right-of-way over the life of the project)" In addition, when the Oregon Department of Fish and Wildlife made comments regarding the Proposed Antelope Ridge Wind Development, they indicated that no permanent structures should be placed in the forested areas that the transmission line is planning to cross and cut because of the numbers of migratory birds nesting in the forested areas. This is unique habitat due to the elevation, proximity to Ladd Marsh Wildlife area, and is critical to maintaining the value of the marsh habitat to these birds as it provides one component of the habitat necessary for the functioning of this ecosystem.

Due to the permanent nature of the habitat impacts, the mitigation for impacts must include the entire right-of-way, not just the bases of the transmission towers and other permanent structures. Related rules are OAR 345-022-0070 and OAR 635-415-0025.

The draft Proposed Order fails to provide adequate mitigation for impacts to habitat protected by federal law for migratory birds.

Sincerely,
Sarah Wehrle, DPT
1603 L Ave
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:40 PM
To: B2H DPOComments * ODOE
Subject: STOP B2H!!!

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

B2H EFSC LACK OF DOCUMENTATION FOR GREAT GRAY OWL AND FLAMMULATED OWL

The surveys provided for these two species are too old to be a reliable indicator of the presence or impacts to these bird species. They were done in 2011 and 2012, seven years ago. On Page P1-9, Table P1-l the applicant proposes doing updated surveys only on areas not previously surveyed and submitting them to only ODOE. This type of secretive procedure where the public is completely removed from any opportunity to comment or review the decisions being made by ODOE is the basis for a great deal of public dissatisfaction with the process currently being supported by ODOE and EFSC.

There is no current information in the application to base any decision regarding what the impacts will be to these birds as a result of the Boardman to Hemingway Transmission Line. A site certificate cannot be issued determining compliance with OAR 345-022-0060 without knowing what the use of the area is by wildlife. In addition, since habitat category must include the use of the habitat by species, the habitat categories cannot be determined until the developer provides the necessary current information. Given that the area of the Ladd Marsh Wildlife area is not only protected, but also contains both federal and state mitigation areas, it is not possible to determine whether or not the development will have unacceptable impacts to these mitigation sites absent information regarding the use of the adjacent habitat by wildlife utilizing the mitigation sites and whether or not the habitat will be compromised making it unsuitable for use of the species due to impacts of the development. Considering the lack of information near Ladd Marsh Wildlife area, one must question why.

Ladd Marsh is an important Migratory Bird Flyway according to the Oregon Department of Fish and Wildlife (ODFW 2008.) The Audubon Society lists it as an Important Bird Area. The number of bird species using this area has expanded in the last several years, however, in 2008 over 230 species of birds had been recorded on LMWA and over 120 species nest in the area and yet the developer appears to be ignoring the importance of not only the wildlife area, but also the habitat surrounding the wildlife area which is critical to the survival of birds moving in and out of the mitigation sites.

Sincerely,
Sarah Wehrle, DPT
1603 L Ave
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:42 PM
To: B2H DPOComments * ODOE
Subject: STOP B2H!!!

August 22, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

1. Idaho Power failed to provide noise estimates for the lay down areas and incorrectly determined they were not required to do so.
2. Idaho Power failed to include all sources of noise as required by OAR 340-035-0035 in noise modeling done on all sites which were not previously used.

References:
OAR 340-035-0035

The exception to requiring noise impacts from sources listed in subsections (5)(b) - (f), (j), and (k) does not apply to developments on sites not previously used. When a lay down area, or other development is located on a site not previously used, the rule states "Sources exempt from the requirements of section (ii) of this rule which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement." The applicant must provide noise monitoring results for all lay down areas or other areas where these types of noise will occur in areas not previously used.

Site Condition needed:

The applicant will complete noise modeling which includes the noise sources identified in OAR 340-035-0035 for all areas where development will occur on sites not previously used. The uses are contained in OAR 345-035-0035(5)(b) - (f), (j), and (k).

For any site exceeding the noise standards, the developer will obtain a waiver from the property owner prior to the start of construction, or establish through all available means of mitigation that the location will not exceed the noise standard.

When applying another agency's rules, the Oregon Department of Energy and Energy Facility Siting Council do not have the authority to make unique interpretations of common terms like

“infrequent”. The Oregon DEQ as the agency responsible for the rules must provide any interpretation if indeed one is needed beyond the dictionary and common use of the term.

Noise surveys have not been completed, and it has not been established that the project will be able to meet the requirements of the standard, therefore, the site certificate must be denied.

Sincerely,

Sarah Wehrle, DPT
1603 L Ave
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:45 PM
To: TARDAEWETHER Kellen * ODOE; B2H DPOComments * ODOE
Subject: STOP B2H!!!!

August 22, 2019

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St. NE
Salem, Oregon 97301

APPLICANT FAILED TO INCLUDE A SERIOUS ANALYSIS OF NON EFU ROUTES REQUIRED BY ORS 215.

Exhibit K, 4.1.1.4 Non-EFU Alternatives.

The applicant states that “The proposed EFU avoidance route provides substantially the most direct route between the Project endpoints while avoiding EFU lands where possible. They also claim that the evaluation they did met the standard of being reasonable by virtue of being fair, proper, just, moderate and suitable under the circumstances. If their statements were actually accurate, the preferred route and alternate route proposed in the application for a site certificate would meet the requirements of ORS 215.275 AND OAR 345-022-0030.

Unfortunately, the application does not support Idaho Power's stated results for the following reasons:

- The applicant failed to do a robust evaluation of the alternative routes and provided practically no analysis of the “No Action” alternative.
- The applicant failed to identify all land meeting the definition of “farm” land.
- The proposed route does not meet a test of being a “reasonable” route as defined by *Friends of Parrett Mountain v Northwest Natural Gas Co.* 336 Or. 93, 108 (2003) due to the fact that it lacks “fairness”, is not “just, moderate, or suitable under the circumstances”. The proposed route fails to utilize available public lands and instead places the burden of impacts of the transmission line on unwilling private landowners.

Morrow and Malheur Counties are the only ones where the transmission line use of public land as opposed to private land is roughly equivalent to the percentages of each type in the county.

Baker County contains fifty one percent public land and 49% private land. The Boardman to Hemingway transmission line would be built using 83% private land and only 17% public land.

Union County contains 50% public and 50% private land. Idaho Power plans to build the transmission line on 19% public and 81% private land in this county.

Umatilla County contains 75% private land, however, the B2H transmission line would be built on 100% private land.

Due to the above, the applicant fails to comply with OAR 345-021-0010 and cannot be found to comply with OAR 345-022-0030 requiring a serious effort to identify a route which minimizes or avoids the impacts on EFU lands.

Sincerely,
Sarah Wehrle, DPT
1603 L Ave
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:48 PM
To: B2H DPOComments * ODOE
Subject: STOP B2H!!!

August 22, 2019

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

THE APPLICANT SIGNIFICANTLY UNDERSTATES THE IMPACTS TO EMPLOYMENT AND FOREST LANDS AS A RESULT OF THE PROPOSED B2H TRANSMISSION LINE

Exhibit K, Attachment K-2, Pages 19 and 20, Section 7.0

The applicant claims that removal of forestland by clearing of trees for a period of over 50 years will have little economic impact to forest sector jobs in Umatilla and Union County. They value the loss of 245.6 acres of forestland in Umatilla County at \$488.60 per acre.

They value the removal of 530.1 acres lost to the transmission line in Union County at \$182.98 per acre. The applicant provides no justification or documentation to support the figures they claim apply or the basis for the difference in value per acre between Umatilla and Union Counties.

Some forest facts related to this section:

According to US Forest Service Tech. Rept. PNW-GTR-578 Rev. 2004 entitled "Forests of Eastern Oregon: an Overview", Eastern Oregon Forests produce an average of 20 cubic feet per acre of timber each year. That would mean that an acre of land would produce approximately 240 board feet of lumber per year per acre during the life of the transmission line. According to Scott Hartell, Planning Director, Union County, forest land in Union County is classified as either 20 cubic feet per acre per year, or 50 cubic feet per acre per year, so the amounts could be significantly higher. The "Forest Facts Oregon's Forests: Some Facts and Figures" published in 2009 by the Oregon Department of Forestry states that economists estimate that for every billion board feet that is harvested in Oregon 11 forest sector jobs are created or retained.

Idaho Power's values are unrealistically low according to individuals owning forest land in both counties. No one would be using land for trees which precludes other uses if the economic benefits were as the developer is stating.

The applicant's identification of the acres of forest land impacted is incorrect due not only to the failure to use soil types to identify forest lands, but also, the fact that they are requesting a 300 foot right of way and they need to include any additional trees they will be removing in the 100 foot area on each side of the right of way.

The applicants claims that the land in the right of way will have a further reduced due to the opportunity to use the land for agricultural or range land after the transmission line is constructed. This is completely unfounded. The lineal nature of a transmission line precludes any productive use of land taken for the transmission line. The right of way is too narrow to make it available for production of crops, and the costs associated with purchasing equipment for agricultural operations would be prohibitive. It would be unusual for a forest operator to already own equipment for a crop operation. In order to use the right of way as grazing land, it would have to be fenced. According to "Estimated Livestock

Fencing Costs for the Small-Farm Owner” by Derek L. Barber, the average cost of materials for ¼ mile (1,320 ft.) of field fence is \$1,108.53 plus the cost of building it. The Iowa State University Extension identified 2011 costs for constructing ¼ mile of fencing to be \$1,947.75 installed. Enclosing a square acre requires 820 feet of fence. In other words, the cost of fencing an acre of lost forest land would exceed the value the applicant claims the land would add to the local economy per acre for the 50 years the transmission line is predicted to be in place.

The applicant also claims that the transmission line right of way through forest lands will not cause a substantial change in accepted forest practices or cause a significant increase in the cost of accepted forest practices on either lands to be directly impacted by the Project or on surrounding lands.

Removing trees from land currently being used to grow them will create a substantial change in accepted forest practices. It also will substantially increase the costs of growing and harvesting trees on the surrounding lands. The transmission line will make it impossible to use aerial equipment to harvest trees on steep hillsides adjacent to the line, it will increase time and costs of harvest due to the need to avoid equipment contact with the transmission lines, avoid trees falling on the transmission lines, require the use of routes of access and egress from the forested lands that avoid having log trucks and equipment moving below the transmission lines, will decrease the harvest along the transmission line due to loss of trees in forest land adjacent to the corridor due to wind and weather conditions causing the loss of additional trees due to weakened root infrastructure once the transmission corridor is cleared.

The economic, social and environmental impacts of running this transmission line through private forest lands in Union and Umatilla Counties are understated, lack convincing documentation, and the conclusions stated by the applicant in Section 8.0 are absolutely false. Farm and forest lands in Eastern Oregon form the basis of our economic and social well being. This developer shows a complete lack of understanding of the significance this transmission line destruction of forested lands will have on the well being of the citizens.

In addition, the applicant has failed to provide documentation to support their comments. The only reference the applicant sites that in any way relates to this issue is the publication from the Oregon Forest Resources Institute.

In summary:

The applicant has failed to document that they will comply with Land Use Goal 4 OAR 660-006-000 through OAR 660-006-0010; They have failed to document that they comply with OAR 345-022-0030; and they have not documented, nor are they able to meet the requirement contained in OAR 345-022-0030(4) to allow an exception.

There is no justification for determining that the proposed plan to destroy forested lands meets the requirements under OAR 345-022-0000(l)(a) which states "The facility complies with the requirements of the Oregon Energy Facility Siting statutes, ORS 469.300 to 469.570 and 469.590 to 469.619 and the standards adopted by the Council pursuant to 469.501 or the overall public benefits of the facility outweigh any adverse effects on a resource or interest protected by the applicable standards the facility does not meet as described in section (2)."

While it will be addressed in other comments, the cumulative adverse effects of the destruction of forest lands will have significant impacts on not only the economic and social well being of the citizens of Union and Umatilla Counties, but it will also adversely affect Critical Wildlife habitat, Threatened and Endangered Species, increase the potential for wildfire, stress local services, as well as multiple additional resource and interests of concern to the citizens.

Sincerely,

Sarah Wehrle
1603 L Ave
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:52 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway

August 22, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018;
Draft Proposed Order 5/23/2019

To: Chairmen Beyeler and Members of the Council

I appreciate the opportunity to comment on the B2H Draft Proposed Order. The Oregon National Historic Trail will be significantly affected by the B2H Transmission Line.

The Draft Proposed Order identifies significant impacts to the Oregon Trail in several Exhibits, including Exhibit C: Property Location and Maps; Exhibit L: Protected Areas; Exhibit R: Scenic Aesthetic Values; Exhibit S: Cultural Resources; Exhibit T: Recreational Facilities; and Exhibit X: Noise.

B2H crosses the Oregon Trail at least 8 times. EFSC has done a reasonable job of protecting the Trail during construction and operation, if the proposed requirements are followed, **except at the Oregon Trail Interpretive Center at Flagstaff Hill.**

The B2H Transmission Line should be buried for approximately 2 to 2 ½ miles to comply with the exhibits indicated above. Idaho Power has from the early years refused to do any significant analysis for this option. IPC uses cost as the reason for stating that undergrounding is not feasible. Cost is not a specific standard, and costs are the responsibility of the Oregon Public Utilities Commission during rate considerations. EFSC has determined that IPC has the Financial ability even if some partners choose to not participate, so reasonable cost should not be a determining factor for EFSC.

EFSC should refuse to approve the Draft Project Order for the following reasons:

1. Does not comply with Noise Standards as no measurements were done at the Oregon Trail viewpoint or walking trails endpoint near milepost 146. Perhaps not a "Noise Sensitive Property," in the context of residential sleeping areas; however, certainly for tourists and visitors to the Interpretive Center and hiking trails noise will be disturbing. Map 23 in Attachment X-1 does not even show the Oregon Trail.
2. Within OAR 345-022-0040 Protected Areas and ODEQ standards 340-035-0000-0100, this area should have been monitored and modeled as a Noise Sensitive Property and was not.
3. Does not comply with Scenic Values from the Blue Mountains Parkway and Oregon Trail Interpretive Center. The OR 86 encourages drivers to STOP and read interpretive signs, so viewer perception and resource change cause significant decrease of scenic values. IPC says no significant impact.
4. The DPO does not comply with Exhibit L Protected Areas. The BLM ACEC at Flagstaff Hill has not considered undergrounding for the protection of the Oregon Trail. No analysis found the pristine, Class 1 swales of the Oregon Trail within the ACEC located at: Lat 44.813762 Long -117.750194 or 44° 48' 48.26"N 117° 75' 57.97"W. IPC proposes to build a new constructed road over the Oregon Trail in the area identified in the location above.
5. The DPO does not meet the standards required for Exhibit T Recreational Facilities, OAR 345-022-0100, especially at the Flagstaff Hill interpretive center, because of:
 - a. It is a BLM ACEC area managed for public tourism
 - b. It is the single most visited tourist facility in Baker County

- c. The quality of the facility is outstanding
 - d. There is no other place where the Oregon Trail can be seen and interpreted.
6. The cost estimates of IPC do not compare with those of the *Edison Electric Institute*, January 2013 publication "Out of Sight, Out of Mind, An Updated Study of the Undergrounding of Power Lines." This article suggests that for 2.5 miles of rural undergrounding, the cost will be \$67,500,000. This is almost half the IPC estimate.

The Oregon Trail along the route of the B2H has the most damaging effects to its critical historic elements. Once the Trail is gone it cannot be reconstructed or mitigated back to life. Once gone, always gone. The only easily accessible public facility in Oregon is the Flagstaff Hill Interpretive Center near Baker City. The B2H must be buried to preserve this important site.

Considering the reasons above and the unconscionable desecration of our national treasure, the Council Must Deny the site certificate for the Boardman to Hemingway Transmission project.

Thank you,

Sarah Wehrle, DPT
1603 L Ave
La Grande, OR 97850

TARDAEWETHER Kellen * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:37 PM
To: TARDAEWETHER Kellen * ODOE
Subject: STOP B2H!!!

August 22, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301
Kellen.Tardaewether@oregon.gov

**Subject: Idaho Power Amended Application for the Boardman to Hemingway Transmission Project dated 9/28/2018;
Draft Proposed Order dated 5/23/2019**

Dear Chair Beyeler and Members of the Council;

Thank you for the opportunity to comment on the Draft Proposed Order for Idaho Power's B2H project.

IPC's "Noxious Weed Plan" fails to take responsibility for spreading noxious weeds in several alarming ways. Here is an excerpt from their Plan (Monitoring 6.1):

As stated above, noxious weed monitoring and control will occur during the first 5-year period. When it is determined that an area of the Project has successfully controlled noxious weeds at any point during the first 5 years of control and monitoring, IPC will request concurrence from ODOE. If ODOE concurs, IPC will conclude that it has no further obligation to monitor and control noxious weeds in that area of the Project. If control of noxious weeds is deemed unsuccessful after 5 years of monitoring and noxious weed control actions, IPC will coordinate with ODOE regarding appropriate steps forward. At this point, IPC may suggest additional noxious weed control techniques or strategies, or may request a waiver from further noxious weed obligations at these sites.

To start with, the landowner or occupant of land in this case, is required by law to control weeds in perpetuity—not just for 5 years! TO say that IPC "has no further obligation" and can "request a waiver" is in blatant disregard to the law.

From Chapter 569 of Oregon law (https://www.oregonlegislature.gov/bills_laws/ors/ors569.html):
569.180 Noxious weeds as public nuisance; policy. *In recognition of the imminent and continuous threat to natural resources, watershed health, livestock, wildlife, land and agricultural products of this state, and in recognition of the widespread infestations and potential infestations of noxious weeds throughout this state, noxious weeds are declared to be a public nuisance and shall be detected, controlled and, where feasible, eradicated on all lands in this state. It is declared to be the policy of this state that priority shall be given first to the prevention of new infestations of noxious weeds and then to the control and, where feasible, eradication of noxious weeds in infested areas. [Formerly 452.615]*
569.390 Owner or occupant to eradicate weeds. *Each person, firm or corporation owning or occupying land within the district shall destroy or prevent the seeding on such land of any noxious weed within the meaning of ORS 569.360 to 569.495 in accordance with the declaration of the county court and by the use of the best means at hand and within a time declared reasonable and set by the court, except that no weed declared noxious shall be permitted to produce seed.*

Secondly, IPC flagrantly flaunts Oregon law by proposing to treat only Class "A" and "T" (a rotating list of weeds for focused treatments in a given year) weeds- ignoring the majority of weed species. Class A weeds are mainly agricultural weeds and weeds which an entity (County or State) believes they have the best chance of controlling i.e. known patches

are few in that area. Class B and C weeds are generally the worst weeds, spreading most aggressively and to more areas, thus threatening and ultimately devastating the most native habitat. Why should Idaho Power be exempt from responsibility for the FULL list of weeds? This is absolutely awful proposition, but especially awful for Union County, where 81% of the land that would be wrecked by the B2H project is private land. Putting the route through federal lands, IPC at least gives a nod to Agency (BLM or USFS) rules for weeds. On private lands in Union County, several of the landowners in on "Proposed" or "Morgan Lake Alternative" routes have labored for years, even decades, to control weeds and maintain native habitats. Case in point are Joel Rice and the City of La Grande (Morgan Lake Park). Now Idaho Power comes along to trash these natural areas. The B2H project is set to become a conduit for the worst noxious weed species to be injected into some of the best native habitat in our County.

"B2H Noxious Weed Plan Comments" is a document collated by weed supervisor Brian Clapp of Union County after a meeting of Morrow, Umatilla, and Union counties, Oregon Dept. of Ag and Tri-County CWMA on August 22, 2017 to go over the B2H Attachment P1-5 Noxious Weed Plan. These comments reflect some of my concerns about weeds. I find it nearly unbelievable the Comments by weed managers are NOT acknowledged in IPC's Plan, published over a year later!

To top the travesty of IPC's "Noxious Weed Plan" the Plan states they are not responsible for "areas outside of the ROW". The weed sites immediately outside areas of potential disturbance are definitely going to spread to disturbed areas --but would not even be recorded! Noxious weeds would explode near the ROW, ruining native habitat, trashing decades of work by landowners, and with no accountability by IPC. IPC is proposing a huge area of disturbance; their responsibility should not be limited to the ROW.

I urge you to strongly deny IPC's B2H Application. IPC's "Noxious Weed Plan" does not comply with Oregon law. They deny responsibility for control of most weed species, deny responsibility for weed control after 5 years, control weeds only once a year, and give themselves a waiver when control fails. EFSC should reject the Weed Plan and Application.

Sincerely,

Sarah Wehrle, DPT

1603 L Ave

La Grande, OR 97850

TARDAEWETHER Kellen * ODOE

From: Sarah Wehrle <wehrle.sarah@gmail.com>
Sent: Thursday, August 22, 2019 4:45 PM
To: TARDAEWETHER Kellen * ODOE; B2H DPOComments * ODOE
Subject: STOP B2H!!!!

August 22, 2019

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St. NE
Salem, Oregon 97301

APPLICANT FAILED TO INCLUDE A SERIOUS ANALYSIS OF NON EFU ROUTES REQUIRED BY ORS 215.

Exhibit K, 4.1.1.4 Non-EFU Alternatives.

The applicant states that “The proposed EFU avoidance route provides substantially the most direct route between the Project endpoints while avoiding EFU lands where possible. They also claim that the evaluation they did met the standard of being reasonable by virtue of being fair, proper, just, moderate and suitable under the circumstances. If their statements were actually accurate, the preferred route and alternate route proposed in the application for a site certificate would meet the requirements of ORS 215.275 AND OAR 345-022-0030.

Unfortunately, the application does not support Idaho Power's stated results for the following reasons:

- The applicant failed to do a robust evaluation of the alternative routes and provided practically no analysis of the “No Action” alternative.
- The applicant failed to identify all land meeting the definition of “farm” land.
- The proposed route does not meet a test of being a “reasonable” route as defined by *Friends of Parrett Mountain v Northwest Natural Gas Co.* 336 Or. 93, 108 (2003) due to the fact that it lacks “fairness”, is not “just, moderate, or suitable under the circumstances”. The proposed route fails to utilize available public lands and instead places the burden of impacts of the transmission line on unwilling private landowners.

Morrow and Malheur Counties are the only ones where the transmission line use of public land as opposed to private land is roughly equivalent to the percentages of each type in the county.

Baker County contains fifty one percent public land and 49% private land. The Boardman to Hemingway transmission line would be built using 83% private land and only 17% public land.

Union County contains 50% public and 50% private land. Idaho Power plans to build the transmission line on 19% public and 81% private land in this county.

Umatilla County contains 75% private land, however, the B2H transmission line would be built on 100% private land.

Due to the above, the applicant fails to comply with OAR 345-021-0010 and cannot be found to comply with OAR 345-022-0030 requiring a serious effort to identify a route which minimizes or avoids the impacts on EFU lands.

Sincerely,
Sarah Wehrle, DPT
1603 L Ave
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Kevin Weitemier <kweitemier@gmail.com>
Sent: Thursday, August 22, 2019 1:01 PM
To: B2H DPOComments * ODOE
Subject: B2H Public Comment

August 22, 2019

**Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301
Kellen.Tardaewether@oregon.gov**

**Subject: Idaho Power Amended Application for the Boardman to Hemingway Transmission Project dated 9/28/2018;
Draft Proposed Order dated 5/23/2019**

Dear Chair Beyeler and Members of the Council;

Thank you for the opportunity to comment on the Draft Proposed Order for Idaho Power's B2H project.

IPC's "Noxious Weed Plan" fails to take responsibility for spreading noxious weeds in several alarming ways. Here is an excerpt from their Plan (Monitoring 6.1):

As stated above, noxious weed monitoring and control will occur during the first 5-year period. When it is determined that an area of the Project has successfully controlled noxious weeds at any point during the first 5 years of control and monitoring, IPC will request concurrence from ODOE. If ODOE concurs, IPC will conclude that it has no further obligation to monitor and control noxious weeds in that area of the Project. If control of noxious weeds is deemed unsuccessful after 5 years of monitoring and noxious weed control actions, IPC will coordinate with ODOE regarding appropriate steps forward. At this point, IPC may suggest additional noxious weed control techniques or strategies, or may request a waiver from further noxious weed obligations at these sites.

IPC should be required to control weeds in perpetuity—not just for 5 years. To say that IPC "has no further obligation" and can "request a waiver" is in blatant disregard to the law. This also goes against the declared policy of the state that "priority shall be given first to the prevention of new infestations of noxious weeds."

From Chapter 569 of Oregon law (https://www.oregonlegislature.gov/bills_laws/ors/ors569.html):

569.180 Noxious weeds as public nuisance; policy. *In recognition of the imminent and continuous threat to natural resources, watershed health, livestock, wildlife, land and agricultural products of this state, and in recognition of the widespread infestations and potential infestations of noxious weeds throughout this state, noxious weeds are declared to be a public nuisance and shall be detected, controlled and, where feasible, eradicated on all lands in this state. It is declared to be the policy of this state that priority shall be given first to the prevention of new infestations of noxious weeds and then to the control and, where feasible, eradication of noxious weeds in infested areas. [Formerly 452.615]*

569.390 Owner or occupant to eradicate weeds. *Each person, firm or corporation owning or occupying land within the district shall destroy or prevent the seeding on such land of any noxious weed within the meaning of ORS 569.360 to 569.495 in accordance with the declaration of the county court and by the use of the best means at hand and within a time declared reasonable and set by the court, except that no weed declared noxious shall be permitted to produce seed.*

Secondly, IPC should be responsible for the FULL list of weeds. Currently, IPC flaunts Oregon law by proposing to treat only Class A and T-Designated weeds (a rotating list of weeds for focused treatments in a given year), ignoring the majority of weed species. Class A weeds are mainly agricultural weeds and weeds which an entity (County or State) believes they have the best chance of controlling i.e. known patches are few in that area. Class B weeds, however, are generally the worst weeds, spreading most aggressively and to more areas, thus threatening and ultimately devastating the most native habitat. Some Class B weeds that are not also T-designated and therefore excluded from the IPC proposal, include yellow starthistle (*Centaurea solstitialis*), Armenian (Himalayan) blackberry (*Rubus armeniacus*), multiple knapweeds (*Centaurea* sp., *Acroptilon repens*), and yellow toadflax (*Linaria vulgaris*).

Excluding IPC from the full weeds list is an awful proposition, especially for Union County, where 81% of the land that would be wrecked by the B2H project is private land. Putting the route through federal lands, IPC at least gives a nod to Agency (BLM or USFS) rules for weeds. On private lands in Union County, several of the landowners in on "Proposed" or "Morgan Lake Alternative" routes have labored for years, even decades, to control weeds and maintain native habitats. Case in point are Joel Rice and the City of La Grande (Morgan Lake Park). The B2H project is set to become a conduit for the worst noxious weed species to be injected into some of the best native habitat in our County.

Furthermore, IPC's "Noxious Weed Plan" states they are not responsible for "areas outside of the ROW". The weed sites immediately outside areas of potential disturbance are definitely going to spread to disturbed areas, but would not even be recorded! Noxious weeds would explode near the ROW, ruining native habitat, trashing decades of work by landowners, and with no accountability by IPC. IPC is proposing a huge area of disturbance; their responsibility should not be limited to the ROW.

I strongly urge you to deny IPC's B2H Application. IPC's "Noxious Weed Plan" does not comply with Oregon law. They deny responsibility for control of most weed species, deny responsibility for weed control after 5 years, control weeds only once a year, and give themselves a waiver when control fails. EFSC should reject the Weed Plan and Application.

Sincerely,

Kevin Weitemier, Ph.D.
6146 SW 18th Dr., Apt 68
Portland, OR 97239

August 10, 2019

Energy Facilities Siting Council

c/o Kellen Tardaewether, Siting Senior Analyst

Oregon Department of Energy

550 Capitol St. N.E.

Salem, OR 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

Re: Soil Protection - **Drill site 103/3; 103/4 and vicinity on unstable and steep slopes**

My comment addresses the known hazards and adverse effects of construction of the B2H transmission line on unstable ground.

The applicable standard is: OAR 345-022-0022. (c) *...The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soil hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility...*

Permanent Administrative Order EFSC 2-2017 Chapter 345 Department of Energy; Energy Facility Siting Council; effective date 10/18/2017; agency approved date 09/22/2017.

Geological Hazards and Soil Stability; Exhibit H. Attachment H-1, Engineering Geology and Seismic Hazards Supplement to Exhibit H Boardman to Hemingway 500kV Transmission Line Project Boardman, Oregon to Hemingway, Idaho January 25, 2018; Shannon & Wilson, Inc. 3990 Collins Way, Suite 100, Lake Oswego, Oregon. 97035.

Drill sites 103/3; 103/4 and vicinity are shown on the following tables and maps and analysis by Shannon & Wilson, Inc.:

Soils; Map page 20 of 44:

Table B3: Soil Descriptions, described as:

18E, erosion hazard; severe; 61E; erosion hazard; severe, percent of slope Low; 5: High; 40.
(sheet 1 of 4)

Table C1: Summary of Proposed Borings; Map Sheet 39

103/3 – Slope Stability/ Geo-Seismic Hazard

E.2 Landslide Descriptions

SLIDO-3.4 FernML2010_129

Northing: 5019127 Easting: 407892 Sheet 9

'SLIDO 129 is referenced at a scale of 1:100,000 (Ferns et al., 2010) and its mapped extents intersect the IPC Proposed Route, between 103/3 and 103/4. This slide appears to be contained within a drainage spanned by the two towers and it therefore unlikely to affect the proposed work areas. A field reconnaissance of this area should be performed as part of the geotechnical exploration program."

Idaho Power Corporation, in Exhibit H 2.2.4 states "The soils (in Union County) vary from a few inches to a few feet thick over weathered bedrock, are generally well-drained, and are typically characterized as having a severe erosion hazard."

Idaho Power Corporation admits in ASC page B-12 that "The mountainous area such as the Blue Mountains present very challenging topography with many areas of steep slopes in excess of 35 percent and other areas of unstable slopes presenting design and construction challenges."

IPCs stated original intention to the EFSC was the following: "Using topographic maps the corridors were adjusted to avoid or minimize distance across very steep slopes and other physical features less desirable for construction and operation of a transmission line."

Hazard Analysis Union County Emergency Operations Plan Updated 6/30/16 lists Winter weather as the highest weighted risk item before Seismic, Fire, Hazmat-Transportation, and Drought. Most of the area receives a large percentage of the annual moisture as snowfall and both the Winter storms and the Spring melt can be precipitous and unpredictable.

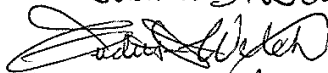
The area surrounding **Drill sites 103/3; 103/4** adds a hazard of unknown proportions to a populated area with a delicate earth crust. **The steep and unstable slopes will require many intrusive modifications to meet the standard of safety and could very easily "aggravate" the stability of the slopes. The application does not comply with the relevant standard.**

Conclusion and Requested Relief:

Drill site Drill sites 103/3; 103/4, and its vicinity, represent a significant risk of several possible adverse effects. This area characterized by steep slopes and hazardous snow melts should be removed for consideration as a site for a transmission "facility". Idaho Power Corporation in *Exhibit H 3.9 Mitigation* describes methods, trucks, and towers designed to mitigate problems of unstable soil with structure and footing modifications, this should not be considered an acceptable risk when the entire area is unstable.

I appreciate your consideration and your attention to this matter.

Name: Judith D. Welch


Address: 62121 Fruitdale Ln,
La Grande OR 97850

References:

Burns, W. J., Mickelson, K. A., Saint-Pierre, E. C., 2011 SLIDO-2, Statewide Landslide Information Database for Oregon, Release 2; Oregon Department of Geology and Mineral Industries.

Ferns, Mark L. McConnell, V. S., Madin, I.P., and Johnson, J.A., 2010 Geology of the Upper Grande Ronde Basin, Union County, Oregon: Oregon Department of Geology and Mineral Industries Open-File Report 2003-11, 85.0, scale 1:125,000.

Idaho Power Corporation, 2017, *Exhibit H of the Application for the Boardman to Hemingway Transmission Line Project*: Report Prepared by Idaho Power Corporation, Boise, Idaho.

Geological Hazards and Soil Stability; Exhibit H. Attachment H-1, Engineering Geology and Seismic Hazards Supplement to Exhibit H Boardman to Hemingway 500kV Transmission Line Project Boardman, Oregon to Hemingway, Idaho January 25, 2018; Shannon & Wilson, Inc. 3990 Collins Way, Suite 100, lake Oswego, Oregon. 97035.

Permanent Administrative Order EFSC 2-2017 Chapter 345 Department of Energy; Energy Facility Siting Council; effective date 10/18/2017; agency approved date 09/22/2017.

Oregon Department of Energy; Energy Facility Siting Council – Chapter 345, Division 22 General Standards for Siting Facilities; OAR Amend: 345-022-0022; *Soil Protection* Effective date: 10/18/2017.

Idaho Power Corporation, 2017, *Exhibit H of the Application for the Boardman to Hemingway Transmission Line Project*: Report Prepared by Idaho Power Corporation, Boise, Idaho.

Geological Hazards and Soil Stability; Exhibit H. Attachment H-1, Engineering Geology and Seismic Hazards Supplement to Exhibit H Boardman to Hemingway 500kV Transmission Line Project Boardman, Oregon to Hemingway, Idaho January 25, 2018; Shannon & Wilson, Inc. 3990 Collins Way, Suite 100, lake Oswego, Oregon. 97035, page 28 and elsewhere.

Union County, Oregon, Union County Emergency Operations Plan – Hazard Analysis. Updated – 6/30/2016.

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

APPLICANT FAILED TO INCLUDE ALL REQUIRED SOURCES OF NOISE IN THEIR MODELING OF NOISE IMPACTS OF DEVELOPMENT

Idaho Power did not include any of the items listed in OAR 340-035-0035(l)(b)(B)(ii), which are only exempt from the noise measurement when the development occurs on a previously used site. When establishing ambient noise level for a new development on a site not previously used, it states: "Sources exempt from the requirements of section (l) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement."

The applicant's noise modeling only includes the noise generated from the transmission line itself. Noise modeling must be corrected to include (b) Warning Devices, (c) sounds created by road vehicles, (d) Sounds from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576 ; (e) bells, chimes, or carillons; (f) aircraft subject to pre-emptive federal regulations and (k) sounds created by the operation of road vehicle auxiliary equipment.

✓) The application is incomplete. Without having the information regarding these additional noise sources, the department and the siting council lack the information regarding how many noise sensitive properties are impacted and by how much.

A proposed order cannot be issued until the developer submits all the information regarding the noise impacts of this development. This information must be available to decide if the standard is met or if it can be met with additional site conditions.

Sincerely,



Signature

Printed Name: Jane Wentzel

Mailing Address:

50251 Bennett Ln., Baker City OR 97814
(Pondosa, Union County)

There is no need for
this project !!

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

August 5, 2019

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

To: Chairman Beyeler and Members of the Council

I am very concerned about the risks to our communities during construction of the proposed transmission line. I take particular exception to the Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN. The document states; "This plan framework serves as baseline document to guide development of the complete Blasting Plan developed with the Plan of Development **before** issuance of the site certificate and commencement of construction."

On page 7, at 3.4, Design Feature 32 states; "Watering facilities (tanks, natural springs and/or developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction and/or maintenance activities to their pre-disturbed condition as required by the landowner or land-management agency. Should construction and/or maintenance activities prevent use of a watering facility while livestock are grazing in that area, then the Applicant will provide alternate sources of water and/or alternate sources of forage where water is available."

The stated purpose of blasting is to "crack" rocks to facilitate geotechnical drilling. Introducing new or expanded fissures/cracks into rock may alter the flow direction or amount of water to existing natural springs or wells.

Since there is no indication that Idaho Power will determine "predisturbed" water flow from wells or springs, how will the landowner prove that flow has been reduced? Without an agreed upon baseline, negotiation or legal action will be required. In the case of private landowners, that will mean legal expenses that may not be available.

Prior to the issuance of a Site Certificate, EFSC should require the additional condition:

ADDED CONDITION TO BLASTING PLAN, DESIGN FEATURES:

Idaho Power will determine baseline flow of natural springs or wells within ¼ mile of blasting site.

Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN on page 5 at 3.3 Safety Procedures, 3.3.3 Fire Safety: Posting fire suppression personnel at the blast site during high-fire danger periods and prohibiting blasting during extreme fire danger periods is not sufficient to minimize fire risk.

Idaho Power has written terminology, "high-fire danger periods" and "extreme fire danger periods" without definition or concurrence with Oregon Department of Forestry. Fire Suppression Personnel have been previously identified in the Fire Suppression and Prevention Plan as a "watchman." This is inadequate!

ADDED CONDITION TO BLASTING PLAN, FIRE SAFETY:

During blasting Idaho Power will provide a water tender staffed by a crew of at least two personnel.

Sincerely,

D. Wentzel

Name: Jane Wentzel

Address: 50251 Bennett Ln., Baker City OR 97814
(Pondosa, Union County)

There is no need for this project !! No great increase in population and solar panels are available !!

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:53 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019
Attachments: Scan 2019-8-15 17.38.19.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter signed by me and 54 other residents of La Grande expressing our concerns regarding the B2H Project and we request that EFSC deny the Site Certificate.

I have also sent a bound copy of this material by the US Postal Service.

Sincerely,

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the usage of the "Local Streets" ¹ specifically the Modelaire-Hawthorne Loop) ², hereafter referred to as the "loop", of La Grande to access the site entrance. This residential "loop" was constructed without sidewalks for a new development around the early 1960s.

According to OAR 345-022-0110, Public Services (pg. 5. April 2017) "The applicant...must address all permanent and temporary impacts of the facility on housing, traffic, safety, police and fire protection, health care and schools." ³

My impression from reviewing the application Page 17 ⁴ is that the applicant has not fully examined the final portion of the intended route nor does it fully recognize or address the need for traffic mitigation. This "loop" is the only access to/from thirty-six houses to the rest of the city. The area to the north of the "loop" is occupied by the Grande Ronde Hospital and Medical Clinic. Two blocks to the east is located the local high school and a grade school. ²

In June of 2016, the Grande Ronde Hospital petitioned the City to have a conditional use for a parking lot expansion project next to Hawthorne. The Conditional Use Permit was approved subject to the Condition of Approval that "No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is developed to residential standards and is not designed to support commercial traffic." ⁵

The La Grande Director of Public Works, Kyle Carpenter, provided information regarding the widths for the streets in question. The two streets range from 33 feet to 37 feet in width with no sidewalks. I personally measured the area where the unpaved stem of Hawthorne leaves the "loop" to go up the hill. At the junction it measures 32 feet curb cut to curb cut and narrows to 18-21 feet in width as it goes around the corner up the hill. 6 The Public Works Director also provided pictures of the mapping system showing the existing utilities located in the "loop". 7-8. It should also be noted that from the entrance to the "loop" at Sunset Drive to the entrance of the site the road has a 16% grade.

Attachment U2 9 from the application shows an "Aerial Lift Crane to be Used During Construction" and the Transportation and Traffic Plan on page 19 10 lists a number of other vehicles anticipated to be used. Article 6.6 — Public Street Standards for the City of La Grande Section 6.6.002 states that "Collector Streets are designed to withstand normal trucks of an HS20 loading. Larger trucks are to utilize Arterial Streets where at all possible." 11 The majority of vehicles listed on page 19 exceed that limit and would be using a Local Street in addition to Arterial and Collector Streets. According to the Public Works Director the two streets in the "loop" were designed as Local Streets for residential use, able to accept the pressures of HS20 for the purpose of an occasional need such as a weekly garbage truck or an emergency vehicle but for no more than 5% of the time. The paving construction of these over 50 year old streets in the "loop" was not designed for repetitive use by vehicles heavier than a normal car. These streets in the "loop" have not been repaved, only patched when necessary, since they were first constructed.

The application does not address the "loop" specifically, but 3.1.2 (pg. 19) 10 and Table 6 (pg.17) 12 of the Transportation and Traffic Plan indicate there would be numerous vehicles using this route. Not knowing exactly just which vehicles would be on the "loop" daily but making a conservative estimate of 50 round trips (100 single) it would be a constant parade with one truck every 7.2 minutes. This is unacceptable for numerous reasons including constant excessive noise.

Not only would weight of the vehicles be a problem but the narrowness of the "loop" streets and the ninety degree blind curves that would have to be executed would be either impossible or extremely dangerous considering the turning radius for many of these large vehicles. The

already dangerous situation for a number of driveways that exit onto these "loop" streets at blind curves would be exacerbated. 13-14

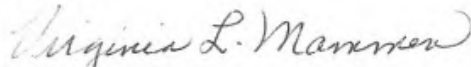
When considering only the traffic and safety issues listed above, the use of the "loop" as a part of the route for Idaho Power seems to be not only dangerous for the residents but unconscionable and irresponsible for Idaho Power to use such streets that are currently primarily for the neighborhood for walking (children to school, all ages for physical training), driving, or biking. I fear there are standards that are either not being considered or they are intentionally being ignored. There should be some common sense, courtesy and respect for the impact this project would impose on any neighborhood.

Finally, La Grande Ordinance Number 3077, which adopted Oregon State Traffic Laws by reference, states in Section 17 page 8 "It shall be unlawful for any person, firm or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes." Neither Modelaire/Hawthorne Loop nor Sunset Drive are posted as truck routes. 15-16

A site review and traffic plan must be completed prior to the cite certificate being issued and not 90 days prior to construction as stated.

For the above reasons I oppose the usage of the proposed route for the construction of the B2H transmission line.

Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon. 97850

gmammen@eoni.com

Exhibit 1

City of La Grande Ordinance Number 3242,
 Series 2018
 Page 236 of 312

**TABLE 1
 STREET STANDARDS**

Functional Classification	ADT Volume	Speed (mph)	# of Travel Lanes	Travel Lane Width	Turn Lane or Median Width	Bike Lanes	Min. Bike Lane Width	On-Street parking
Downtown Arterial	10,000	20	2-3	11'	11'			both sides
Arterial	10,000	40-55	2-5	12'	4-14'	optional ⁴	5'	none
Major Collector	2,000 - 10,000	25-45	2-3	11'	12'	required	5'	one or both sides
Minor Collector	1,000 - 2,000	25-35	2	11'	none	Optional ⁵	5'	one or both sides
Local Street	0 - 1,000	15-25	2	10'	none	none	none	one or both sides

Functional Classification	Sidewalks	Min. Sidewalk Width	Planting Strip Width ¹	Total Paved Width ²	Total ROW Width ³	Private Access Spacing
Downtown Arterial	required	12'	3'6" ⁶	49'	80'	200'
Arterial	required	5'	8'	36'-72'	80'-102'	200' - 400'
Major Collector	required	5'	8'	52'-60'	62'-90'	150' - 300'
Minor Collector	required	5'	8'	30'-48'	60'-78'	75' - 150'
Local Street	required	5'	8'	28'-36'	40'-66'	Each Lot

¹A portion of the required planting strip width may be used instead as additional sidewalk width or reduced right of way, as appropriate.

²The minimum of the paved width was calculated with the following assumptions:

Arterials: Two (2) travel lanes, four foot (4') median divider, no center turn lane, no bike lanes.

Major Collectors: Two (2) travel lanes, two (2) bike lanes, no center turn lane, parking on one (1) side.

Minor Collectors: Two (2) travel lanes, parking on one (1) side of street, no bike lanes.

Local Streets: Two (2) travel lanes, parking on one (1) side of street.

The maximum paved width for each street was calculated assuming the inclusion of all required and optional facilities. Minimum paved widths for each street are as required in Section 6.2.005 of this Code.

³These right-of-way width ranges are for new streets.

⁴Bike lanes should be provided on Arterials unless more desirable parallel facilities are designated and designed to accommodate bicycles.

⁵ Bike lanes should be provided on Minor Collectors where traffic volumes or other factors warrant. Otherwise, Minor Collectors should be designed and designated as shared roadway facilities with wide outside travel lanes of 14' on important bike routes.

Exhibit 2

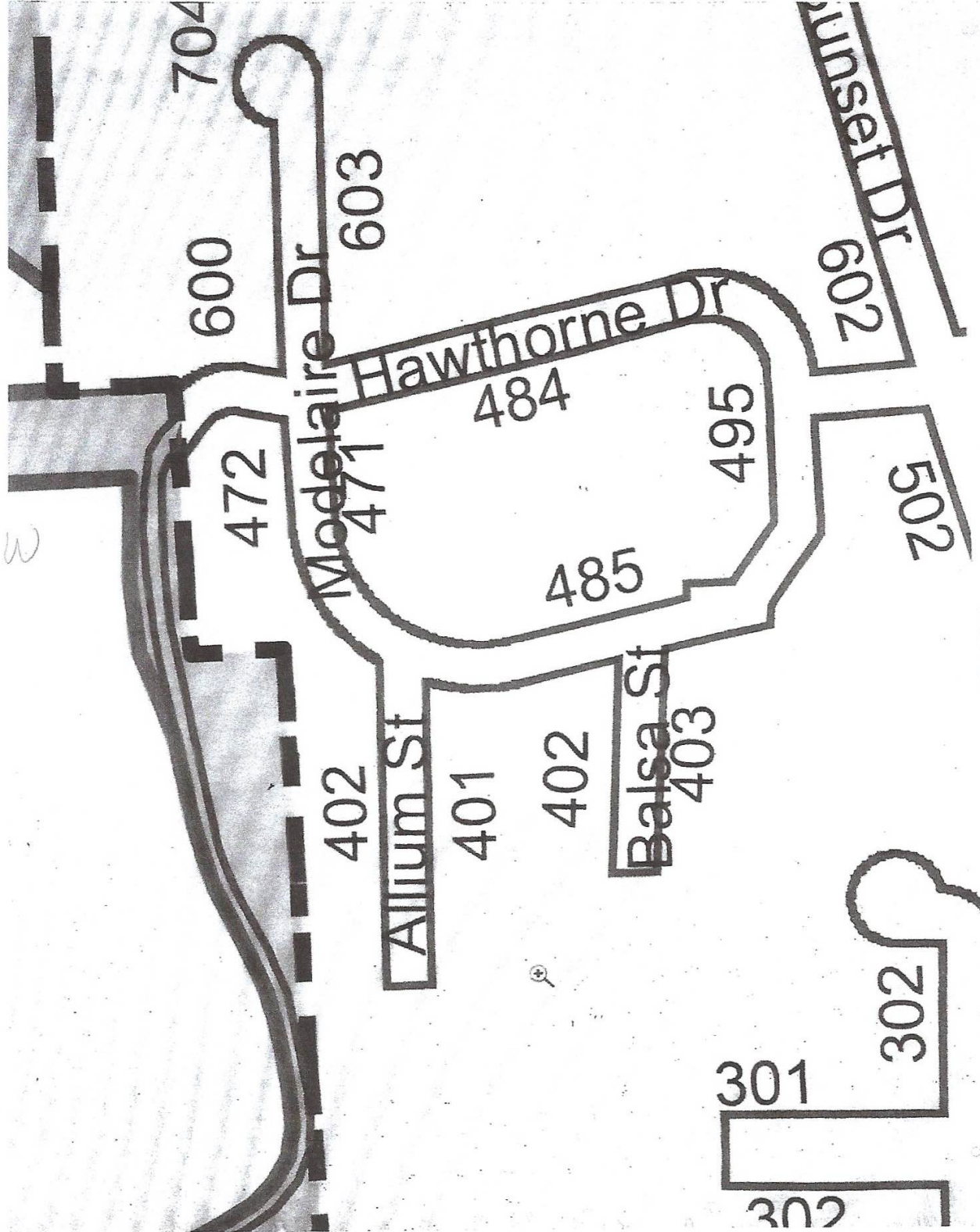


Exhibit 3

Public Services

ORAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

ORAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

ORAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (ORAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (ORAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

ORAR 345-024-0010 and 345-024-0015

This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety. Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

ORAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4

Idaho Power Responses to Comments and Requests for Additional Information on the B2H ApASC
 from the City of La Grande
 Compiled by ODOE. RAI's from the City of La Grande and Responses from IPC

U	U-Public Services include utilities such as road systems, water, sanitation services, power, and other amenities necessary for the construction.	Ordinance #2912, Series 1997 gives the City jurisdiction and control on all City street rights-of-way and Ordinance #3077, Series 2009, establishes the process and requirements for permits and licenses for uses of the streets that are not normal uses and may result in damages.	The project construction has two major road systems through La Grande that are proposed for this project – Morgan Lake Road via Gekeler Lane, 'C' Avenue, Walnut Street, and on up Morgan Lake Road. Roads along these routes are used by the ambulance service for accessing the hospital, the public transit system on its normal daily route, citizens to access locations within and outside this area and also for the school busing system for transporting kids to the La Grande Middle School, La Grande High School and Central Elementary School. In addition to the vehicular modes of travel, those routes are heavily used by bicyclists and pedestrians. The other route that would be utilized is the same route with the exception of turning onto Sunset Drive and up Hawthorne Street to a private gravel road that heads up the area above Deal Canyon. Two other routes that are not addressed but that would be obvious access routes for construction would be South 12th Street and South 20th Street. As a general rule, City streets are built with ninety degree angles, which may restrict some	To address the City's concerns regarding traffic and road use within the city's limits, Idaho Power has added the following proposed conditions to Exhibit K: <i>Land Use Condition 9: Prior to construction in Union County, the site certificate holder shall complete the following to address traffic impacts in the county:</i> <i>a. The site certificate holder shall finalize, and submit to the department for its approval, a final county-specific transportation and traffic plan. The protective measures described in the draft Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be included and implemented as part of the final county-specific plan, unless otherwise approved by the department;</i> <i>b. The site certificate holder shall work with the Union County Road Department and the City of La Grande Public Works Department to identify concerns related to Project construction traffic; and</i> <i>c. The site certificate holder shall develop traffic control measures to mitigate the effects of Project construction traffic.</i> <i>Land Use Condition 26: During construction in Union County, the site certificate holder shall conduct all work in compliance with the Union County-specific</i>
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Exhibit 5

103

IV. CONCLUSIONS

104 Based on the Findings of Fact above, the Planning Commission concludes that the application meets the
105 requirements established in LDC Articles 8.5 and other applicable codes and Ordinances.

106

107

V. ORDER AND CONDITIONS OF APPROVAL

108 Based on the conclusions above, the Planning Commission approves the Conditional Use Permit as
109 requested, subject to the following Conditions of Approval:

- 110 1. No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is
111 developed to a residential standards and is not designed to support commercial traffic.
- 112 2. Any existing driveway curb cuts along Hawthorn Drive bordering GRH's property, that are not used for
113 residential purposes, shall be removed and replaced with City standard improvements that exists
114 adjacent to such areas.
- 115 3. There is a storm sewer line extending through the project area that shall to be protected. Any
116 improvements that may affect the storm sewer line shall be reviewed and approved by the Public Works
117 Director.

118

119

VI. STANDARD CONDITIONS OF APPROVAL FOR LAND USE APPLICATIONS

- 120 1. **Revisions to a Valid Conditional Use Permit:** Any variations, alterations, or changes in a valid
121 Conditional Use Permit requested by the deed holder shall be considered in accordance with the
122 procedures of the Land Development Code as though a new Conditional Use Permit were being applied
123 for.
- 124 2. **Public Works Standards:** Where a development involves work within the public right-of-way, a Right-
125 of-Way Permit shall be obtained from the Public Works Department in advance of commencing with any
126 work in the right-of-way. All improvements within the public right-of-way shall be in conformance with the
127 most recent adopted City of La Grande "Engineering Standard Drawings and Specifications for
128 Construction Manual."
- 129 3. **Building Permits:** The City of La Grande Building Department shall be contacted early in the process
130 and in advance of development to coordinate and obtain required building, plumbing, electrical and/or
131 mechanical permits. All required permits shall be acquired in advance of construction.

132

133

VI. OTHER PERMITS AND RESTRICTIONS

134 The applicant and property owner is herein advised that the use of the property involved in this application
135 may require additional permits from the City of La Grande or other local, State or Federal Agencies.

136 The City of La Grande land use review, approval process and any decision issued does not take the place of,
137 or relieve the applicant of responsibility for acquiring such other permits, or satisfy any restrictions or
138 conditions thereon. The land use decision herein does not remove, alter, or impair in any way the covenants
139 or restrictions imposed on this property by deed or other instrument.

140 The land use approvals granted by this decision shall be effective only when the rights granted herein have
141 been exercised and commenced within one (1) year of the effective date of the decision. In case such right
142 has not been exercised and commenced or an extension obtained, the approvals granted by this decision
143 shall become null and void. A written request for an extension of time shall be filed with the Planning
144 Department at least thirty (30) days prior to the expiration date of the approval.

145

146

7/25/2019

Gmail - Modelaire Roadway Specifications

Exhibit 6



Virginia Mammen <4gmammen@gmail.com>

Modelaire Roadway Specifications

3 messages

Kyle Carpenter <KCarpenter@cityoflagrande.org>
To: "gmammen@eoni.com" <gmammen@eoni.com>

Fri, Jul 12, 2019 at 1:51 PM

I have attached a couple pictures of our mapping system that will give you a sense of where existing utilities are in Modelaire and Hawthorne. As for the widths of the roadways, I took measurements in multiple places, and found the following:

- Modelaire Drive (F Avenue) between Sunset Blvd and Hawthorne Drive is approximately 33 feet wide with a grade of about 5 Percent.
- Hawthorne Drive is approximately 32 feet wide at the bottom near the intersection of Modelaire/F Avenue and widens to about 34 feet where it intersects Modelaire at the top of the hill. The grade heading up hill is approximately 15.5 Percent.
- Modelaire Drive is generally 36 feet wide with some minor variability generally less than a foot (35' to 37'). On the southernmost segment of the roadway where the majority of the elevation gain is observed the grade is approximately 16 Percent.

Let me know if there are any other specifications of these roadways that you are interested in that I have missed. Have a great weekend and thanks for the treats, the guys were very appreciative.

Kyle Carpenter, PE

Public Works Director

City of La Grande

Public Works

Ph: (541) 962-1325

Fax: (541) 963-4844

2 attachments



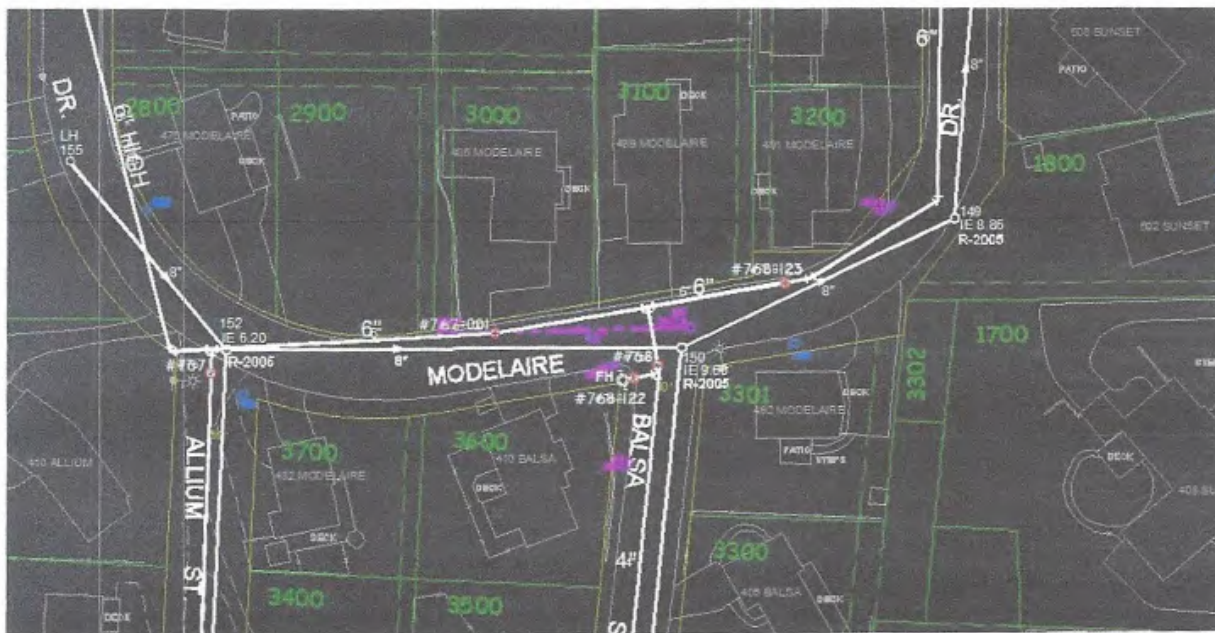
Hawthorne.jpg
150K

Modelaire.jpg
120K

7/25/2019

0 (1067x555)

Exhibit 7



7/25/2019

0 (1397x451)

Exhibit 8



Exhibit 9

attachment U2

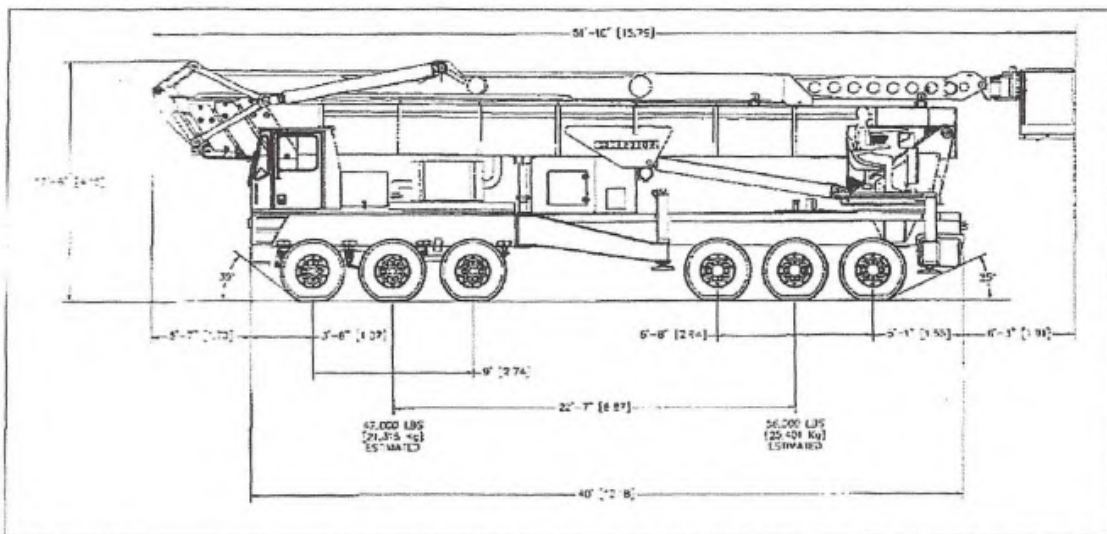


Figure 2. Example Aerial Lift Crane to be Used During Construction (Roadable Length 52 Feet; Width 8 Feet 6 Inches)

Exhibit 10

The following is a summary of anticipated equipment to be used for each transmission-line construction activity.

- Survey work: pickup trucks or ATVs.
- Timber removal: pickup trucks, feller bunchers, dump trucks, wood chippers.
- Road construction: pickup trucks, bulldozers, motor graders, and water trucks.
- Hole digging, installation of directly embedded structures, or foundation installation: pickup trucks, 2-ton trucks, digger derrick trucks, hole diggers, bulldozers, concrete trucks, water trucks, cranes, hydro cranes, wagon rock drills, dump trucks, and front-end loaders.
- Hauling lattice steel members, tubular poles, braces, and hardware to the structure sites: steel haul trucks, carry alls, cranes, and forklifts.
- Assembly and erection of structures: pickup trucks, 2-ton trucks, carry alls, cranes, and a heavy lift helicopter.
- Wire installation: pickups, wire reel trailers, diesel tractors, cranes, 5-ton boom trucks, splicing trucks, three drum pullers, single drum pullers, tensioner, sagging dozers, carry-alls, static wire reel trailers, bucket trucks, and a light duty helicopter.
- Final cleanup, reclamation, and restoration: pickup trucks, 2-ton trucks, bulldozers, motor graders, dump trucks, front-end loaders, hydro-seed truck, and water trucks.

The highest level of traffic will be when the wire stringing operations begin while several other operations are occurring at the same time, which will likely include ROW clearing, installing foundations, hauling steel, and assembling and erecting structures. For the station work, the highest level of traffic will be during site grading and foundation installation. For the communication station sites, the highest level of traffic will be during grading and site preparation.

Detailed estimates of trips generated by transporting Project construction equipment will be provided by the construction contractor prior to construction.

3.1.3 Traffic Related to Timber Removal

In forested areas, the Project will require removal of timber from the Project ROW and for construction and improvement of access roads. Specific timber harvest plans have not been finalized. Logs from timber clearing may be transported to nearby sawmills. Decisions regarding transportation routes for harvested timber will be made following completion of a timber harvest plan, and the number of log truck tips will be estimated when the timber harvest plan has been finalized. Logging slash will remain onsite if possible. For additional discussion regarding removal of timber in forested areas, see Exhibit K, Attachment K-2, ROW Clearing Assessment.

3.1.4 Impacts to V/C Ratios

Based on the estimated trip generation numbers in Tables 4 and 6, a maximum of approximately 1,294 daily one-way vehicle trips are expected within any one construction spread. To facilitate traffic and other analyses, the two construction spreads are divided into smaller sections based on similar construction windows and seasonal weather restrictions. Not all construction sections will have the same number of concurrent construction activities, depending on how the construction contractor sequences and executes the Project. Some sections will have fewer daily vehicle trips. For the purposes of the traffic analysis, the spreads are divided into five sections with multi-use areas that could have additive traffic impacts. The sections are assumed to have approximately equal levels of activity. The 1,294 daily one-way trips per spread divided over five sections of more concentrated traffic results in 259 daily one-

Exhibit 11

City of La Grande Ordinance Number 3242,
Series 2018
Page 252 of 312

ARTICLE 6.6 – PUBLIC STREET STANDARDS

SECTION 6.6.001 - PURPOSE

Upon the request of the La Grande City Council, a variety of street design standards have been reviewed and are now incorporated in the Land Development Code.

SECTION 6.6.002 - CLASS I IMPROVEMENT STANDARDS

This classification will cover those streets that are designed to meet the standards for an expected life of twenty (20) years or more. The attached drawings shall be the minimum standard for those streets in this classification. All streets designated as Federal Aid Urban Streets (F.A.U.) shall be constructed under these design standards. Streets in this designation shall be constructed with sidewalks when at all possible in an effort to increase pedestrian safety. Collector streets are designed to withstand normal trucks of an HS 20 loading. Larger trucks are to utilize Arterial streets where at all possible. This level of development shall be the ultimate goal for all streets within the City of La Grande.

Possible means of financing available for this Class shall be methods A, B, C, D, E, F, G, and H in Section 6.6.006.

A. Advantages

1. The construction life is extended to a period above other City standards.
2. The visible aesthetics in relationship to having curbs and a blacktop surface with landscaping or concrete driveways and a sidewalk is generally appealing to the public.
3. Easy maintenance for the Public Works Department for cleaning and minor repair.
4. Storm sewer drainage is confined within the bounds of the curbs during minor flooding periods.
5. Parking is restricted to a solid barrier, that being the curb; this restricts parking in the area on the back side of the curb and confines travel to the street surface.
6. Defined areas for possible cross walks, signs, power poles, and other utilities that are restricted to the outside areas behind the curbs.
7. It allows for a wide range of financing methods and is to City standards for a ten (10) year Bancroft bonding.
8. Provides a dust free surface.

B. Disadvantages

1. The extreme high level of cost that is incurred with this type of development.

SECTION 6.6.003 - CLASS II IMPROVEMENT LEVEL

Streets constructed in this classification shall be constructed to the same standards as Class I Streets with the exception of the form of drainage system. These streets shall meet the standards as shown on the attached drawing. This level of construction shall be only utilized in substitution for Class I Streets when it is determined by the City Council at the recommendation of the City Engineer or Engineering Superintendent, that an adequate drainage system cannot be installed for a Class I Street.

Exhibit 12

Table 6. Construction Vehicle Trips per Day per Construction Spread

Construction Crew Type	Construction Vehicles					
	Light Construction Vehicles			Heavy Construction Vehicles		
	Number of Pickups/ Mechanic Trucks (per day)	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)	Number of Other Vehicles	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)
Substation Construction	20	2	40	5	2	10
ROW Clearing	9	4	36	5	4	20
Roads/ Pad Grading	9	4	36	9	2	18
Foundations	9	2	18	5	8	40
Tower Lacing (assembly)	27	2	54	0	0	0
Tower Setting (erection)	20	2	40	0	0	0
Wire Stringing	9	4	36	9	4	36
Restoration	3	2	6	0	0	0
Blasting	5	4	20	0	0	0
Material Delivery	20	8	160	12	2	24
Mechanic and Equipment Mgmt.	5	6	30	0	0	0
Refueling	0	0	0	5	4	20
Dust Control	0	0	0	5	4	20
Construction Inspection	5	8	40	0	0	0
Concrete Testing	5	4	20	0	0	0
Environmental Compliance	9	6	54	0	0	0
Surveyors	5	3	30	0	0	0
Totals	—	—	620	—	—	188

Exhibit 13

7/24/2019

Roadway Design Manual: Minimum Designs for Truck and Bus Turns

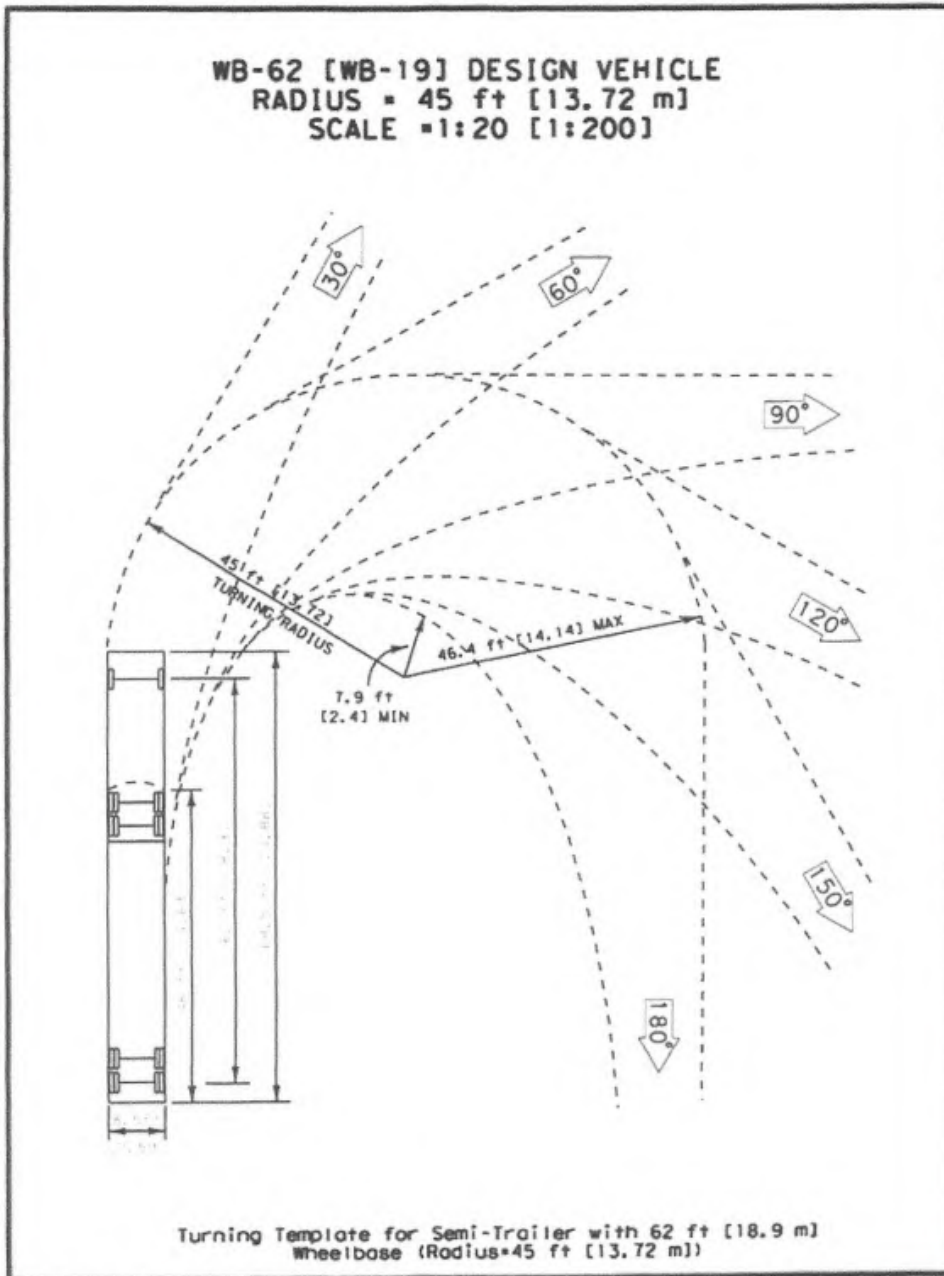


Figure 7-4. Turning Template for Semi-Trailer with 62 ft [18.9 m] Wheelbase, (not to scale). Click [here](#) to see a PDF of the image.

7/24/2019

7-1.png (596x805)

Exhibit 14

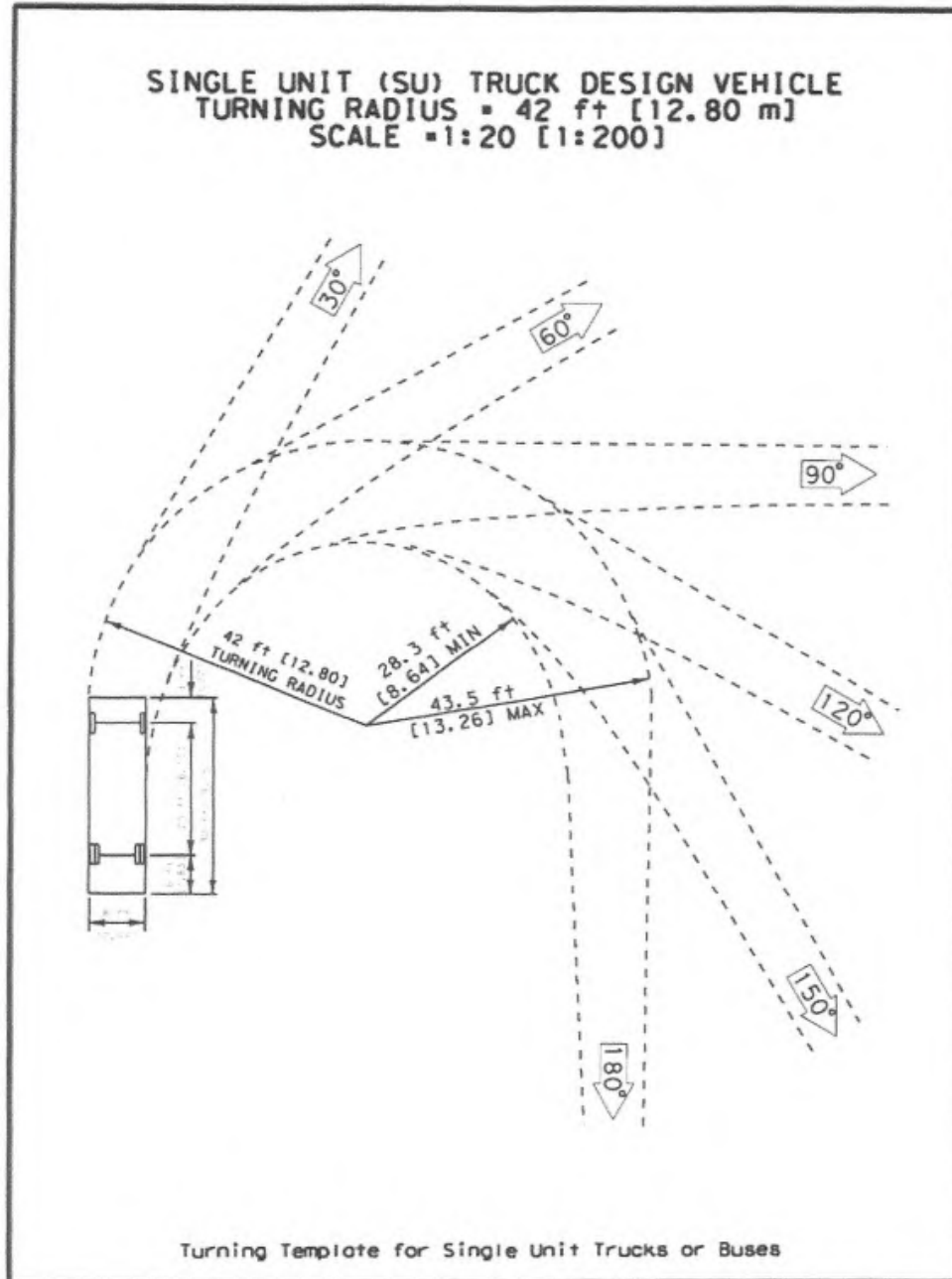


Exhibit 15

**CITY OF LA GRANDE
ORDINANCE NUMBER 3077
SERIES 2009**

**AN ORDINANCE CONTROLLING VEHICULAR AND PEDESTRIAN TRAFFIC, PARADES
AND PROCESSIONS AND ISSUANCE OF PERMITS; PROVIDING PENALTIES; AND
REPEALING ORDINANCE NUMBER 2845, SERIES 1993; ALL AMENDING ORDINANCES
AND ALL OTHER ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH;
AND DECLARING AN EFFECTIVE DATE**

THE CITY OF LA GRANDE ORDAINS AS FOLLOWS:

Section 1. This Ordinance may be cited as the City of La Grande Uniform Traffic Ordinance.

Section 2. APPLICABILITY OF STATE TRAFFIC LAWS.

Oregon Revised Statutes, Chapter 153, and the Oregon Vehicle Code, ORS Chapter 801 and 822, as now constituted, are adopted by reference. Violation of an adopted provision of those chapters is an offense against the City.

Section 3. DEFINITIONS

In addition to those definitions contained in the Oregon state Motor Vehicle Code, the following words or phrases, except where the context clearly indicates a different meaning, shall mean:

a. Alley

A street or highway primarily intended to provide access to the rear or side of lots or buildings in urban areas and not intended for through vehicular traffic.

b. Bicycle

A bicycle is a vehicle that:

1. Is designed to be operated on the ground on wheels;
2. has a seat or saddle for use of the rider;
3. is designed to travel with not more than three (3) wheels in contact with the ground;
4. is propelled exclusively by human power; and,
5. has every wheel more than fourteen inches (14") in diameter or two (2) tandem wheels, either of which is more than fourteen inches (14") in diameter.

c. Bicycle Lane

That part of the highway, adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

d. Bicycle Path

A public way, not part of a highway, which is designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

e. Block

The part of one side of a street lying between the two (2) nearest cross streets.

f. Central Business District

Exhibit 16

ORDINANCE NUMBER 3077
SERIES 2009
Page (8)

a. City Regulation of Special Movement of Oversized Load

The applicant shall submit an application to the City Manager or designee, showing the terminal points of the purported movement; the proposed route; the nature of the movement requested, including the weight and dimensions of the vehicle, load, machine, building, or structure to be moved; the time, date and duration of the proposed movement.

b. Special Movement Permit

A permit shall be required to move any vehicle, structure, or load on, or to access a street when, after preparation for movement, the vehicle, structure or load exceeds fourteen feet (14') in height, requires the use of guy wires, or could result in the blockage of a street. An approved application may serve as a permit, and a copy of the approved application shall be provided to the applicant.

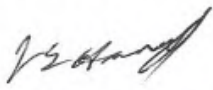
Section 17. TRUCK ROUTES

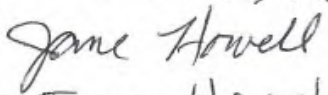
- a. It shall be unlawful for any person, firm, or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes.
- b. Any vehicle with a gross weight over 26,000, pounds specifically picking up deliveries or making deliveries to any business or residence located on a street that is not a truck route will be exempted if the vehicle is driven from the truck route to the destination in the shortest, most direct, and safest route.
- c. The use of Jacob brakes shall not be allowed within the city limits of La Grande, Oregon.
- d. Truck routes will be posted as follows:
 1. Walnut street north from the city limits to C Avenue;
 2. C Avenue east from Walnut Street to Gekeler Avenue;
 3. Gekeler Avenue east to the city limits;
 4. 12th street south from Gekeler Avenue to the city limits;
 5. 2nd Street south from the city limits to Adams Avenue;
 6. Monroe Avenue east from Spruce Street to Highway 82;
 7. Jackson Avenue east from Spruce Street, and
 8. Spruce Street south from the city limits to Monroe.

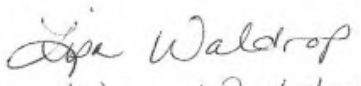
Section 18. IMPOUNDMENT AND DETENTION OF VEHICLES

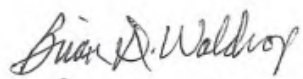
- a. Whenever a vehicle is placed in a manner or location that constitutes an obstruction to traffic or a hazard to public safety, a police officer or enforcement officer shall order the owner or operator of the vehicle to remove said vehicle. If the vehicle is unattended, the officer or enforcement officer may cause the vehicle to be towed and stored at the owner's expense. The owner shall be liable for the costs of towing and storing, notwithstanding that the vehicle was parked by another or that the vehicle was initially parked in a safe manner but subsequently became an obstruction or hazard.

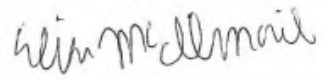
I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE 
PRINTED NAME James E. Howell II
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SIGNATURE 
PRINTED NAME BRIAN D. WALDROP
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SIGNATURE 
PRINTED NAME EUSE McILMAIL
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EMAIL mcilmail154@hotmail.com


I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL



Jessie Huxell
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jessiehuxell@live.com

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL

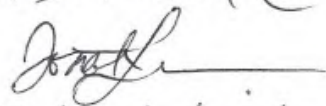

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CHRIS Huxell @ EMAIL.COM

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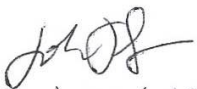
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SIGNATURE 
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EMAIL


I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE 
PRINTED NAME Andrea Galzow
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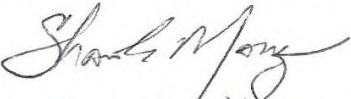
SIGNATURE 
PRINTED NAME Frances E. Lillard
ADDRESS 471 madelaire Dr. L.G.
EMAIL

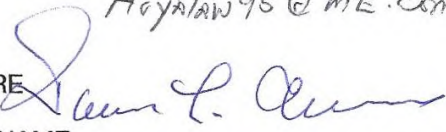
SIGNATURE 
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SIGNATURE 
PRINTED NAME M. Jeannette Smith
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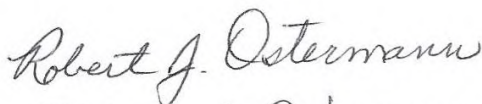
SIGNATURE 
PRINTED NAME KIMBERLEY HEITSTUMAN
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EMAIL kimheitstuman@hotmail.com


I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE: 
PRINTED NAME Shawn K. Mangum
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SIGNATURE 
PRINTED NAME
ADDRESS Dennis L. Auer 541-9637720
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EMAIL N/A

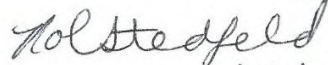
SIGNATURE 
PRINTED NAME Linda Snyder
ADDRESS 491 Modelaire
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SIGNATURE 
PRINTED NAME Robert J. Ostermann
ADDRESS 495 Modelaire Dr. LaGrande, OR 97850
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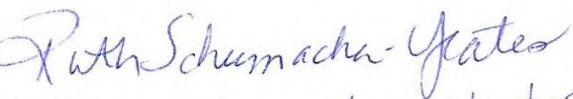
SIGNATURE 
PRINTED NAME Robin J. Ostermann
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EMAIL

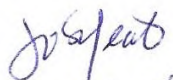
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EMAIL rstedfeld@yahoo.com

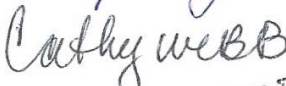
SIGNATURE 
PRINTED NAME Rita Allen
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EMAIL

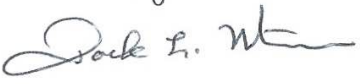
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EMAIL ruthschumacheryeates@gmail.com



SIGNATURE 
PRINTED NAME JOHN YEATES
ADDRESS 408 SUNSET DR. LA GRANDE, OR 97850
EMAIL jyeates52@gmail.com


I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

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PRINTED NAME LOIS BARRY
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EMAIL loisbarry31@gmail.com

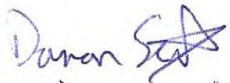
SIGNATURE 
PRINTED NAME CATHY WEBB
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EMAIL thunkski@gmail.com


SIGNATURE 
PRINTED NAME Jack L. Martin
ADDRESS 1412 Gilcrest Dr. LaGrande
EMAIL Buff Martin 27 @ @ G Mail . com

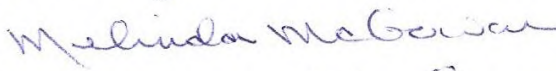
SIGNATURE 
PRINTED NAME GERALDINE BRASETH-PALMER
ADDRESS 1602 Goldencrest Drive LA GRANDE, Ore 97850
EMAIL 


SIGNATURE 
PRINTED NAME Jean BAPH
ADDRESS 1509 MADISON AVE LaGrande, OR 97850
EMAIL Jbaph19@gmail.com


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SIGNATURE 
PRINTED NAME Damon Sexton
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SIGNATURE 
PRINTED NAME Melinda McGowan
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EMAIL melindamegowan@gmail.com

SIGNATURE 
PRINTED NAME Keith D. Hudson
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EMAIL Keithdhudson@gmail.com

SIGNATURE 
PRINTED NAME Laura Elly Hudson
ADDRESS 605 F Ave, La Grande OR 97850
EMAIL ellyhudson@gmail.com

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Gary D. Pierson*
PRINTED NAME Gary D. Pierson
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EMAIL -

SIGNATURE *Lynn Wheeler Duncan*
PRINTED NAME LYNN WHEELER DUNCAN
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SIGNATURE *Anne G. Cavinato*
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EMAIL acavinat@eou.edu

SIGNATURE *Joe Horst*
PRINTED NAME JOE HORST
ADDRESS 86 HAWTHORNE DR. LA GRANDE OR.
EMAIL joehorst@eoni.com

SIGNATURE *Angela Sherer*
PRINTED NAME ANGELA Sherer
ADDRESS 91 - W. Hawthorne Dr. LaGrande, OR 97850
EMAIL asherer@frontier.com.

I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE *Robert J. Sherer*
PRINTED NAME Robert J. Sherer
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SIGNATURE *Heather M. Null*
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SIGNATURE *Bert R. Frewing*
PRINTED NAME Bert R. Frewing
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EMAIL jeanfrewing@gmail.com

SIGNATURE *Lindsay McCullough*
PRINTED NAME Lindsay McCullough
ADDRESS 406 Balsa St., La Grande, OR 97850
EMAIL lindz_mm91@hotmail.com

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

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SIGNATURE *Merle E. Comfort*
PRINTED NAME MERLE E. COMFORT
ADDRESS 2009 SCORPIO DRIVE LA GRANDE OR 97850
EMAIL MERLECOMFORT@GMAIL.COM

SIGNATURE *Robin L. Maille*
PRINTED NAME Robin Maille
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EMAIL bruce.kevan@lagrandesd.org

SIGNATURE *Carol S. Summers*
PRINTED NAME CAROL S. SUMMERS
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EMAIL carolsummers1935@gmail.com

SIGNATURE *Caroline Kaye Juniper*
PRINTED NAME Caroline Kaye Juniper
ADDRESS 406 NTH St. LaGrande - OR 97850
EMAIL

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SIGNATURE *Gerald D. Juniper*
PRINTED NAME *Gerald Darwin Juniper*
ADDRESS *406 4th St. LaGrande OR. 97850*
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PRINTED NAME
ADDRESS
EMAIL

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PRINTED NAME
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PRINTED NAME
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EMAIL

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:28 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposal Order 5/23/2019
Attachments: Scan 2019-8-15 17.14.06.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter sign by me and 46 other residents of La Grande expressing our concerns regarding the B2H Project and requesting that EFSC Deny the Site Certificate.

I have also sent a bound copy of this material by US Postal Service.

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, Oregon. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the predicted noise levels resulting from construction and operation of the proposed Boardman to Hemingway Transmission Line Project. I would like to address the noise coming from the blasting and rock breaking specifically above the area at the top of Modelaire Drive 1 both to the north and the south of that area and also the construction traffic noise that that will impact the west hills and the area below.


In Exhibit X page X-9 3.3.1.1 2 blasting and rock breaking is mentioned saying that "Modern blasting techniques include the electronically controlled ignition of multiple small explosive charges in an area of rock that are delayed fractions of second, resulting in a total event that is generally less than a second. Impulse (instantaneous) noise from blasts could reach up to 140dBA at the blast location or over 90 dBA within 500 feet." This sounds oh so "don't worry about it, it will be OK just over in a split second." Living in this area off Modelaire Drive, I don't find this at all comforting. And the fact that this will be overseen by properly licensed personnel and all of the necessary authorizations doesn't help anything either.

The area in question, which for such inordinate construction is extremely close to many residents, has been my home for over 50 years and during

related medical problems and exhibit various reactions to loud noises.¹⁰ These children also live in the neighborhoods to be affected by the noise so they would be impacted coming and going to school, at home and also while at school. To impose the constant possibility of loud noises is cruel, disrespectful and totally unacceptable.¹¹

For a project like this involving blasting and heavy machinery noise so close to homes, schools, and medical facilities impacting hundreds of peoples' daily lives, the day to day agitation, wondering what is coming next, fear and being on constant alert are not just addressed by some type of mitigation but must be addressed by a route that is much less impactful to peoples' safety, sanity, and health.

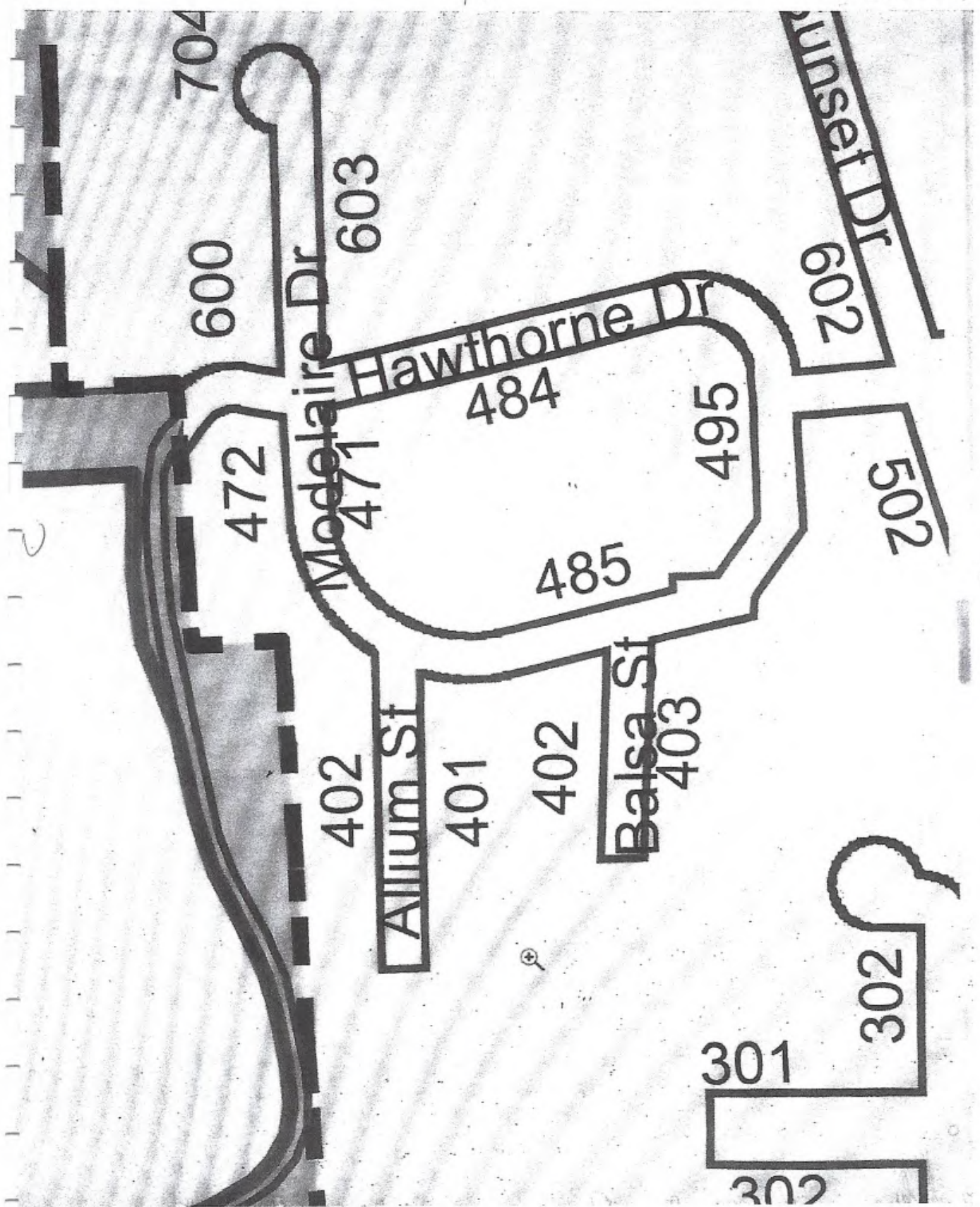
Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

gmammen@eoni.com

Exhibit 1



N

2

11

5

Exhibit 2

Boardman to Hemingway Transmission Line Project

Exhibit X

1 **3.3 Predicted Noise Levels**

2 OAR 345-021-0010(1)(x)(A): Predicted noise levels resulting from construction and operation
3 of the proposed facility.

4 **3.3.1 Construction Noise**

5 **3.3.1.1 Predicted Construction Noise Levels**

6 Project construction will occur sequentially, moving along the length of the Project route, or in
7 other areas such as near access roads, structure sites, conductor pulling sites, and staging and
8 maintenance areas. Overhead transmission line construction is typically completed in the
9 following stages, but various construction activities may overlap, with multiple construction
10 crews operating simultaneously:

- 11 • Site access and preparation
- 12 • Installation of structure foundations
- 13 • Erecting of support structures
- 14 • Stringing of conductors, shield wire, and fiber-optic ground wire

15 The following subsections discuss certain construction activities that will periodically generate
16 audible noise, including blasting and rock breaking, implosive devices used during conductor
17 stringing, helicopter operations, and vehicle traffic.

18 **Blasting and Rock Breaking**

19 Blasting is a short-duration event as compared to rock removal methods, such as using track rig
20 drills, rock breakers, jackhammers, rotary percussion drills, core barrels, or rotary rock drills.
21 Modern blasting techniques include the electronically controlled ignition of multiple small-
22 explosive charges in an area of rock that are delayed fractions of second, resulting in a total
23 event duration that is generally less than a second. Impulse (instantaneous) noise from blasts
24 could reach up to 140 dBA at the blast location or over 90 dBA within 500 feet.

25 Lattice tower foundations for the Project typically will be installed using drilled shafts or piers;
26 however, if hard rock is encountered within the planned drilling depth, blasting may be required
27 to loosen or fracture the rock to reach the required depth to install the structure foundations.
28 Final blasting locations will not be identified until an investigative geotechnical survey of the
29 analysis area is conducted during the detailed design.

30 The contracted blasting specialist will prepare a blasting plan that demonstrate compliance with
31 applicable state and local blasting regulations, including the use of properly licensed personnel
32 and the acquisition of necessary authorizations. The Framework Blasting Plan is set forth in
33 Exhibit G, Attachment G-5.

34 **Implosive Devices**

35 An implosive conductor splice consists of a split-second detonation with sound and flash.
36 Implosive splicing activities are anticipated to be limited to daytime hours. A blasting plan will be
37 developed by an individual certified and licensed to perform the work. The plan will
38 communicate all safety and technical requirements including, but not limited to, delineation of
39 the controlled access zone and distance away from residences.

Exhibit 3

Public Services

OAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

OAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

OAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (OAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (OAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

OAR 345-024-0010 and 345-024-0015

- This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety.
- Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

OAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4a

8/5/2019

Oregon Secretary of State Administrative Rules

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Chapter 340

Division 35

NOISE CONTROL REGULATIONS

340-035-0035

Noise Control Regulations for Industry and Commerce

(1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 7, except as otherwise provided in these rules. [Table not included. See ED. NOTE.]

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind energy facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies. [Table not included. See ED. NOTE.]

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b)-(f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind energy facility may conduct measurements to determine the actual ambient L10 and L50 background level.

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with wind speed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient background level" does not include noise generated or caused by the wind energy facility.

(III) The noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 8), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. The easement or covenant must authorize the wind energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

Exhibit 4b

8/5/2019

Oregon Secretary of State Administrative Rules

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

Exhibit 5a

Controlling the Adverse Effects of Blasting

This module addresses the control of offsite impacts that result from blasting, namely:

- vibrations,
- airblast, and
- flyrock.

Much of the information in the module is derived from the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The performance standards apply to all surface coal mines. Similar standards have been adopted on some State and local levels and applied to non-coal blasting operations such as quarrying and construction.

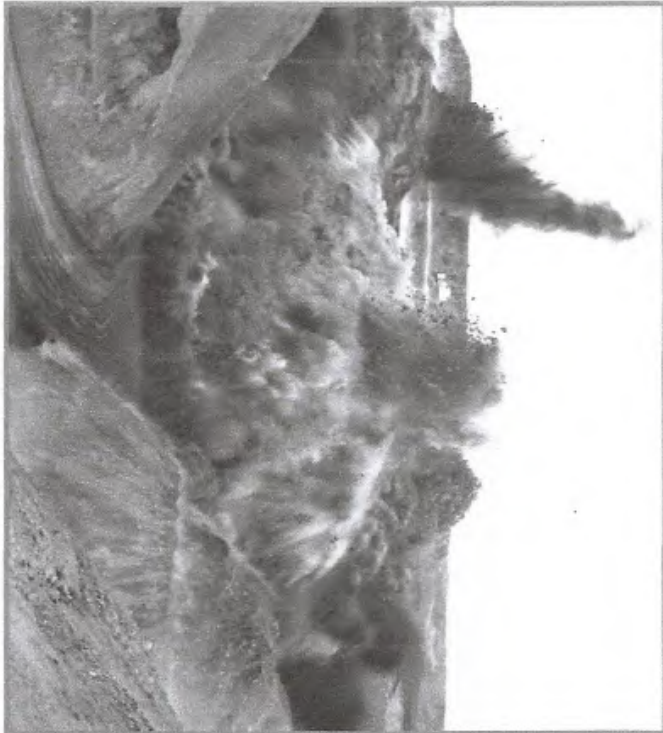
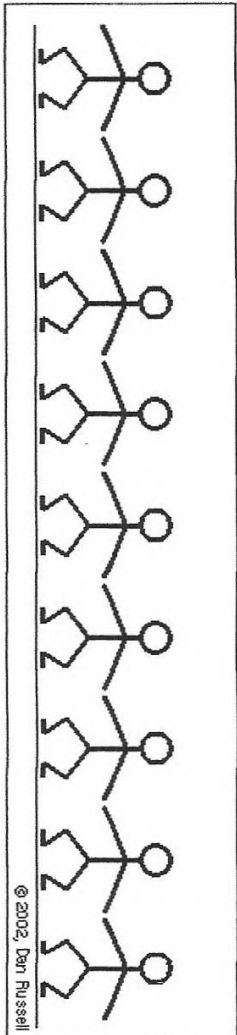


Exhibit 5b

Part I: Ground Vibrations, Airblast, and Flyrock

Explosive energy is used to break rock. However, the use of this energy is not 100-percent efficient. Some of the energy escapes into the atmosphere to generate *airblast or air vibrations*. Some of the energy also leaves the blast site through the surface soil and bedrock in the form of *ground vibrations*.



Both air and ground vibrations create waves that disturb the material in which they travel. When these waves encounter a structure, they cause it to shake. Ground vibrations enter the house through the basement and airblast enters the house through the walls and roof.

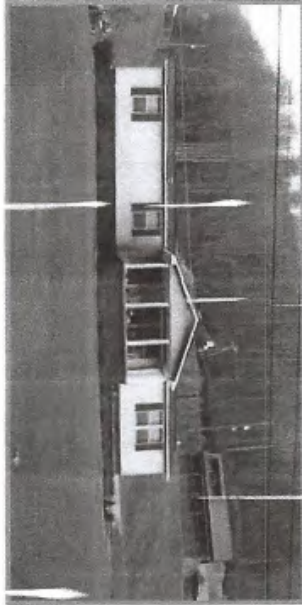
Airblast may be audible (noise) or in-audible (concussion). When outside a house the blast may be heard because of the noise, however noise has little impact on the structure. The concussion wave causes the structure to shake and rattles objects hanging on walls or sitting on shelves. This "interior noise" will alarm and startle people living in the house.

Flyrock is debris ejected from the blast site that is traveling through the air or along the ground. Flyrock the single most dangerous adverse effect that can cause property damage and personal injury or death.

Exhibit 5g

Blasting Impacts on Structures

Both above-ground and below-ground structures are susceptible to vibration impacts. Structures can include onsite mine offices and buildings, as well as offsite residences, schools, churches, power-transmission lines, and buried pipelines. Some of these structures may include historic or cultural features sensitive to even low levels of vibrations.



It is important to understand:

1. the causes of ground vibrations and airblast, and
2. what practices can be followed to control and minimize the adverse effects

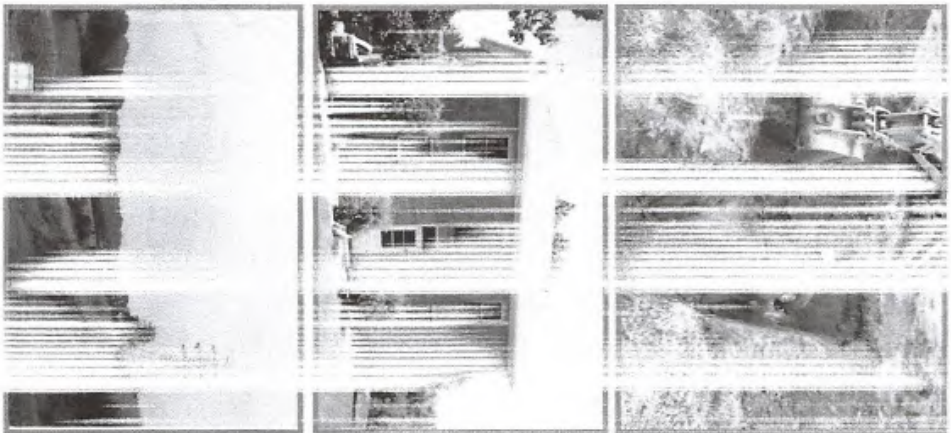
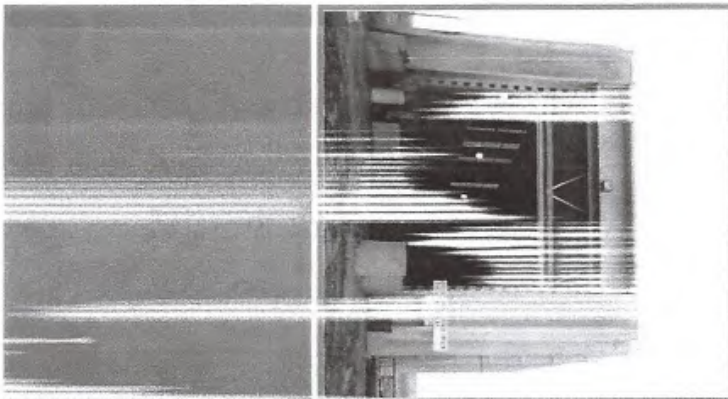
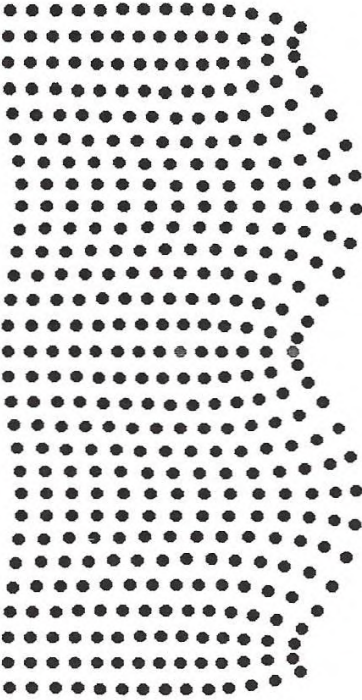


Exhibit 5d

Ground Vibrations

Ground vibrations propagate away from a blast site as Rayleigh (or surface) waves. These waves form a disturbance in the ground that displaces particles of soil or rock as they pass by. Particle motions are quite complicated. At the ground surface (free boundary), measured particle motions have the greatest displacements, and displacements decrease with depth (see the illustration below). At a depth of between 20 to 50 feet below ground surface, particle displacements are barely detectable. Structures that are well coupled to the ground tend to move with this motion; structures buried in the ground are less affected by surface motions.



©1999, Daniel A. Russell

Ground vibrations are measured in terms of **particle velocity** and are reported in inches per second (ips) or the speed at which a particle of soil or rock moves.

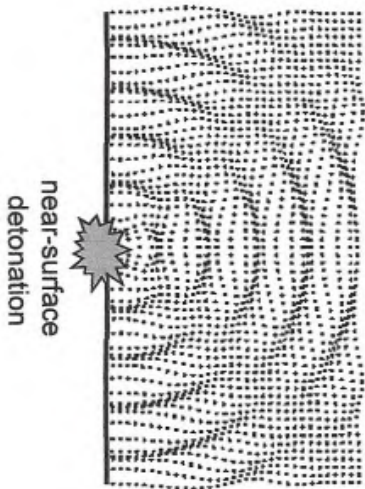
At typical blasting distances from residential structures, the ground only moves with displacements equal to the thickness of a piece of writing paper. In terms of displacement, this equates to hundredths of an inch; visually, such movement cannot be detected.

Airblast

Exhibit 5 e

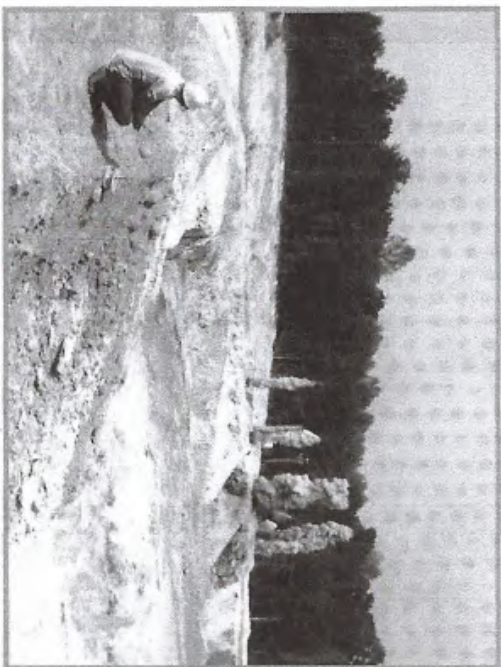
Airblast is measured as a pressure in pounds per square inch (psi) and is often reported in terms of **decibels (dB)**.

Airblast is a pressure wave that that may be audible or inaudible. Elevated airblast levels are generated when explosive energy in the form gases escape from the detonating blast holes. Energy escapes either through the top stemming or through fractures in the rock along the face or at the ground surface.



Airblast radiates outward from the blast site in all directions and can travel long distances. Sound waves travel much slower (1,100 ft/s) than ground vibrations (about 5,000 – 20,000 ft/s). Hence, airblast arrives at offsite structures later than do ground vibrations.

Both ground vibrations and airblast cause structures to shake structures. Occupants in structures that are located far from a blast may experience shaking from vibration and airblast as two separate, closely spaced events. This can be particularly bothersome, as it prolongs the duration of structure shaking and leads the property owner to think that two separate blasts occurred.



Structure Response

Exhibit 5 F

As ground and air vibrations reach a structure, each will cause it to shake. Structure response is dependant on the vibration characteristics (frequency and amplitude) and structure type.

Ground Vibrations enter the house through the basement. This is like shaking the bottom of a flag pole. Movement at the top of the pole depends on how (frequency) and how hard (amplitude) the bottom of the pole is shaken. If shaken at just the right pace, or at the pole's natural frequency, the top will move significantly compared to the bottom. Motion at the top is amplified from the bottom motion.

All blast damage studies have measured incoming ground vibrations at the ground surface. The observed structure amplifications were typically between 1 to 4 times the ground vibration. Structure response below ground level is the same or less than the incoming vibrations

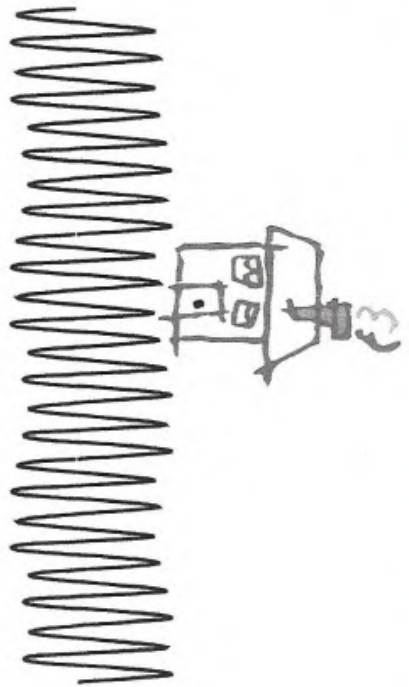
Airblast enters the house through the roof and walls. Like ground vibrations, the frequency and amplitude of the vibrations affect structure response. However the low frequency events (concussion) that most strongly affect structures is normally only a one or two cycle event.

Due to the different arrival times of ground and air vibrations, occupants may feel two distinct impacts on the house.

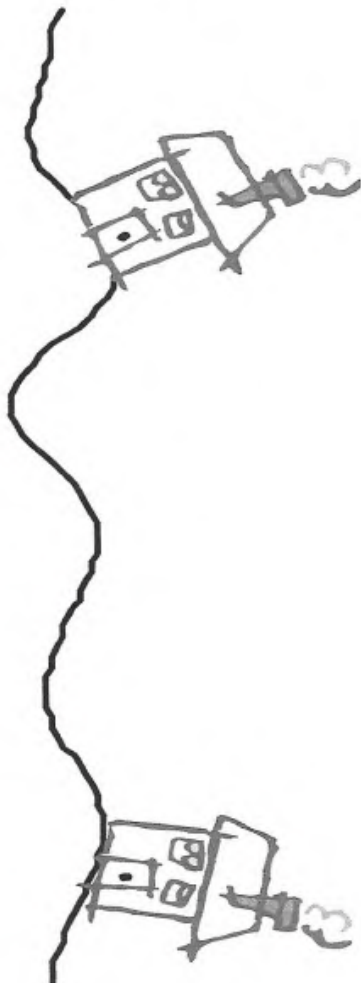


Ground Vibration Structure Response

Exhibit 5g



On the other hand, low-frequency wave cycles are long as compared with the dimensions of structures. Accordingly, low frequencies tend to efficiently couple energy into structures and to promote higher-amplitude, long-duration shaking.



High frequencies do not promote structure shaking. The length of a single high-frequency wave cycle is short as compared with the dimension of a structure. A structure does not significantly respond to high frequencies.

8/4/2019



Harvard Health Publishing
HARVARD MEDICAL SCHOOL

Trusted advice for a healthier life

A noisy problem - Harvard Health

Exhibit 16
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What can we help you find?



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HEALTH

MIND &
MOOD

PAIN

STAYING
HEALTHY

CANCER

DISEASES &
CONDITIONS

MEN'S
HEALTH

WOMEN'S
HEALTH

LICENSING

Harvard Men's Health Watch

A noisy problem

People often become more sensitive to noise as they age, which can affect their mental and physical health.

Published: March, 2019



Image: © Juanmonino/Getty Images

Are you more sensitive to noises than you used to be? Do certain sounds now feel too loud and jarring? Don't worry; it's actually quite normal.

Age-related hearing loss is common among older adults and affects about two-thirds of men in their 70s and 85% of men ages 80 and older. Although it's not clear why, this can also make people hypersensitive to sounds that they used to tolerate easily, which in turn can affect their well-being.

"Exposure to noises from crowds, traffic, and other everyday sounds can become harder to tolerate and increase stress levels, leading to anxiety and a reduction in overall quality of life," says Dr. Stephanie Tompkins, an audiologist with Harvard-affiliated Massachusetts Eye and Ear. "As your sensitivity to noises increases, this can lead to greater isolation, too, as you may try to avoid potentially noisy places and situations."

Exhibit 7a

8/4/2019

Hospital Noise: How Noise Reduction Helps Patients Heal



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Quiet in the Hospital: How Noise...

Quiet in the Hospital: How Noise Reduction Helps Patients Heal

on June 7, 2018 (<https://medcenterblog.uvmhealth.org/innovations/hospital-noise-reduction/>) in Innovation (<https://medcenterblog.uvmhealth.org/category/innovations/>) by UVM Medical Center (<https://medcenterblog.uvmhealth.org/author/uvmmedcenter/>)

Noise. It is present in almost every aspect of our lives. From the traffic in the streets, to the fan that provides us white noise in the background to sleep, noise exists. Unfortunately, like stress, too much of it can have a negative impact on a person's health and rest. Some sounds we do like to hear, such as birds chirping, signaling spring in Vermont, but what about sounds in a hospital?

Many of us get admitted to hospitals when we are too sick to take care of ourselves at home. We expect exceptional care from physicians and nurses and, of course, to rest in order to help our bodies heal. We understand that some noises in a hospital are necessary for care; however, others simply aren't.

The Sounds of a Hospital

Many organizations, including the UVM Medical Center, have high tech equipment, which greatly assists in the delivery of care to our patients, but can also be noisy. Sometimes, healthcare providers are the source of the noise as we interact and communicate with our patients and other health team members.

Another factor is visits from families and friends during visiting hours. It is difficult when one's roommate is trying to rest in the opposite bed. Yet, we need to be cognizant of noise in patient care areas as sounds can be magnified and misinterpreted, increasing agitation and even confusion for some patients.

We become accustomed to the noise; our patients are not.

The Research on Noise, Quiet, and Healing

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Hospital Noise: How Noise Reduction Helps Patients Heal

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Research has shown that noise plays a negative role in healing and that decreasing noise in patient care areas aids in healing processes and helps facilitate speedier recoveries for patients. Patients are able to heal, sleep better and recover more quickly when able to rest. A quieter environment can also help decrease burnout for hospital staff.

Studies show that patients are more likely to develop negative side effects from a noisy hospital, such as sleep disturbances, elevated blood pressure and heart rate, and increased use of pain medications.

Noise can also increase annoyance levels for staff. One study indicated noise, such as talking inside and outside patient rooms, is the most common source of noise as well as visitors' voices, TVs, and behaviors of other patients.

Research concluded that best practices to eliminate noise from talking included staff education about noise reduction, public indicators such as sound monitors, a quiet time protocol, and lower cost environmental fixes, such as fixing noisy doors and squeaky wheels. Lastly, by introducing scripting with routine monitoring, patients' perception of quietness increased and the perception of noise decreased.

How We Address Noise at the UVM Medical Center

We introduced the "Culture of Quiet" Organizational initiative. The Nursing Professional Governance Patient and Family Experience Global council continued this work. After convening a small task force of nurses and assessing current quiet strategies, we introduced the following tactics:

- Many hospital units have designated 'quiet hours' with automatically dimming of lights at quiet hour intervals.
- Signage is visible in most patient care areas to help keep patients, family, and visitors aware. Throughout the hospital, you will see signs with a relaxing pair of Adirondack chairs and the sun setting with details on when a unit has quiet hours.
- Many semi-private rooms have windows in doors, so doors can be closed allowing for patient rest.
- We offer headphones for TVs and earplugs to help minimize sounds.
- In-patient kits contain a sleeping mask and other comfort items that can be provided at time of admission. Each kit contains a card and explains, 'the best healing occurs in a quiet environment.'
- New education material is available for staff, patients and visitors-just ask to review the next time visiting.
- Some units offer white noise machines, others have this built in.
- Noisy equipment such as wheels and doors can be tagged and replaced.
- Our facility and distribution staff have changed their cleaning and supply delivery schedules to accommodate patient care.
- Healthcare teams within the hospital are focusing efforts to cluster patient care to minimize interruptions to provide restful moments.

How you can help us.

We ask patients and visitors to hold us accountable when sounds are too loud. We want our community to alert us when noise levels are high and we will do what we can to minimize sound. In turn, we ask that all members of the healthcare team, patients, family, and friends be aware to keep voices soft, cell phones on vibrate, and hold each other accountable for these are the times of the day when our patients take pause to rest and positively impact their healing.

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Dangerous Decibels: Hospital Noise More Than a Nuisance | RN.com

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Dangerous Decibels: Hospital Noise More Than a Nuisance

By Diane Sparacino, Staff Writer

Imagine a world where hospitals have become so noisy that the annoyance has topped hospital complaints, even more than for the tasteless, Jell-O-laden hospital food (Deardorff, 2011). If you're a nurse, you know that we're already there – with noise levels reaching nearly that of a chainsaw (Garcia, 2012). In fact, for more than five decades, hospital noise has seen a steady rise (ScienceDaily, 2005).

But it wasn't always that way. At one time, hospitals were virtually noise-free like libraries – respected spaces, preserved as quiet zones. The culture was such that a loud visitor might be silenced by a nurse's purposeful glare or sharply delivered "Shhh!" As early as 1859, the importance of maintaining a quiet environment for patients was a topic for discussion. In Florence Nightingale's book, "Notes on Nursing," she described needless noise as "the most cruel absence of care" (Deardorff, 2011).

Fast forward to 1995, when the World Health Organization (WHO) outlined its hospital noise guidelines, suggesting that patient room sound levels not exceed 35 decibels (dB). Yet since 1960, the average daytime hospital noise levels around the world have steadily risen to more than double the



Exhibit 8b

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acceptable level (from 57 to 72 dB), with nighttime levels increasing from 42 to 60 dB. WHO found that the issue was not only pervasive, but high noise levels remained fairly consistent across the board, despite the type of hospital (ScienceDaily, 2005).

Researchers at Johns Hopkins University began to look into the noise problem in 2003. They maintained that excessive noise not only hindered the ability for patients to rest, but raised the risk for medical errors. Other studies blamed hospital noise for a possible increase in healing time and a contributing factor in stress-related burnout among healthcare workers (ScienceDaily, 2005).

Technology is, of course, partly to blame. State-of-the-art machines, banks of useful alarms, respirators, generators, powerful ventilation systems and intercoms all add up to a lot of unwanted racket. When human voices are added to the mix, (i.e., staff members being forced to speak loudly over the steady din of medical equipment), it's anything but a restful environment. For the recovering patient in need of sleep, that can be a real issue (Deardorff, 2011).

Contributing to the problem, experts say, are the materials used in hospitals. Because they must be easily sanitized, surfaces cannot be porous where they could harbor disease-causing organisms. Rather than using noise-muffling materials like carpet, acoustic tiles and other soft surfaces, hospitals have traditionally been outfitted using smooth, hard surfaces – especially in patient rooms. Good for cleanliness – not so great for dampening sounds, which tend to bounce around the typical hospital (Deardorff, 2011).

Which brings us to the most recent research, published January 2012 in the *Archives of Internal Medicine*. In the report, Jordan Yoder, BSE, from the Pritzker School of Medicine, University of Chicago, and his colleagues associated elevated noise levels with "clinically significant sleep loss among hospitalized patients," perhaps causing a delay in their recovery time (Garcia, 2012). During the 155-day study period, researchers examined hospital sound levels. The numbers far exceeded (WHO) recommendations for average hospital-room noise levels, with the peak noise at an average 80.3 dB - nearly as loud as a chainsaw or electric sander (85 dB), and well over the recommended maximum of 40 dB. And while nights tended to be quieter, they were still noisier than recommended allowances, with "a mean maximum sound level of 69.7 dB" (Garcia, 2012).

Perhaps most interestingly, the researchers broke down the sources of noise into categories: "Staff conversation (65%), roommates (54%), alarms (42%), intercoms (39%), and pagers (38%) were the most common sources of noise disruptive reported by patients" (Garcia, 2012). "Despite the importance of sleep for recovery, hospital noise may put patients at risk for sleep loss and its associated negative effects," they wrote. In addition, researchers found that the intensive care and surgical wards had some work to do in dampening noise levels, with ICU peaking at 67 dB and 42 dB for surgical areas. Both far exceeded WHO's 30 dB patient room recommendation (Garcia, 2012).

Besides patient sleep deprivation, which itself can lead to a multitude of health problems including high blood sugar, high blood pressure and fatigue, studies have reported that elevated noise levels can increase heart and respiratory rates, blood pressure and cortisol levels. Recovery room noise causes patients to request more pain medication, and preterm infants "are at increased risk for hearing loss, abnormal brain and sensory development, and speech and language problems when exposed to prolonged and excessive noise" (Deardorff, 2011).

There is still more research to be done, of course, but Yoder and his colleagues had good news, as well; much of the hospital noise they identified is modifiable, suggesting that hospitals can take steps to successfully create a quieter environment for both patients and healthcare providers (Garcia, 2012).

Exhibit 3

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Around the country, "quiet campaigns" have been launched by hospitals in an attempt to dampen nighttime noise. Besides dimming lights and asking staff to keep their voices down at night, they are working to eliminate overhead paging systems, replace wall and/or floor coverings – even the clang of metal trashcans. Northwestern's Prentice Women's Hospital in Chicago was built with noise reduction in mind, replacing the idea of centralized nursing stations with the advent of smaller, multiple stations (Deardorff, 2011)

Billed as "one of the nation's largest hospital construction projects," Palomar Medical Center in North San Diego County a state-of-the-art facility that has been designed "to encourage quietness," according to Tina Pope, Palomar Health Service Excellence Manager. Slated to open its doors this August, the hospital will feature a new nursing call system to route calls directly to staff and help eliminate the need for overhead paging, de-centralized nursing stations and clear sig lines, allowing staff to check on patients without having to leave unit doors open. With measures already in place including "Quiet Hospital" badges on staff and posters at the entrance of every unit, a "Quiet at Night" campaign (9 p.m. – 6 a.m.), and a "Quiet Champions" program that encourages staff to report noise problems, Palomar is one of a growing number of hospitals working toward a new era of quiet.

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<https://knops.co/magazine/noise-and-ptsd/>

Exhibit 9
a



Noises Are Truly Horrible For People Who Have PTSD

20 Mar '2018 [Sound](#)

Noise is a really big issue for PTSD survivors: people who have mental health problems because of their traumas. How are they connected?

Almost everybody has experienced a trauma. But some traumas are more scarring than others and can even result in long-lasting mental disorders like **PTSD**, which can have an extreme impact on someone's life. It's a disorder that can develop in the brain after a horrifying experience, like war or a car crash.

Symptoms

The symptoms of PTSD are, to say the least, not pleasant. They range from nightmares about the traumatic events, disturbing thoughts and feelings, anxiety, trying to avoid anything that has something to do with the traumatic event, and an increase in the fight-or-flight response.

Around ten percent of the population suffers from PTSD, according to data from **NCBI**, a part of the US National Library of Medicine. And, remarkably enough, that percentage is the same for people who suffer from tinnitus (the sound of a constant beep in your ears). The NCBI clearly sees a link between the two.

PTSD survivors also suffer from the Exaggerated Startle Syndrome, with anxiety and actions in an extreme and irrational way too loud noises and bangs. And then there are the sounds that remind them of the sounds during the traumatic events, which can trigger memories of the

Exhibit 9b

8/6/2010

trauma or flashbacks.



Fear

PTSD can also cause a general fear of sounds: phonophobia, or a fear of some specific sounds: misophonia. Survivors of the disorder also are generally much more sensitive to sounds and perceive them as much louder than other people would.

All of this makes the life of people with PTSD very hard. If you think you are suffering from this, consult your doctor. Really, please do it. For yourself, and for the ones you love.

Do you have PTSD and would you like to tell your experiences to us? We are always very open and interested to hear what you have to say. And again: if you haven't done it yet, visit your doctor, please. Thank you!

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8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

Exhibit 10a



Front Psychol. 2013; 4: 578.

PMCID: PMC3757288

Published online 2013 Aug 30. doi: [10.3389/fpsyg.2013.00578](https://doi.org/10.3389/fpsyg.2013.00578)

PMID: [24009598](https://pubmed.ncbi.nlm.nih.gov/24009598/)

Does noise affect learning? A short review on noise effects on cognitive performance in children

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This article was submitted to *Developmental Psychology*, a section of the journal *Frontiers in Psychology*.

Received 2013 May 14; Accepted 2013 Aug 12.

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Abstract

The present paper provides an overview of research concerning both acute and chronic effects of exposure to noise on children's cognitive performance. Experimental studies addressing the impact of acute exposure showed negative effects on speech perception and listening comprehension. These effects are more pronounced in children as compared to adults. Children with language or attention disorders and second-language learners are still more impaired than age-matched controls. Noise-induced disruption was also found for non-auditory tasks, i.e., serial recall of visually presented lists and reading. The impact of chronic exposure to noise was examined in quasi-experimental studies. Indoor noise and reverberation in classroom settings were found to be associated with poorer performance of the children in verbal tasks. Regarding chronic exposure to aircraft noise, studies consistently found that high exposure is associated with lower reading performance. Even though the reported effects are usually small in magnitude, and confounding variables were not always sufficiently controlled, policy makers responsible for noise abatement should be aware of the potential impact of environmental noise on children's development.

Keywords: noise, cognitive performance, cognitive development, children, speech perception, listening comprehension, irrelevant sound effect, classroom acoustics

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Does noise affect learning? A short review on noise effects on cognitive performance in children

EXHIBIT 10/12

In everyday life, cognitive tasks are often performed in the presence of task-irrelevant environmental noise. Accordingly, numerous studies on noise effects on performance have been conducted since the middle of the 20th century (for reviews see Hellbrück and Liebl, 2007; Szalma and Hancock, 2011), showing that—depending on characteristics of sounds and tasks—noise of low to moderate intensity may in fact evoke substantial impairments in performance.

Most of these studies were conducted with adults. The present review, however, will focus on studies including children. Children are especially vulnerable to harmful effects of environmental noise, as cognitive functions are less automatized and thus more prone to disruption. We will report findings concerning effects of acute noise on performance in concurrent auditory and non-auditory tasks, as well as effects of chronic noise on children's cognitive development.

Effects of acute noise on children's performance in auditory tasks

Psychoacoustic studies have consistently shown that children's speech perception is more impaired than adults' by unfavorable listening conditions. The ability to recognize speech under conditions of noise or noise combined with reverberation improves until the teenage years (Johnson, 2000; Wightman and Kistler, 2005; Talarico et al., 2007; Neuman et al., 2010). With stationary noise makers, signal-to-noise ratios (SNRs) have to be 5–7 dB higher for young children when compared to adults in order to achieve comparable levels of identification of speech or nonspeech signals, with adult-like performance reached at about 6 years of age (Schneider et al., 1989; Fallon et al., 2000; Werner, 2007). However, with maskers that vary over time, i.e., with trial-by-trial variation of the maskers' spectral composition (Oh et al., 2001; Hall et al., 2005; Leibold and Neff, 2007) or with fluctuating maskers such as single-talker speech (Wightman and Kistler, 2005), adult-like performance is usually not reached before the age of 10 years. Furthermore, children are less able than adults to make use of spectro-temporal and spatial cues for separation of signal and noise (Wightman et al., 2003; Hall et al., 2005). These findings demonstrate that children are especially prone to *informational* masking, i.e., masking that goes beyond energetic masking predicted by filter models of the auditory periphery.

Studies identified a range of linguistic and cognitive factors to be responsible for children's difficulties with speech perception in noise: concerning the former, children are less able than adults to use stored phonological knowledge to reconstruct degraded speech input. This holds for the level of individual phonemes, as children's phoneme categories are less well specified than adults' (Hazan and Barrett, 2000), but also for the lexical level since children's phonological word representations are more holistic and less segmented into phoneme units. Therefore the probability of successfully matching incomplete speech input with stored long-term representations is reduced (Nittrouer, 1996; Metsala, 1997; Mayo et al., 2003). In addition, young children are less able than older children and adults to make use of contextual cues to reconstruct noise-masked words presented in sentential context (Elliott, 1979). Concerning attention, children's immature auditory selective attention skills contribute to their difficulties with speech-in-noise perception. Children's susceptibility to informational masking has been attributed to deficits in focusing attention on auditory channels centered on signal frequencies, while ignoring nonsignal channels (Wightman and Kistler, 2005). Behavioral and ERP measures from dichotic listening paradigms provide evidence that auditory selective attention improves throughout entire childhood (Doyle, 1973; Pearson and Lane, 1991; Coch et al., 2005; Wightman et al., 2010; Gomes et al., 2012).

Owing to the mediating role of linguistic competence and selective attention, children with language or attention disorders are still more impaired than normally developing children by noise in speech perception tasks (Geffner et al., 1996; Ziegler et al., 2005, 2009). A stronger noise effect is also evident for children tested in their second language when compared to native children (Crandell and Smaldino,

8/4/2018



Walk Donate Q

Exhibit 11a

Autism & Anxiety: Parents seek help for extreme reaction to loud noise

September 5, 2018

Our 12-year-old son has autism, mild intellectual disability and anxiety attacks so severe that we end up in the emergency room. Loud noises are the worst – for example the school fire alarm, thunderstorms, a balloon popping, fireworks. Any help would be greatly appreciated.



This week's "Got Questions?" answer is by Judy Reaven, a clinical psychologist and associate professor of psychiatry and pediatrics at the University of Colorado School of Medicine and Children's Hospital Colorado, in Denver. Dr. Reaven's conducted research on the effectiveness of cognitive-behavioral therapy for anxiety in adolescents with autism, with the support of an [Autism Speaks research grant](#).

Editor's note: The following information is not meant to diagnose or treat and should not take the place of personal consultation, as appropriate, with a qualified healthcare professional and/or behavioral therapist.

Thanks for the great question. It certainly sounds like your family is experiencing a very difficult situation. Anxiety symptoms and reactions are very common in individuals with autism spectrum disorder (ASD). They can interfere with functioning across home, community and school settings.

Although your son's reaction sounds more severe than most, many people with autism struggle with a range of fears, phobias and worries. These can range from a debilitating fear of, say, spiders or the dark to chronic anxiety about making mistakes or being late.

Fortunately, recent research suggests that anxiety in children and adults who have autism is quite treatable. Often, these individuals are helped by the same or similar strategies that work well in treating anxiety in the general population.

These approaches include cognitive behavior therapy, or CBT. Cognitive-behavioral approaches are well-established, evidenced-based treatments that have become the gold standard of psychosocial treatments for anxiety. [My own research](#) and that of my colleagues has demonstrated the helpfulness of modifying cognitive-behavioral approaches to address the special needs of those who have autism.

Where to begin?

You describe a number of fears that may be related to sensory sensitivities. I recommend that you begin by consulting an occupational therapist who can assess whether your son's extreme sensitivities to noises are part of a broader sensory processing disorder. If this is the case, and if your son's fears are exclusively triggered by sensory stimuli, then his symptoms may be best addressed by a sensory-focused intervention. Many occupational therapists who specialize in autism receive special training in this area.

It's common for children with ASD and anxiety to become extremely frightened in response to sensory stimuli. Perhaps – like many individuals with autism – your son also has difficulty telling you what's scaring him. Instead, he may show his fear with extreme avoidance of a situation.

8/4/2011

For example, he might refuse to go to school after a fire drill. He might become fearful of birthday parties after being frightened by a balloon that popped unexpectedly. Other signs of extreme distress can include yelling, crying, clinging and general agitation. Because your son may have difficulty communicating, it's important to observe his behavior for these signs of distress. This can help you determine what's triggering his fears.

Avoidance versus learning to cope

Many parents go to great pains to protect their children by avoiding agitating situations. This approach is sometimes appropriate and even necessary. However, it denies individuals the opportunity to learn how to manage anxiety-provoking situations on their own.

By helping your son learn to manage his fear, you can prepare him for an unpredictable world so that he can participate in it to the maximum extent possible.

Given the severity of your son's anxiety symptoms, I suggest that you seek professional support in addition to the strategies offered here. Families whose children have milder symptoms of anxiety can try these strategies on their own – seeking professional help if symptoms worsen.

Tackling one fear at a time

I suggest making a list of your child's major fears and worries. Try to rank order them from mild to severe. To encourage success, I'd start with a mild-to-moderate fear before taking on his extreme reaction to loud noises.

Key components of a cognitive behavioral approach include introducing coping strategies such as deep breathing and "helpful thoughts" that can help a person manage fearful reactions.

For example, you can teach your son to take deep slow breaths to help manage his body's physical anxiety reactions.

"Helpful thoughts" are statements that your son can say to himself when faced with a situation that makes him anxious. For example, you can coach to your son to say, "This is a loud noise. I don't like it, but I can handle it."

To help your son to learn these strategies, I suggest you model taking deep breaths while repeating a "helpful thought" out loud.

Graded exposure

The most important step is to help your son face his fears a little at a time. We call this "graded exposure." For example, explain to your son that the two of you are going to listen to a recording of thunder. The first time, you might play the recording at a soft volume, then gradually increase the volume over time as he demonstrates increased comfort with the sounds

Or you might try watching a video of a balloon pop – perhaps with the volume off the first time. Then he can watch a real balloon pop while standing some distance away. Over time, he can move closer and closer to the balloon.

After such exercises, you can present him with small rewards for being brave and "facing fears." Remember that even a small act of bravery – such as listening to a recording of thunder for 10 seconds – represents an important step toward handling fears. It deserves to be acknowledged.

Although graded exposure may seem counterintuitive, research indicates that this strategy is the single most effective strategy for getting over a particular fear.

I wish you and your son the very best. Please let us know how you're doing with an email to GotQuestions@autismspeaks.org.

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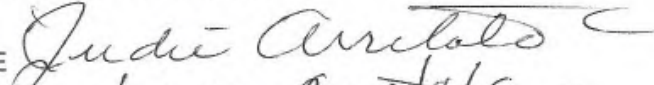


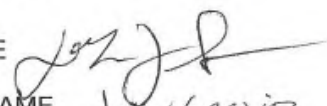
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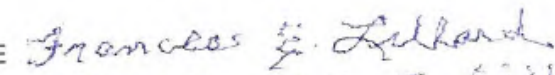
[Parents Seek Help: Child with Severe Autism Eats Only Sweets](#)


I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

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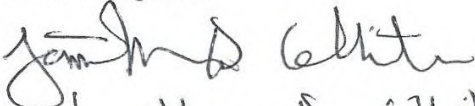
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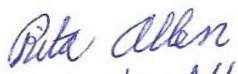
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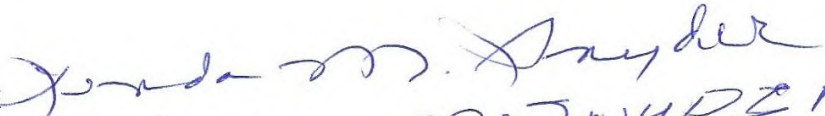
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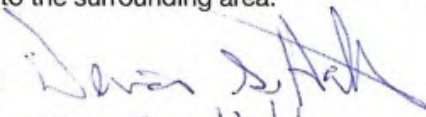
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ADDRESS 405 Balsa. La Grande, Or
EMAIL dmammen@conic.com

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE



PRINTED NAME

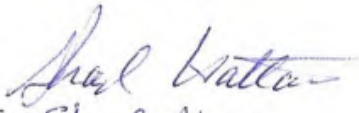
Denise Hattan

ADDRESS

507 Sunset Dr. La Grande, OR

EMAIL

SIGNATURE



PRINTED NAME

Shad Hattan

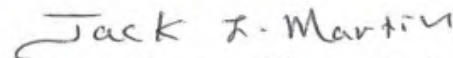
ADDRESS

507 Sunset Dr

EMAIL

hattansl88@gmail.com

SIGNATURE



PRINTED NAME

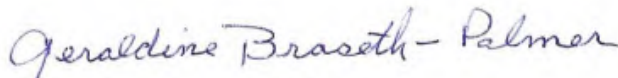
Jack L. Martin

ADDRESS

1412 Gildcrest Dr.

EMAIL

SIGNATURE



PRINTED NAME

GERALDINE BRASETH-PALMER

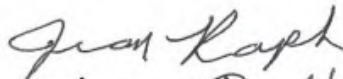
ADDRESS

1602 Gildcrest Drive - LaGrande, Or; 97850

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SIGNATURE



PRINTED NAME

Jean RAPH

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1509 Madison Ave LaGrande, OR 97850

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jraph19@gmail.com

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Damon Sexton*
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SIGNATURE
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SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Lois Barry*
PRINTED NAME LOIS BARRY
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I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Lynn Wheeler Duncan*
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SIGNATURE *Gary D. Pierson*
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SIGNATURE *Anne G. Cavinto*
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EMAIL joehorst@conic.com

SIGNATURE *Angela Sherer*
PRINTED NAME Angela Sherer
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I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Merle E Comfort*
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SIGNATURE *Carol Summers*
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SIGNATURE *Caroline Kaye Juniper*
PRINTED NAME Caroline Kaye Juniper
ADDRESS 406 4th Street - LaGrande - OR 97850
EMAIL

SIGNATURE *Gerald D. Juniper*
PRINTED NAME Gerald Darwin Juniper
ADDRESS 406 4th St. LaGrande, OR. 97850
EMAIL

I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

SIGNATURE *Robert J. Sherer*
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SIGNATURE *Heather M. Null*
PRINTED NAME Heather M. Null
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EMAIL hnull@con.com

SIGNATURE *Bert R. Frewing*
PRINTED NAME Bert R. Frewing
ADDRESS 709 South 12th Street La Grande, OR 97850
EMAIL jeanfrewing@gmail.com

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL



Oregon Department of Energy and the Energy Facility Siting Council

Public Hearing on the Draft Proposed Order
for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) William Whitaker

Mailing Address (mandatory) 1108 G Ave
La Grande, OR 97850

Phone Number (optional) (541) 805-5681 Email Address (optional) bill@oregonenergy.gov

Today's Date: 6/20/19

Do you wish to make oral public testimony at this Hearing: Yes No

Written comments can also be submitted today.

All written comments must be received by the deadline, July 23, 2019, 5 p.m. PDT to:

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony
(Please print legibly – Use the back for additional space if needed. Additional written comments may be attached to this card.)

I will provide written testimony later.

<p style="text-align: right;">Page 98</p> <p>1 this line. 2 I've also worked for the Happy Camp Ranger 3 District in the Klamath National Forest and worked on 4 active forest fires. I have flown with pilots over the 5 fires and seen the devastation caused to the habitat and 6 to the animals. The animals can't be forgotten. 7 I have many relatives that dedicated their 8 careers to protecting the towns and forests from 9 wildland fires. These fires put the lives of 10 firefighters, volunteers, residents, habitat, and 11 wildlife in jeopardy. 12 Living in Happy Camp at one time, I've been 13 totally surrounded by a forest fire. All of our crew 14 had to work on this fire. There were many dangers, we 15 lost some of our vehicles, and the fire and long-lasting 16 smoke caused severe health issues in many residents, 17 including my father-in-law who passed away a couple of 18 years later. He was a fire officer for the Forest 19 Service for about 25 years. 20 I'd like to talk about a fire that affected 21 many people that I knew. In November of 2018, near 22 Paradise, California, a fire started on the 56-mile 23 Caribou-Palermo Electric transmission line. This fire 24 started at 6:33 a.m. near a tower in Pulga -- I may be 25 saying that wrong -- in Paradise. That day utility</p>	<p style="text-align: right;">Page 100</p> <p>1 say this area holds a serene and untouched beauty. The 2 landscape and wildlife are stunning; the elk, the deer, 3 everything that you see every single day. 4 I spent the past two days on a parcel of land 5 right across from Morgan Lake. We hiked for many hours 6 and saw all the wildlife, the beauty, the untouched 7 beauty of this area. 8 I think that the building of this power line 9 will devastate this beauty, and I feel that this should 10 not go on. That is all I have to say. 11 Thank you. 12 HEARING OFFICER WEBSTER: Thank you. 13 After Mr. Whitaker is Thomas Thompson. 14 MR. WILLIAM WHITAKER: Good evening. My name 15 is Bill Whitaker. I live here in La Grande at 1108 G 16 Avenue, about a mile away from Morgan Lake Road. 17 I'm vice chair of the Board of Oregon Rural 18 Action. ORA is a member organization of the Stop B2H 19 Coalition. ORA believes that local residents, ordinary 20 people, should be the people who are able to decide the 21 impact of issues that dramatically affect their lives, 22 our lives, not corporate interests making those 23 decisions. 24 We have many concerns about the necessity for 25 the cost of and the impact of the B2H transmission line.</p>
<p style="text-align: right;">Page 99</p> <p>1 workers discovered that a part had separated from an arm 2 on the tower, and that is what started that portion of 3 the fire. 4 The Camp Fire in Paradise killed 85 people, 5 destroyed 18,804 structures, and burned 153,336 acres. 6 That is a huge devastation. 7 Cal Fire also identified a second ignition 8 site. The second fire was determined to be vegetation 9 that got into an electrical distribution line, owned and 10 operated also by PG&E. Not many people know that there 11 was a second cause to that fire. Those fires both 12 emerged. 13 Many family and friends that I know live in 14 Paradise. They lost their homes, their pets, their 15 livelihood. How can that ever be recovered? 16 If you drive through northern California on 17 Interstate 5 from the Oregon border, you just have to 18 look around. You could probably go 20 miles and notice 19 there was another wildfire and the total devastation 20 that it caused. 21 Fires have increased each year that goes by 22 and become larger and more devastation caused; animals, 23 plants, people, homes. I mean, what can I say. 24 As a tourist and visitor from a state 25 devastated by wildfire each and every year, I can only</p>	<p style="text-align: right;">Page 101</p> <p>1 I will be submitting a detailed report, but in light of 2 the fact that many of the things that you have heard 3 already tonight, I won't repeat. I want to just speak a 4 bit from my heart. 5 Idaho Power stated that it intended to 6 construct its proposed power line on a route that had 7 the most support from the community, that had the least 8 impact on the community. The route chosen clearly lacks 9 support from citizens of La Grande and Union County. It 10 simply is not something that we want to have here 11 affecting our community in many ways. 12 We are asking you to consider some of the 13 impacts of this line on our community. We want you to 14 consider, to think about the impact of construction 15 traffic on our residential neighborhoods and the 16 deterioration that it will cause to our streets and 17 roads, and the danger that it would present to 18 pedestrians walking in these neighborhoods, many of 19 which don't even have sidewalks. 20 We want you, please, to consider the negative 21 impact of the project on our unique Morgan Lake Park. 22 You have heard vivid testimony about what the impact of 23 power transmission towers towering 40 feet above the 24 forest canopy in Morgan Lake would cause to the 25 viewshed, the solitude, the beauty of that area.</p>

<p style="text-align: right;">Page 102</p> <p>1 We want you to consider the negative impact of 2 the project on the beautiful viewshed of the entire 3 La Grande valley and the entire route of this proposed 4 line throughout eastern Oregon. We want you to consider 5 the likely loss of property values that the viewshed 6 would bring with its massive towers that terribly impact 7 our enjoyment, our livelihood, our ability to bring in 8 tourists that provide very substantial amounts of money 9 to our community. 10 And we would like you to consider the impact 11 of B2H on Ladd Marsh, its watershed, its refuge for 12 waterfowl, and wildlife, and its water quality. 13 So we in Oregon Rural Action believe, and we 14 hope that you will come to agree with us, that Idaho 15 Power should abandon the B2H project and should instead 16 utilize the alternative sources of power that are 17 available to it. 18 Thank you. 19 HEARING OFFICER WEBSTER: Following 20 Mr. Thompson, we will hear from Norm Cimon. 21 MR. THOMAS THOMPSON: Good evening. My name 22 is Thomas Thompson. My address is 2202 Gekeler Lane, 23 La Grande, Oregon. I'm a landowner in the Ladd Canyon 24 area along the existing 240-line that is the proposed 25 action of the current plan.</p>	<p style="text-align: right;">Page 104</p> <p>1 conifer forest. I managed grazing programs in the West, 2 the noxious weed programs in the West. If you don't 3 catch it right at the year or 2 years of knowing it's 4 coming with the right chemicals, the right seeded 5 grasses and follow-up, you are in trouble. And we are 6 in trouble on our land from those construction projects. 7 What was different on the construction of the 8 existing line was, in the 1960s, was they used smaller 9 machines. They crawled over the land, they dug those 10 with pneumatic drills, much like the drills they used on 11 the dams, in rock bedrock, and a lot of those holes were 12 handset by pretty tough guys. When we replaced our 13 existing poles, by worker safety standards, they added 14 those lines into every replaced pole site to get their 15 poles in, set, and with bucket trucks to prepare the 16 H-braces and stuff like that. 17 When I left, I left them with a terribly big 18 problem to deal with, and I'm losing with Ventenata 19 dubia. Please write that down, that grass. 20 In talking to Land Services, the contractor 21 for Idaho Power, it was not on the radar. They didn't 22 hear that. The guy I talked to, I think they were 23 inobservant. They do have a noxious weed manager in the 24 city of Boise, but my gut feeling is their hands are 25 filled with -- their time is dominated with southern</p>
<p style="text-align: right;">Page 103</p> <p>1 I'm not naive enough to know, I think, that 2 both proposals will be approved, and I'm unclear on the 3 decision on either/or how that decision which route to 4 take. If the line is to be built, I support the Morgan 5 Lake alternative for the following reasons: 6 My estimate is that it's shorter in its route, 7 and thus, by logic, less impact. It's located mostly 8 in, not all, but more in the proposed activity in a 9 mixed conifer forest where the moisture regimes are 10 higher. There is ability for lower seral vegetation to 11 re-establish, have to cut trees on. Hopefully most of 12 those will be native. 13 My concern on the proposed, along the existing 14 240, is the noxious weeds. I've heard testimony on the 15 threat of wildfire, but noxious weed invasion is just as 16 threatening as wildfire to landowners, especially if 17 they raise cows. When that conversion from a native 18 bunch grass to an introduced annual grass, everybody 19 knows what cheatgrass and medusa are. There is a new 20 invader on the scene called Ventenata dubia. I don't 21 see that addressed in the boilerplate vegetation 22 management plan. We have been fighting it on the 23 existing 240 with the poles that were replaced from wood 24 and steel. 25 So my fear is -- I'm retired from range and</p>	<p style="text-align: right;">Page 105</p> <p>1 Idaho issues. 2 The reason I support the Morgan Lake 3 alternative over the existing 240 is it avoids Ladd 4 Marsh. It avoids more designated elk winterage, the 5 county map. It avoids the viewshed of La Grande I think 6 more. For the portions that are in the county, from La 7 Grande or from the southern valley, from the viewpoints 8 of Ladd Marsh, and for those reasons -- what really 9 worries me, these last 2 minutes, is I know the problems 10 of noxious weeds, and I'm working with Idaho Power to 11 get it done. 12 But the mitigation plans, it's the landowner's 13 responsibility to determine that problem, design the 14 appropriate method to control it, monitor it to see if 15 it's working, and provide follow-up measures. They are 16 pretty much asking what do you need, if you can't do it, 17 get a contractor. 18 Once the decision is made, when, if, how, what 19 does a landowner have other than legal recourse, if they 20 are not following the plan set or they are not providing 21 the expertise and the information, or the contractors 22 they sent out to help you don't know what they are 23 doing? 24 So another issue I think with the landowners 25 is, once the power poles are in, right-of-ways are</p>

1112 1/2 Adams Ave
La Grande, OR 97850

Energy Facility Siting Counsel
Attn: Tardeweth
Oregon Dept. of Energy
550 Capital St., NE
Salem OR

97301-974299

97301-974299

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DEPARTMENT OF ENERGY

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

Chair Beyeler and Members of the Council:

I am very concerned about the Boardman to Hemingway Transmission Project as it is proposed. My concerns are for the safety of myself and all of the citizens of La Grande if this line is permitted. My primary concerns are slope instability and wildfire hazard.

The proposed route sited to the west of La Grande is placed on a ridge noted to have instability and high risk for slides. The geologic study provided by Idaho Power references several studies (below).

Table H-2. USGS Quaternary Faults within 5 Miles of Project by County on page H-12 clearly shows that the project is placed right on an active fault in the West Grande Ronde Valley Fault Zone. In addition, in exhibit H, Geological Hazards and Soil Stability, Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated "severe." Below is part of the report:

5.2 La Grande Area Slope Instability

As part of our study, we reviewed DOGAMI's open file report: Engineering Geology of the La Grande Area, Union County, Oregon, by Schlicker and Deacon (1971). The study identified several landslides in the areas west and south of La Grande. The majority of the landslide features mapped by Schlicker and Deacon (1971) were similarly mapped as landslides or alluvial fans in Ferns and others (2010). The current SLIDO database uses the feature locations mapped in Ferns and others (2010). While the two map sets generally agree, there are differences in the mapped limits of some landslide and alluvial fan areas, and there is one landslide area in Schlicker and Deacon (1971), near towers 106/3 and 106/4, which is not included in SLIDO or Ferns and others (2010). The Landslide Inventory in Appendix E includes mapped landslide and alluvial fan limits from both SLIDO and Schlicker and Deacon (1971).

This slope instability is not inconsequential to a project like this. Recall in 2014, Oso, Washington, was the site of a catastrophic mudslide as the result of logging disturbance of the soil upslope from the town combined with significant rainfall. This resulted in 43 fatalities. We must learn from previous mistakes in not heeding the geologists' warnings. The area down slope from the proposed B2H line lies the Grande Ronde Hospital and Clinics, which employs hundreds of people and is the critical access hospital for this region. La Grande High School and Central Elementary School are also positioned down slope from the proposed towers. At least 100 homes are positioned down slope of the proposed towers. According to "Engineering Geology of the La Grande Area, Union County, Oregon" maps published by Schlicker, and Deacon (1971), the ENTIRE area of the hillside is deemed a "landslide area" in the La Grande SE quadrangle. This is not a safe place for a transmission line.

The next significant hazard to our community is wildfire. Oregon is ranked 8th Most Wildfire Prone state in the United States according to Verisk Wildfire Risk analysis. La Grande is ranked in the top 50 communities in Oregon with the greatest cumulative housing-unit exposure to wildfire as referenced in "Exposure of human communities to wildfire in the Pacific Northwest," by Joe H. Scott, Julie Gilbertson-Day and Richard D. Stratton (available at http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf). Finally the proposed route is in the vicinity of Morgan lake, the highest risk area (#1) in Union County in terms of wildland-urban interface, according to the County's Community Wildfire Protection Plan, August 10, 2005.

Cal Fire cites Pacific Gas and Electric equipment and power lines as the cause of numerous wildfires in the state in the last 2 years. This includes the Camp Fire in Butte County (2018), Tubbs Fire in Napa/Sonoma Counties (2017), Witch Fire in San Diego (2007), Valley Fire in Lake/Napa/Sonoma Counties (2015), Nuns Fire in Sonoma County (2017), which were all attributed to transmission.

The Boardman To Hemingway Transmission Line Project proposal places lines about 2000 feet or less than half a mile from the La Grande city limits, including medium density housing within the city as well as Grande Ronde Hospital. If a line from this proposed route were to spark a fire, La Grande residents would have little time to react. According to National Geographic, wildfires can move as fast as 6.7 mph in forests and 14 mph in grasslands. A fast-moving fire starting at the B2H lines could move to residential areas of La Grande and HOSPITAL in 10 minutes. This is frightening and an unacceptable risk for our citizens.

The current proposal for a Boardman to Hemingway transmission line does not adequately address the issue of landslides, basically by stating it will be mitigated somehow when the time comes to build. The proposal offers no analysis of wildfire risk, which is an unacceptable omission. All of the routes proposed are unsafe and create an unacceptable risk to the citizens of La Grande.

The Council should DENY the request for a site certificate.

Sincerely,



Name: William Whitaker

Address: 1108 G Avenue
La Grande, OR. 97850

TARDAEWETHER Kellen * ODOE

From: Dan White <danno@bighdesign.biz>
Sent: Tuesday, August 20, 2019 10:04 AM
To: B2H DPOComments * ODOE
Subject: Comments against Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project
Attachments: B2H EFSC comment.docx

By the attached letter, please register my opposition to granting approval for the B2H project.

Dan White, La Grande Oregon

August 20, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project
9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

I am writing to oppose granting a site certificate to Idaho Power for the Boardman to Hemingway Transmission Project on the grounds of unacceptable impact to the scenic resources in the Grande Ronde valley of Oregon. This is the community I chose to live, in part due to the outstanding scenery. I do not want to see its scenery degraded by a string of massive towers that will overpower the natural, rural beauty that make this valley a desirable place to live.

Specifically, OAR 345-022-0080, in describing Scenic Resources, states “the Council must find that the design, construction and operation of the facility, taking into account mitigation, are **not likely** to result in significant adverse impact to scenic resources and values identified as significant or important in local land use plans...”

The “not likely” probability of adverse impact is laughable. OF COURSE IT WILL NEGATIVELY IMPACT OUR SCENERY in the Grande Ronde valley. How could it not with such a visible string of huge towers? Our Union County Land Use Plan (1979) in the Plan Policies > Resources section, page 33, outlines goals for resources:

V. Resources

A. State Planning Goal: To conserve open space and protect natural, cultural, historical and **scenic resources**.

B2. That the following concerns will be taken into account in protecting area **visual attractiveness**:

- a. Maintaining vegetative cover wherever practical.
- b. Using vegetation or other site obscuring methods of screening unsightly uses.
- c. Minimizing number and size of signs.
- d. Siting developments to be compatible with surrounding area uses, and to recognize the natural characteristics of the location.

B6. That development will maintain or enhance attractiveness of the area and not degrade resources.

As you can see, Idaho Power’s request to string huge towers along the visible edge of the Grande Ronde Valley violates sections V.A, V.B.2 and V.B.6 of our County’s Land Use Plan.

Considering the points above, Idaho Power cannot comply with the state standards. Therefore **EFSC Must Deny the Site Certificate!**

Dan White
505 M Avenue
La Grande, OR 97850
danno@bighdesign.biz

Albina Whitte
95 2nd St. Apt A
La Grande, OR 97850

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT
OF THE RETURN ADDRESS, FOLD AT DOTTED LINE
CERTIFIED MAIL



7018 0360 0000 2356 2582

Kellen Jordanweber, Senior Billing Analyst
Oregon Department of Energy
550 Capital St. NE
Salem, OR 97301

Department of Energy

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August 2, 2019

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301
email: B2H.DPOComments@Oregon.gov

THE APPLICANT SIGNIFICANTLY UNDERSTATES THE IMPACTS TO EMPLOYMENT AND FOREST LANDS AS A RESULT OF THE PROPOSED B2H TRANSMISSION LINE

Exhibit K, Attachment K-2, Pages 19 and 20, Section 7.0

The applicant claims that removal of forestland by clearing of trees for a period of over 50 years will have little economic impact to forest sector jobs in Umatilla and Union County. They value the loss of 245.6 acres of forestland in Umatilla County at \$488.60 per acre. However, they value the removal of 530.1 acres lost to the transmission line in Union County at \$182.98 per acre. The applicant provides no justification or documentation to support the difference in value per acre between Umatilla and Union Counties.

Some forest facts related to this section:

According to US Forest Service Tech. Rept. PNW-GTR-578 Rev. 2004 entitled "Forests of Eastern Oregon: an Overview", Eastern Oregon Forests produce an average of 20 cubic feet per acre of timber each year. That would mean that an acre of land would produce approximately 240 board feet of lumber per year per acre during the life of the transmission line. According to Scott Hartell, Planning Director, Union County, forest land in Union County is classified as either 20 cubic feet per acre per year, or 50 cubic feet per acre per year, so the value amounts could be significantly higher. The "Forest Facts Oregon's Forests: Some Facts and Figures" published in 2009 by the Oregon Department of Forestry states that economists estimate that for every billion board feet that is harvested in Oregon 11 forest sector jobs are created or retained.

Idaho Power's stated timber values are unrealistically low according to individuals owning forest land in both counties. No one would be using land for trees which precludes other uses if the economic benefits were as the developer is stating.

The applicant's identification of the acres of forest land impacted is incorrect due not only to the failure to use soil types to identify forest lands, but also, the fact that they are requesting a 300 foot right of way and they need to include the value of any additional trees they will be removing in the 100 foot area on each side of the right of way.

The applicant claims that the value of the land in the right of way will not be significantly reduced due to the owner's opportunity to use the land for agricultural or range land after the transmission line is constructed. This is completely unfounded. The lineal nature of a transmission line precludes any productive use of land taken for the transmission line. The right of way is too narrow to make it available for production of crops, and the costs associated with purchasing equipment for agricultural operations would be prohibitive.

It would be unusual for a forest operator to already own equipment for a crop operation. In order to use the right of way as grazing land, it would have to be fenced. According to "Estimated Livestock Fencing Costs for the Small-Farm Owner" by Derek L. Barber, the average cost of materials for ¼ mile (1,320 ft.)

of field fence is \$1,108.53 plus the cost of building it. The Iowa State University Extension identified 2011 costs for constructing ¼ mile of fencing to be \$1,947.75 installed. Enclosing a square acre requires 820 feet of fence. In other words, the cost of fencing an acre of lost forest land would exceed the value the applicant claims the land would add to the local economy per acre for the 50 years the transmission line is predicted to be in place.

The applicant also claims that the transmission line right of way through forest lands will not cause a substantial change in accepted forest practices or cause a significant increase in the cost of accepted forest practices on lands to be directly impacted by the Project or on surrounding lands. Removing trees from land currently being used to grow them certainly will create a substantial change in accepted forest practices. It also will substantially increase the costs of growing and harvesting trees on the surrounding lands. Soil compacted by heavy equipment used to access the line will discourage regrowth.

The transmission line will make it impossible to use aerial equipment to harvest trees on steep hillsides adjacent to the line; it will increase costs of harvest due to the need to avoid equipment contact with the transmission lines, avoid trees falling on the transmission lines, require new access and egress from the forested lands that avoid having log trucks and equipment moving below the transmission line, It will decrease the harvest along the transmission line due to tree loss along the corridor from wind and weather conditions impacting weakened root infrastructure once the transmission corridor is cleared.

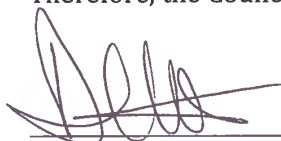
Removing forested land along the transmission line will result in nearly a total loss of the economic value of the land removed from production of trees, and will impact the landowners and county economy not only by the loss of the production of trees and taxes, fees, employment and other benefits coming from that activity, but there will be related losses to the productivity of adjacent land, increased costs of harvesting along the transmission line, introduction of noxious weeds, increased risk of wildfire, potential increase in the number of trespassers, interference with wildlife activities including displacement of wildlife to what may be less desirable habitat, opening the area up to increased predation on the multiple non-raptor species utilizing the forested areas, decreased value of land if it is sold, long-term reduction in assessed value of the land, etc. The conclusions stated by the applicant in section 8.0 are false, absolutely without merit.

In addition, the applicant has failed to provide documentation to support their conclusions. The only reference the applicant cites that relates at all to this issue is the publication from the Oregon Forest Resources Institute.

In summary:

The applicant has failed to document that they will comply with Land Use Goal 4 OAR 660-006-000 through OAR 660-006-0010; There is no documentation provided that would indicate they are in compliance with OAR 345-022-0030 and they have not documented, nor are they able to meet the requirement contained in OAR 345-022-0030(4) to allow an exception.

Therefore, the Council should DENY the application for site certificate.



Signature

Debra G White

Printed Name

Mailing Address: 95 2nd St. Apt A
La Grande, OR. 97850

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

Chair Beyeler and Members of the Council:

I am very concerned about the Boardman to Hemingway Transmission Project as it is proposed. My concerns are for the safety of myself and all of the citizens of La Grande if this line is permitted. My primary concerns are slope instability and wildfire hazard.

The proposed route sited to the west of La Grande is placed on a ridge noted to have instability and high risk for slides. The geologic study provided by Idaho Power references several studies (below).

Table H-2. USGS Quaternary Faults within 5 Miles of Project by County on page H-12 clearly shows that the project is placed right on an active fault in the West Grande Ronde Valley Fault Zone. In addition, in exhibit H, Geological Hazards and Soil Stability, Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated "severe." Below is part of the report:

5.2 La Grande Area Slope Instability

As part of our study, we reviewed DOGAMI's open file report: Engineering Geology of the La Grande Area, Union County, Oregon, by Schlicker and Deacon (1971). The study identified several landslides in the areas west and south of La Grande. The majority of the landslide features mapped by Schlicker and Deacon (1971) were similarly mapped as landslides or alluvial fans in Ferns and others (2010). The current SLIDO database uses the feature locations mapped in Ferns and others (2010). While the two map sets generally agree, there are differences in the mapped limits of some landslide and alluvial fan areas, and there is one landslide area in Schlicker and Deacon (1971), near towers 106/3 and 106/4, which is not included in SLIDO or Ferns and others (2010). The Landslide Inventory in Appendix E includes mapped landslide and alluvial fan limits from both SLIDO and Schlicker and Deacon (1971).

This slope instability is not inconsequential to a project like this. Recall in 2014, Oso, Washington, was the site of a catastrophic mudslide as the result of logging disturbance of the soil upslope from the town combined with significant rainfall. This resulted in 43 fatalities. We must learn from previous mistakes in not heeding the geologists' warnings. The area down slope from the proposed B2H line lies the Grande Ronde Hospital and Clinics, which employs hundreds of people and is the critical access hospital for this region. La Grande High School and Central Elementary School are also positioned down slope from the proposed towers. At least 100 homes are positioned down slope of the proposed towers. According to "Engineering Geology of the La Grande Area, Union County, Oregon" maps published by Schlicker, and Deacon (1971), the ENTIRE area of the hillside is deemed a "landslide area" in the La Grande SE quadrangle. This is not a safe place for a transmission line.

The next significant hazard to our community is wildfire. Oregon is ranked 8th Most Wildfire Prone state in the United States according to Verisk Wildfire Risk analysis. La Grande is ranked in the top 50 communities in Oregon with the greatest cumulative housing-unit exposure to wildfire as referenced in "Exposure of human communities to wildfire in the Pacific Northwest," by Joe H. Scott, Julie Gilbertson-Day and Richard D. Stratton (available at http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf). Finally the proposed route is in the vicinity of Morgan lake, the highest risk area (#1) in Union County in terms of wildland-urban interface, according to the County's Community Wildfire Protection Plan, August 10, 2005.

Cal Fire cites Pacific Gas and Electric equipment and power lines as the cause of numerous wildfires in the state in the last 2 years. This includes the Camp Fire in Butte County (2018), Tubbs Fire in Napa/Sonoma Counties (2017), Witch Fire in San Diego (2007), Valley Fire in Lake/Napa/Sonoma Counties (2015), Nuns Fire in Sonoma County (2017), which were all attributed to transmission.

The Boardman To Hemingway Transmission Line Project proposal places lines about 2000 feet or less than half a mile from the La Grande city limits, including medium density housing within the city as well as Grande Ronde Hospital. If a line from this proposed route were to spark a fire, La Grande residents would have little time to react. According to National Geographic, wildfires can move as fast as 6.7 mph in forests and 14 mph in grasslands. A fast-moving fire starting at the B2H lines could move to residential areas of La Grande and HOSPITAL in 10 minutes. This is frightening and an unacceptable risk for our citizens.

The current proposal for a Boardman to Hemingway transmission line does not adequately address the issue of landslides, basically by stating it will be mitigated somehow when the time comes to build. The proposal offers no analysis of wildfire risk, which is an unacceptable omission. All of the routes proposed are unsafe and create an unacceptable risk to the citizens of La Grande.

The Council should DENY the request for a site certificate.

Sincerely,



Name: Debeva G White
Address: 95 2nd St Apt A
La Grande, OR. 97850

Kellen Tardaaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

August 5, 2019

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

To: Chairman Beyeler and Members of the Council

I am very concerned about the risks to our communities during construction of the proposed transmission line. I take particular exception to the Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN. The document states; "This plan framework serves as baseline document to guide development of the complete Blasting Plan developed with the Plan of Development **before** issuance of the site certificate and commencement of construction."

On page 7, at 3.4, Design Feature 32 states; "Watering facilities (tanks, natural springs and/or developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction and/or maintenance activities to their pre-disturbed condition as required by the landowner or land-management agency. Should construction and/or maintenance activities prevent use of a watering facility while livestock are grazing in that area, then the Applicant will provide alternate sources of water and/or alternate sources of forage where water is available."

The stated purpose of blasting is to "crack" rocks to facilitate geotechnical drilling. Introducing new or expanded fissures/cracks into rock may alter the flow direction or amount of water to existing natural springs or wells.

Since there is no indication that Idaho Power will determine "predisturbed" water flow from wells or springs, how will the landowner prove that flow has been reduced? Without an agreed upon baseline, negotiation or legal action will be required. In the case of private landowners, that will mean legal expenses that may not be available.

Prior to the issuance of a Site Certificate, EFSC should require the additional condition:

ADDED CONDITION TO BLASTING PLAN, DESIGN FEATURES:

Idaho Power will determine baseline flow of natural springs or wells within 1/4 mile of blasting site.

Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN on page 5 at 3.3 Safety Procedures, 3.3.3 Fire Safety: Posting fire suppression personnel at the blast site during high-fire danger periods and prohibiting blasting during extreme fire danger periods is not sufficient to minimize fire risk.

Idaho Power has written terminology, "high-fire danger periods" and "extreme fire danger periods" without definition or concurrence with Oregon Department of Forestry. Fire Suppression Personnel have been previously identified in the Fire Suppression and Prevention Plan as a "watchman." This is inadequate!

ADDED CONDITION TO BLASTING PLAN, FIRE SAFETY:

During blasting Idaho Power will provide a water tender staffed by a crew of at least two personnel.

Sincerely,



Name: Debera G White

Address: 95 2nd st Apt. A
La Grande, OR. 97850

August 8, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project; Draft Proposed Order May 23, 2019

Dear Chair Beyeler and Members of the Council:

THE APPLICANT IS IN VIOLATION OF ORDANCECES OAR 345-001-0010(55) DECEPTIVE MAPPING OF THE B2H PROJECT IN LA GRANDE

Exhibit C Page 4 2.2 Second Amended Project Order Provisions

OAR 345-001-0010(55) "Maps shall provide enough information for property owners potentially affected by the facility to determine whether their property is within or adjacent to the site boundary. Major roads shall be named. IPC shall include maps drawn to a scale of 1 inch = 2,000 feet or smaller when necessary to show detail."

"Maps shall clearly show the boundaries of the proposed corridor within which the transmission line would be constructed, and shall include familiar landmarks such as roads and existing power lines that reviewing agencies and affected landowners may use to identify the proposed route. Aerial photographs with all roads identified are helpful for public interpretation and review. The site boundaries of all proposed related or supporting facilities, including but not limited to access roads, temporary lay down areas, switching stations/substations, must also be identified. Maps showing access roads included as related or supporting facilities shall clearly depict where existing roads or road segments are proposed to be in the site boundary."

Idaho Power states that attachment C-2 contains a map-set organized by county that includes a series of detailed maps that are at a scale of 1 inch equals 1,000 feet. Project features shown include the Site Boundary, access roads, stations, communication station sites, and communication distribution lines within the Idaho Power Company (IPC) service area. Temporary project features are also shown, including structure work areas, multi-use areas, pulling and tensioning sites, and light-duty fly yards. (See attachment 1: Copy of pages C4&5)

Unfortunately near La Grande the maps showing access roads as related or supporting facilities do not clearly depict existing roads or road segments. The B2H application maps lack the detail that is required because the maps do not show the names of the streets. Without detailed maps property owners cannot

tell how they will be affected by this project. La Grande maps lack the details required by the state of Oregon to meet the ordinance. (See attachment 2: Copy of maps from attachment C-2 and Google maps)

Furthermore, the application states that "Surface streets within the city of La Grande may need to be used during construction to access portions of the project" (U2 P8). Nowhere in the application are the streets listed that may be used in La Grande. The roads listed for Union County in Table 7, Preliminary Routes (U2 P18) lists Foothill Road and city of La Grande surface Streets. The application omits that from Foothill you would need to travel on Gekeler, Sunset, Modelaire, and Hawthorne to get to their proposed access road in La Grande. The application also forgot to mention that you cannot get to Modelaire without traveling on Sunset Drive which houses the Grande Ronde Hospital, La Grande High School, Central Elementary and Community Sports Complex. The Modelaire access road is also next to Grande Ronde Hospital's Heliport. None of this information can be deducted from the maps or the verbiage that Idaho Power has supplied in their application.

Idaho Power states that "Project traffic generated during construction is not anticipated to cause notable congestion or otherwise impact local communities" (U2 P20). Given that the application states that "Construction of the new transmission line is anticipated to last at least 36 months, with multiple construction crews working simultaneously (U2 3.1.1.1) and that construction will generally occur between 7 a.m. and 7 p.m., Monday through Saturday (U2 page 16) it is impossible to believe that there will not be "notable congestion" within the city of La Grande.

The application also states that "impacts from temporary road closures and construction activities are not anticipated to affect local communities because Project activities involving short-term road closures will occur in remote areas, away from housing and other developments"(U3.1.5 P25). This statement is not true for La Grande and the Google Maps that have been provided clearly shows that the proposed B2H construction will be happening in La Grande neighborhoods!

Idaho Power's application for the Boardman to Hemingway power transmission line has obvious inaccuracies. Idaho Power did not provide aerial photographs with all roads identified to help the public interpret and review their application. Nor did they provide maps showing access roads that clearly depict existing roads so that the general public could determine how this project would affect them. The application has also omitted the names of the roads that will be used in La Grande.

Therefore the Oregon Department of Energy Siting Council needs to deny Idaho Power's application for the B2H transmission project due to the fact that the application violates OAR 345-001-0010(55).

Sincerely,



Signature

95 2nd St #A

Address La Grande, OR

Debera G white

Printed Name

deberaw3@gmail.com

Email

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

APPLICANT FAILED TO INCLUDE ALL REQUIRED SOURCES OF NOISE IN THEIR MODELING OF NOISE IMPACTS OF DEVELOPMENT


Idaho Power did not include any of the items listed in OAR 340-035-0035(l)(b)(B)(ii), which are only exempt from the noise measurement when the development occurs on a previously used site. When establishing ambient noise level for a new development on a site not previously used, it states: "Sources exempt from the requirements of section (l) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement."

The applicant's noise modeling only includes the noise generated from the transmission line itself. Noise modeling must be corrected to include (b) Warning Devices, (c) sounds created by road vehicles, (d) Sounds from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576 ; (e) bells, chimes, or carillons; (f) aircraft subject to pre-emptive federal regulations and (k) sounds created by the operation of road vehicle auxiliary equipment.

The application is incomplete. Without having the information regarding these additional noise sources, the department and the siting council lack the information regarding how many noise sensitive properties are impacted and by how much.

A proposed order cannot be issued until the developer submits all the information regarding the noise impacts of this development. This information must be available to decide if the standard is met or if it can be met with additional site conditions.

Sincerely,



Signature

Printed Name:

Debeva G white

Mailing Address:

95 2nd St Apt A
La Grande, OR, 97850



Oregon Department of Energy and the Energy Facility Siting Council

Public Hearing on the Draft Proposed Order
for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) Jonathan White

Mailing Address (mandatory) 485 Modulaire Dr
La Grande, OR

Phone Number (optional) () _____ Email Address (optional) jonwhite418@gmail.com

Today's Date: 6/20/19

Do you wish to make oral public testimony at this Hearing: Yes No

Written comments can also be submitted today.

All written comments must be received by the deadline, July 23, 2019, 5 p.m. PDT to:

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony

(Please print legibly – Use the back for additional space if needed. Additional written comments may be attached to this card.)

Input on Draft Proposed Order for the Boardman to
Hemingway Transmission Line

<p style="text-align: right;">Page 50</p> <p>1 primitive campsites and a fishing dock. Morgan Lake 2 Park actually contains two lakes. Morgan Lake covers 3 70 acres. 4 The other, Twin Lake, is in plain site within 5 300 feet of Morgan Lake, it covers 27 acres. Twin Lake 6 is undeveloped, a wildlife and bird sanctuary, home to 7 nesting bald eagles. It is designated as protected 8 wetlands. In their application Idaho Power conveniently 9 omits any references to Twin Lake. 10 Page 156 purports to be a map of Morgan Lake 11 Park. According to the map legend the purple crosshatch 12 amoeba-shaped area is Morgan Lake Park. That is wrong. 13 The purple crosshatch is Morgan Lake. The actual 14 boundaries of the 204-acre park are not indicated. And 15 obviously it's difficult to believe "extensive work on 16 this siting study" ever occurred. 17 A specific example of unsupported conclusions: 18 Page 145, Baseline condition, quote: "A goal of minimal 19 development of Morgan Lake Park should be maintained to 20 preserve the maximum natural setting and to encourage 21 solitude, isolation, and limited visibility of users..." 22 Page 146, quote: "The landscape character is 23 natural appearing. Scenic integrity is high as the 24 human developments are harmonious with the landscape." 25 Page 149: "Vegetation will block views of the</p>	<p style="text-align: right;">Page 52</p> <p>1 significant impact." 2 Thank you. 3 HEARING OFFICER WEBSTER: Following 4 Mr. Anderson, we will hear from Jonathan White. 5 MR. JOHN ANDERSON: Thank you. Many of the 6 things I have to say have already been covered. 7 HEARING OFFICER WEBSTER: If you could give 8 your name and your address. 9 MR. JOHN ANDERSON: I'm sorry. John C. 10 Anderson, 409 Sunset Drive, La Grande. 11 Many of the things that I have to say have 12 already been covered quite eloquently, but being short, 13 I will say them anyway. 14 There are many good reasons to abandon Idaho 15 Power's planned B2H power line. Today you may hear 16 testimony regarding economics, geology, eminent domain, 17 view scapes, and many others. 18 I would like to talk about the danger of fire. 19 We know about the Camp Fire and the tragic consequences 20 for Paradise, California. This and other major fires 21 were caused by power lines owned by PG&E. 22 B2H will cross the Blue Mountains west of 23 La Grande through areas of extreme risk of wildfire. 24 This is reckless behavior. 25 In 1973, the Rooster Peak Fire started 6 miles</p>
<p style="text-align: right;">Page 51</p> <p>1 towers from most locations in the park," unquote. 2 In reality, one tower would dominate the 3 entrance to the park, all 130 feet of it in plain view. 4 Within the park, trees bordering the lake are no more 5 than 80 feet high. 130-foot transmission towers will 6 rise more than 50 feet above those trees, dominating the 7 current landscape. 8 Idaho Power simply concludes that the 9 inescapable sight of 500-kV transmission lines and 10 towers around a natural lake setting will have, quote, 11 "no significant impact," on Morgan Lake Park. In 12 research writing this qualifies as wishful thinking. 13 This is the park whose baseline, quote, 14 "should be maintained to preserve the maximum natural 15 setting and to encourage solitude, isolation, and 16 limited visibility of users," unquote, because 50 years 17 ago, no one ever imagined anything larger than a human 18 being might ever intrude. 19 If this application were an airplane, it would 20 have crashed long ago. I urge the Commission to deny 21 this application for a site certificate until each 22 comment submitted at these public meetings and sent to 23 the Commission by July 23rd has been thoroughly analyzed 24 and Idaho Power has provided credible evidence to 25 support each of its conclusions of, quote, "no</p>	<p style="text-align: right;">Page 53</p> <p>1 west of La Grande. When it was discovered it was 2 limited to 1 acre. Days later it had consumed 6,000 3 acres and had burned right up to the hospital's grounds. 4 It could happen again. 5 PG&E and other utilities are shutting down 6 some of their lines during times of high risk. If Idaho 7 Power wisely followed their lead, they would lose the 8 power they say they need during a time of peak demand. 9 Siting a high-voltage line through fire-prone 10 areas is an unacceptable risk to take when this line is 11 not needed. I don't think that Idaho Power has 12 presented plans to mitigate this dangerous situation nor 13 the unforeseen consequences of construction during peak 14 fire season. 15 Please consider the safety of La Grande and 16 its surroundings before you make any decisions. 17 Thank you. My written remarks will follow at 18 a later time. 19 HEARING OFFICER WEBSTER: Thank you. 20 Following Mr. White, we will hear from Susan 21 Badger. 22 MR. JONATHAN WHITE: Jon White, 485 Modelaire 23 Drive, La Grande. 24 My comment is about the blasting that would 25 likely be required during the construction phase of the</p>

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1 B2H line near milepost 106 through 108 of the
 2 IPC-preferred Mill Creek route, and that is where the
 3 line would come closest to La Grande. Although the
 4 application does not specify where blasting will occur,
 5 the applicant's blasting plans state, quote: "Blasting
 6 may be needed in certain areas with rocky terrain to
 7 excavate tower footings, prepare station pads, and to
 8 construct access roads."
 9 The relevant Structural Standard states, in
 10 part: The applicant, through appropriate site-specific
 11 study, has adequately characterized the potential
 12 geological and soils hazards of the site and its
 13 vicinity that could be aggravated by the construction of
 14 the proposed facility.
 15 My impression from reviewing the application
 16 is that the applicant has not fully considered the
 17 impacts of blasting on the nearby unstable slope in a
 18 populated area of La Grande, Oregon. There is map in
 19 the application that shows the B2H line at milepost 106
 20 through 108. That map depicts where the line is about
 21 2,500 feet from a populated "Unconsolidated Sediments"
 22 zone, and then crosses a, quote, "Landslide Deposits"
 23 zone near milepost 108.
 24 The application also mentions in text, slope
 25 instability in a small part. Quote: "One of the

Page 55

1 landslides intersects the IPC proposed routed between
 2 towers 160/3 and 106/4. Based on review of the
 3 topography and aerial photographs, this mapped landslide
 4 may impact the proposed work areas around tower 160/4.
 5 A field reconnaissance of this area should be performed
 6 as part of the geotechnical exploration program,"
 7 unquote.
 8 My concern is more about the construction
 9 process than about the integrity of the towers after
 10 construction. The application identifies the problem in
 11 general but provides no detail about the blasting or the
 12 potential effects on nearby houses in an area that the
 13 City of La Grande designates as a, quote, "Geologic
 14 Hazard Zone," unquote. We know that each tower footing
 15 will require a hole 30 to 50 feet deep, and that the
 16 bedrock underneath the line on milepost 106 to 108 will
 17 almost certainly require blasting for efficient
 18 excavation.
 19 The application does not address this concern,
 20 and the proposed construction is simply too close to a
 21 populated area to mitigate the risk of damage to homes.
 22 The application does not comply with the relevant
 23 standard.
 24 I will include detailed references in my
 25 written comments. Thank you for your consideration.

Page 56

1 HEARING OFFICER WEBSTER: Thank you.
 2 MS. SUSAN BADGER-JONES: Thank you. Susan
 3 Badger-Jones, 412 H Avenue, PO Box 1341, La Grande.
 4 While I agree with most of the objections
 5 you'll hear this evening about elements of the
 6 application for site certification, I want to
 7 specifically address portions of the Morgan Lake
 8 Alternative, Exhibit T, page 44.
 9 La Grande has been my home for more than
 10 30 years, and in that time, visiting Morgan Lake Park
 11 has been a weekly, but more likely daily pleasure,
 12 enjoying the wildflowers as they emerge, walk or bird,
 13 exercise my dog, meet friends, gather at a picnic table.
 14 Which brings me to the tower at the park. The
 15 City of La Grande has many well-manicured parks with
 16 playing structures, sports fields, hard scape,
 17 buildings, and professional landscaping. Morgan Lake,
 18 however, has been reserved to experience the natural
 19 world; birds, waterfowl, fishing, camping under the
 20 stars. It's one of the few places around here you can
 21 go to see the sunset. Nesting osprey, cormorants, and
 22 other waterfowl. It's a quiet place; no motors are
 23 allowed on the lake.
 24 Due to the popularity of the park, over the
 25 last few years the City has made improvements to

Page 57

1 hosting, maintenance, and campground designation,
 2 supporting that natural experience. A tower is very
 3 much at odds with this.
 4 The application says vegetation will block
 5 views of the proposed tower. It's just not true. Trees
 6 at the proposed site are 70, maybe 80 feet tall, but the
 7 tower 130 feet and basically ugly. The tower will be
 8 highly visible coming and going and from many locations
 9 in the park.
 10 While people may still be able to walk and
 11 boat and camp, the quality of that natural experience
 12 will be very much compromised. "Less than significant
 13 impact" is what the application says. Give me a break.
 14 That brings me to fire. Fire is a constant
 15 danger in a park area, and the proposed tower heightens
 16 that threat. The area is already well familiar with
 17 wildfire and subsequent loss of timber and homes, yet
 18 that risk isn't even addressed.
 19 And then there is the road. The only access
 20 to the staging area and future maintenance is the
 21 county's Morgan Lake Road. It's the only access to town
 22 and emergency services for more than 30 families. You
 23 do the math; 30 homes, 2 drivers each, 2, 4 trips a day,
 24 6 to 7 days a week to work, to school, church, kids,
 25 medical services, and then there are people coming up

June 19, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the B2H Transmission Project 9/28/2018; DPO

Dear Chair Beyeler and Members of the Council:

My comment is about the blasting that would likely be required during the construction phase of the B2H line near MP 106—108 of the IPC-preferred Mill Creek route. Although the application does not specify where blasting will occur, *Attachment G-5 Framework Blasting Plan* states: "Blasting may be needed in certain areas with rocky terrain to excavate tower footings, prepare station pads, and to construct access roads."

The relevant standard is the 345-022-0020 Structural Standard:

"(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility;"

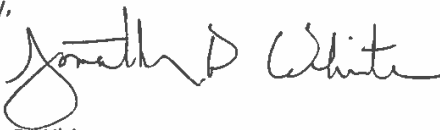
My impression from reviewing the application is that the applicant has not fully considered the impacts of blasting on the nearby unstable slope in a populated area of La Grande, Oregon. The map on page 169 of *Exhibit H Geological Hazards and Soil Stability*, shows the B2H line at MP 106—108, where it is within about 2500' of a populated "Unconsolidated Sediments" zone (labeled Qf) and then crosses a "Landslide Deposits" zone (labeled Qls) near MP 108.

The application also mentions the slope instability in a small part of this area, on page 112 of *Exhibit H – Attachment H-1 Appendix B Soils Data Tables and Maps*:

"One of the landslides mapped by Schlicker and Deacon (1971), not included in SLIDO, intersects the IPC Proposed Route between towers 106/3 and 106/4. Based on review of topography and aerial photographs, this mapped landslide may impact the proposed work areas around tower 106/4. A field reconnaissance of this area should be performed as part of the geotechnical exploration program."

My concern is more about the construction process than about the integrity of the towers after construction. The application identifies the problem in general but provides no detail about the blasting or about the potential effects on nearby houses in an area that the City of La Grande designates as a "Geologic Hazard Zone." We know that each tower footing will require a hole 30—50' deep, and that the bedrock underneath the line at MP 106—108 will almost certainly require blasting for efficient excavation. The application does not address this concern, and the proposed construction is simply too close to a populated area to mitigate the risk of damage to homes. The application does not comply with the relevant standard.

Sincerely,



Jonathan D White
485 Modelaire Dr
La Grande, OR 97850

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:53 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019
Attachments: Scan 2019-8-15 17.38.19.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter signed by me and 54 other residents of La Grande expressing our concerns regarding the B2H Project and we request that EFSC deny the Site Certificate.

I have also sent a bound copy of this material by the US Postal Service.

Sincerely,

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the usage of the "Local Streets" ¹ specifically the Modelaire-Hawthorne Loop) ², hereafter referred to as the "loop", of La Grande to access the site entrance. This residential "loop" was constructed without sidewalks for a new development around the early 1960s.

According to OAR 345-022-0110, Public Services (pg. 5. April 2017) "The applicant...must address all permanent and temporary impacts of the facility on housing, traffic, safety, police and fire protection, health care and schools." ³

My impression from reviewing the application Page 17 ⁴ is that the applicant has not fully examined the final portion of the intended route nor does it fully recognize or address the need for traffic mitigation. This "loop" is the only access to/from thirty-six houses to the rest of the city. The area to the north of the "loop" is occupied by the Grande Ronde Hospital and Medical Clinic. Two blocks to the east is located the local high school and a grade school. ²

In June of 2016, the Grande Ronde Hospital petitioned the City to have a conditional use for a parking lot expansion project next to Hawthorne. The Conditional Use Permit was approved subject to the Condition of Approval that "No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is developed to residential standards and is not designed to support commercial traffic." ⁵

The La Grande Director of Public Works, Kyle Carpenter, provided information regarding the widths for the streets in question. The two streets range from 33 feet to 37 feet in width with no sidewalks. I personally measured the area where the unpaved stem of Hawthorne leaves the "loop" to go up the hill. At the junction it measures 32 feet curb cut to curb cut and narrows to 18-21 feet in width as it goes around the corner up the hill. 6 The Public Works Director also provided pictures of the mapping system showing the existing utilities located in the "loop". 7-8. It should also be noted that from the entrance to the "loop" at Sunset Drive to the entrance of the site the road has a 16% grade.

Attachment U2 9 from the application shows an "Aerial Lift Crane to be Used During Construction" and the Transportation and Traffic Plan on page 19 10 lists a number of other vehicles anticipated to be used. Article 6.6 — Public Street Standards for the City of La Grande Section 6.6.002 states that "Collector Streets are designed to withstand normal trucks of an HS20 loading. Larger trucks are to utilize Arterial Streets where at all possible." 11 The majority of vehicles listed on page 19 exceed that limit and would be using a Local Street in addition to Arterial and Collector Streets. According to the Public Works Director the two streets in the "loop" were designed as Local Streets for residential use, able to accept the pressures of HS20 for the purpose of an occasional need such as a weekly garbage truck or an emergency vehicle but for no more than 5% of the time. The paving construction of these over 50 year old streets in the "loop" was not designed for repetitive use by vehicles heavier than a normal car. These streets in the "loop" have not been repaved, only patched when necessary, since they were first constructed.

The application does not address the "loop" specifically, but 3.1.2 (pg. 19) 10 and Table 6 (pg.17) 12 of the Transportation and Traffic Plan indicate there would be numerous vehicles using this route. Not knowing exactly just which vehicles would be on the "loop" daily but making a conservative estimate of 50 round trips (100 single) it would be a constant parade with one truck every 7.2 minutes. This is unacceptable for numerous reasons including constant excessive noise.

Not only would weight of the vehicles be a problem but the narrowness of the "loop" streets and the ninety degree blind curves that would have to be executed would be either impossible or extremely dangerous considering the turning radius for many of these large vehicles. The

already dangerous situation for a number of driveways that exit onto these "loop" streets at blind curves would be exacerbated. 13-14

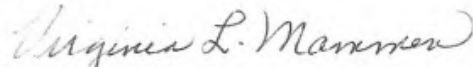
When considering only the traffic and safety issues listed above, the use of the "loop" as a part of the route for Idaho Power seems to be not only dangerous for the residents but unconscionable and irresponsible for Idaho Power to use such streets that are currently primarily for the neighborhood for walking (children to school, all ages for physical training), driving, or biking. I fear there are standards that are either not being considered or they are intentionally being ignored. There should be some common sense, courtesy and respect for the impact this project would impose on any neighborhood.

Finally, La Grande Ordinance Number 3077, which adopted Oregon State Traffic Laws by reference, states in Section 17 page 8 "It shall be unlawful for any person, firm or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes." Neither Modelaire/Hawthorne Loop nor Sunset Drive are posted as truck routes. 15-16

A site review and traffic plan must be completed prior to the cite certificate being issued and not 90 days prior to construction as stated.

For the above reasons I oppose the usage of the proposed route for the construction of the B2H transmission line.

Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon. 97850

gmammen@eoni.com

Exhibit 1

City of La Grande Ordinance Number 3242,
 Series 2018
 Page 236 of 312

**TABLE 1
 STREET STANDARDS**

Functional Classification	ADT Volume	Speed (mph)	# of Travel Lanes	Travel Lane Width	Turn Lane or Median Width	Bike Lanes	Min. Bike Lane Width	On-Street parking
Downtown Arterial	10,000	20	2-3	11'	11'			both sides
Arterial	10,000	40-55	2-5	12'	4-14'	optional ⁴	5'	none
Major Collector	2,000 - 10,000	25-45	2-3	11'	12'	required	5'	one or both sides
Minor Collector	1,000 - 2,000	25-35	2	11'	none	Optional ⁵	5'	one or both sides
Local Street	0 - 1,000	15-25	2	10'	none	none	none	one or both sides

Functional Classification	Sidewalks	Min. Sidewalk Width	Planting Strip Width ¹	Total Paved Width ²	Total ROW Width ³	Private Access Spacing
Downtown Arterial	required	12'	3'6" ⁶	49'	80'	200'
Arterial	required	5'	8'	36'-72'	80'-102'	200' - 400'
Major Collector	required	5'	8'	52'-60'	62'-90'	150' - 300'
Minor Collector	required	5'	8'	30'-48'	60'-78'	75' - 150'
Local Street	required	5'	8'	28'-36'	40'-66'	Each Lot

¹A portion of the required planting strip width may be used instead as additional sidewalk width or reduced right of way, as appropriate.

²The minimum of the paved width was calculated with the following assumptions:

Arterials: Two (2) travel lanes, four foot (4') median divider, no center turn lane, no bike lanes.

Major Collectors: Two (2) travel lanes, two (2) bike lanes, no center turn lane, parking on one (1) side.

Minor Collectors: Two (2) travel lanes, parking on one (1) side of street, no bike lanes.

Local Streets: Two (2) travel lanes, parking on one (1) side of street.

The maximum paved width for each street was calculated assuming the inclusion of all required and optional facilities. Minimum paved widths for each street are as required in Section 6.2.005 of this Code.

³These right-of-way width ranges are for new streets.

⁴Bike lanes should be provided on Arterials unless more desirable parallel facilities are designated and designed to accommodate bicycles.

⁵ Bike lanes should be provided on Minor Collectors where traffic volumes or other factors warrant. Otherwise, Minor Collectors should be designed and designated as shared roadway facilities with wide outside travel lanes of 14' on important bike routes.

Exhibit 2

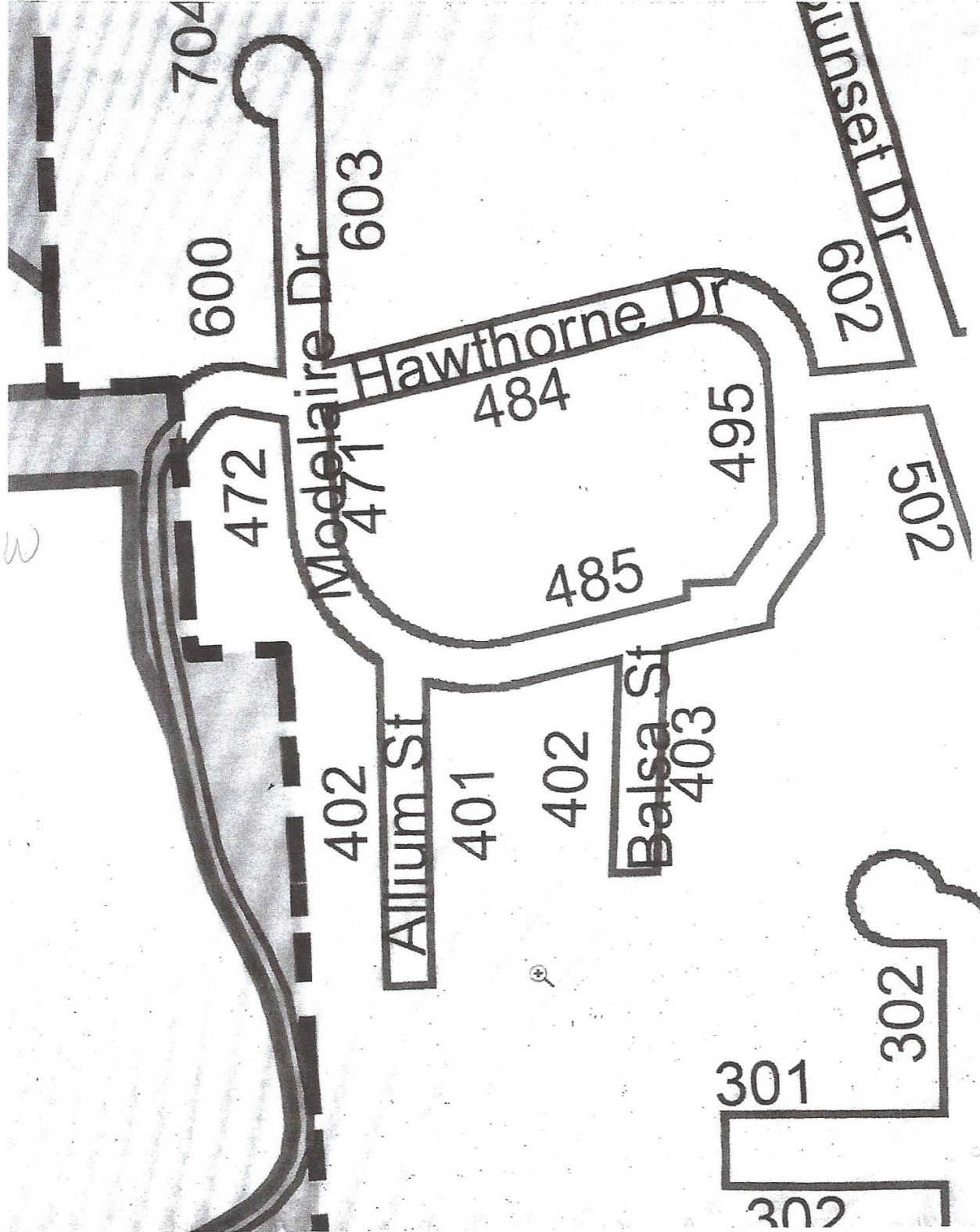


Exhibit 3

Public Services

ORAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

ORAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

ORAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (ORAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (ORAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

ORAR 345-024-0010 and 345-024-0015

This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety. Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

ORAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4

Idaho Power Responses to Comments and Requests for Additional Information on the B2H ApASC
 from the City of La Grande
 Compiled by ODOE. RAI's from the City of La Grande and Responses from IPC

U	U-Public Services include utilities such as road systems, water, sanitation services, power, and other amenities necessary for the construction.	Ordinance #2912, Series 1997 gives the City jurisdiction and control on all City street rights-of-way and Ordinance #3077, Series 2009, establishes the process and requirements for permits and licenses for uses of the streets that are not normal uses and may result in damages.	The project construction has two major road systems through La Grande that are proposed for this project – Morgan Lake Road via Gekeler Lane, 'C' Avenue, Walnut Street, and on up Morgan Lake Road. Roads along these routes are used by the ambulance service for accessing the hospital, the public transit system on its normal daily route, citizens to access locations within and outside this area and also for the school busing system for transporting kids to the La Grande Middle School, La Grande High School and Central Elementary School. In addition to the vehicular modes of travel, those routes are heavily used by bicyclists and pedestrians. The other route that would be utilized is the same route with the exception of turning onto Sunset Drive and up Hawthorne Street to a private gravel road that heads up the area above Deal Canyon. Two other routes that are not addressed but that would be obvious access routes for construction would be South 12th Street and South 20th Street. As a general rule, City streets are built with ninety degree angles, which may restrict some	To address the City's concerns regarding traffic and road use within the city's limits, Idaho Power has added the following proposed conditions to Exhibit K: <i>Land Use Condition 9: Prior to construction in Union County, the site certificate holder shall complete the following to address traffic impacts in the county:</i> <i>a. The site certificate holder shall finalize, and submit to the department for its approval, a final county-specific transportation and traffic plan. The protective measures described in the draft Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be included and implemented as part of the final county-specific plan, unless otherwise approved by the department;</i> <i>b. The site certificate holder shall work with the Union County Road Department and the City of La Grande Public Works Department to identify concerns related to Project construction traffic; and</i> <i>c. The site certificate holder shall develop traffic control measures to mitigate the effects of Project construction traffic.</i> <i>Land Use Condition 26: During construction in Union County, the site certificate holder shall conduct all work in compliance with the Union County-specific</i>
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Exhibit 5

103

IV. CONCLUSIONS

104 Based on the Findings of Fact above, the Planning Commission concludes that the application meets the
105 requirements established in LDC Articles 8.5 and other applicable codes and Ordinances.

106

107

V. ORDER AND CONDITIONS OF APPROVAL

108 Based on the conclusions above, the Planning Commission approves the Conditional Use Permit as
109 requested, subject to the following Conditions of Approval:

- 110 1. No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is
111 developed to a residential standards and is not designed to support commercial traffic.
- 112 2. Any existing driveway curb cuts along Hawthorn Drive bordering GRH's property, that are not used for
113 residential purposes, shall be removed and replaced with City standard improvements that exists
114 adjacent to such areas.
- 115 3. There is a storm sewer line extending through the project area that shall to be protected. Any
116 improvements that may affect the storm sewer line shall be reviewed and approved by the Public Works
117 Director.

118

119

VI. STANDARD CONDITIONS OF APPROVAL FOR LAND USE APPLICATIONS

- 120 1. **Revisions to a Valid Conditional Use Permit:** Any variations, alterations, or changes in a valid
121 Conditional Use Permit requested by the deed holder shall be considered in accordance with the
122 procedures of the Land Development Code as though a new Conditional Use Permit were being applied
123 for.
- 124 2. **Public Works Standards:** Where a development involves work within the public right-of-way, a Right-
125 of-Way Permit shall be obtained from the Public Works Department in advance of commencing with any
126 work in the right-of-way. All improvements within the public right-of-way shall be in conformance with the
127 most recent adopted City of La Grande "Engineering Standard Drawings and Specifications for
128 Construction Manual."
- 129 3. **Building Permits:** The City of La Grande Building Department shall be contacted early in the process
130 and in advance of development to coordinate and obtain required building, plumbing, electrical and/or
131 mechanical permits. All required permits shall be acquired in advance of construction.

132

133

VI. OTHER PERMITS AND RESTRICTIONS

134 The applicant and property owner is herein advised that the use of the property involved in this application
135 may require additional permits from the City of La Grande or other local, State or Federal Agencies.

136 The City of La Grande land use review, approval process and any decision issued does not take the place of,
137 or relieve the applicant of responsibility for acquiring such other permits, or satisfy any restrictions or
138 conditions thereon. The land use decision herein does not remove, alter, or impair in any way the covenants
139 or restrictions imposed on this property by deed or other instrument.

140 The land use approvals granted by this decision shall be effective only when the rights granted herein have
141 been exercised and commenced within one (1) year of the effective date of the decision. In case such right
142 has not been exercised and commenced or an extension obtained, the approvals granted by this decision
143 shall become null and void. A written request for an extension of time shall be filed with the Planning
144 Department at least thirty (30) days prior to the expiration date of the approval.

145

146

7/25/2019

Gmail - Modelaire Roadway Specifications

Exhibit 6



Virginia Mammen <4gmammen@gmail.com>

Modelaire Roadway Specifications

3 messages

Kyle Carpenter <KCarpenter@cityoflagrande.org>
To: "gmammen@eoni.com" <gmammen@eoni.com>

Fri, Jul 12, 2019 at 1:51 PM

I have attached a couple pictures of our mapping system that will give you a sense of where existing utilities are in Modelaire and Hawthorne. As for the widths of the roadways, I took measurements in multiple places, and found the following:

- Modelaire Drive (F Avenue) between Sunset Blvd and Hawthorne Drive is approximately 33 feet wide with a grade of about 5 Percent.
- Hawthorne Drive is approximately 32 feet wide at the bottom near the intersection of Modelaire/F Avenue and widens to about 34 feet where it intersects Modelaire at the top of the hill. The grade heading up hill is approximately 15.5 Percent.
- Modelaire Drive is generally 36 feet wide with some minor variability generally less than a foot (35' to 37'). On the southernmost segment of the roadway where the majority of the elevation gain is observed the grade is approximately 16 Percent.

Let me know if there are any other specifications of these roadways that you are interested in that I have missed. Have a great weekend and thanks for the treats, the guys were very appreciative.

Kyle Carpenter, PE

Public Works Director

City of La Grande

Public Works

Ph: (541) 962-1325

Fax: (541) 963-4844

2 attachments



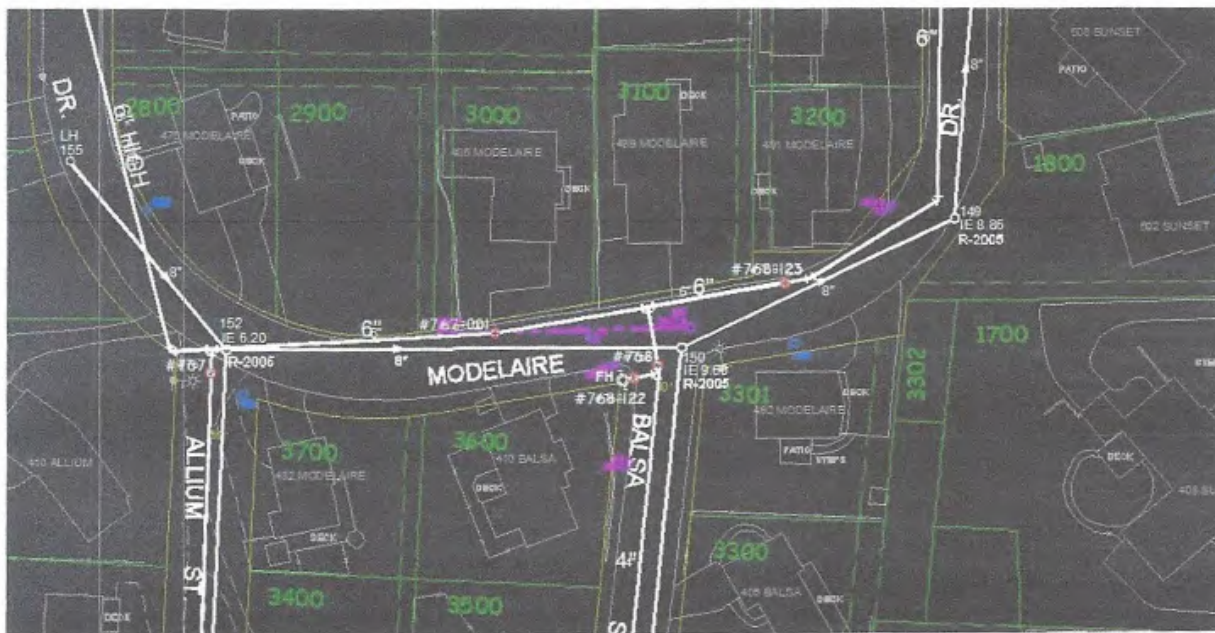
Hawthorne.jpg
150K

Modelaire.jpg
120K

7/25/2019

0 (1067x555)

Exhibit 7



7/25/2019

0 (1397x451)

Exhibit 8



Exhibit 9

attachment U2

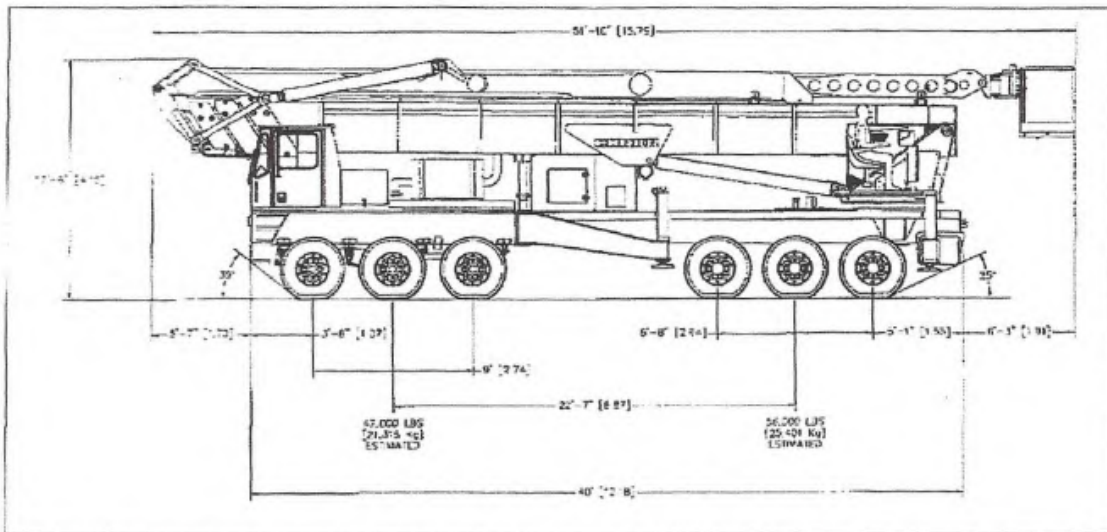


Figure 2. Example Aerial Lift Crane to be Used During Construction (Roadable Length 52 Feet; Width 8 Feet 6 Inches)

Exhibit 10

The following is a summary of anticipated equipment to be used for each transmission-line construction activity.

- Survey work: pickup trucks or ATVs.
- Timber removal: pickup trucks, feller bunchers, dump trucks, wood chippers.
- Road construction: pickup trucks, bulldozers, motor graders, and water trucks.
- Hole digging, installation of directly embedded structures, or foundation installation: pickup trucks, 2-ton trucks, digger derrick trucks, hole diggers, bulldozers, concrete trucks, water trucks, cranes, hydro cranes, wagon rock drills, dump trucks, and front-end loaders.
- Hauling lattice steel members, tubular poles, braces, and hardware to the structure sites: steel haul trucks, carry alls, cranes, and forklifts.
- Assembly and erection of structures: pickup trucks, 2-ton trucks, carry alls, cranes, and a heavy lift helicopter.
- Wire installation: pickups, wire reel trailers, diesel tractors, cranes, 5-ton boom trucks, splicing trucks, three drum pullers, single drum pullers, tensioner, sagging dozers, carry-alls, static wire reel trailers, bucket trucks, and a light duty helicopter.
- Final cleanup, reclamation, and restoration: pickup trucks, 2-ton trucks, bulldozers, motor graders, dump trucks, front-end loaders, hydro-seed truck, and water trucks.

The highest level of traffic will be when the wire stringing operations begin while several other operations are occurring at the same time, which will likely include ROW clearing, installing foundations, hauling steel, and assembling and erecting structures. For the station work, the highest level of traffic will be during site grading and foundation installation. For the communication station sites, the highest level of traffic will be during grading and site preparation.

Detailed estimates of trips generated by transporting Project construction equipment will be provided by the construction contractor prior to construction.

3.1.3 Traffic Related to Timber Removal

In forested areas, the Project will require removal of timber from the Project ROW and for construction and improvement of access roads. Specific timber harvest plans have not been finalized. Logs from timber clearing may be transported to nearby sawmills. Decisions regarding transportation routes for harvested timber will be made following completion of a timber harvest plan, and the number of log truck tips will be estimated when the timber harvest plan has been finalized. Logging slash will remain onsite if possible. For additional discussion regarding removal of timber in forested areas, see Exhibit K, Attachment K-2, ROW Clearing Assessment.

3.1.4 Impacts to V/C Ratios

Based on the estimated trip generation numbers in Tables 4 and 6, a maximum of approximately 1,294 daily one-way vehicle trips are expected within any one construction spread. To facilitate traffic and other analyses, the two construction spreads are divided into smaller sections based on similar construction windows and seasonal weather restrictions. Not all construction sections will have the same number of concurrent construction activities, depending on how the construction contractor sequences and executes the Project. Some sections will have fewer daily vehicle trips. For the purposes of the traffic analysis, the spreads are divided into five sections with multi-use areas that could have additive traffic impacts. The sections are assumed to have approximately equal levels of activity. The 1,294 daily one-way trips per spread divided over five sections of more concentrated traffic results in 259 daily one-

Exhibit 11

City of La Grande Ordinance Number 3242,
Series 2018
Page 252 of 312

ARTICLE 6.6 – PUBLIC STREET STANDARDS

SECTION 6.6.001 - PURPOSE

Upon the request of the La Grande City Council, a variety of street design standards have been reviewed and are now incorporated in the Land Development Code.

SECTION 6.6.002 - CLASS I IMPROVEMENT STANDARDS

This classification will cover those streets that are designed to meet the standards for an expected life of twenty (20) years or more. The attached drawings shall be the minimum standard for those streets in this classification. All streets designated as Federal Aid Urban Streets (F.A.U.) shall be constructed under these design standards. Streets in this designation shall be constructed with sidewalks when at all possible in an effort to increase pedestrian safety. Collector streets are designed to withstand normal trucks of an HS 20 loading. Larger trucks are to utilize Arterial streets where at all possible. This level of development shall be the ultimate goal for all streets within the City of La Grande.

Possible means of financing available for this Class shall be methods A, B, C, D, E, F, G, and H in Section 6.6.006.

A. Advantages

1. The construction life is extended to a period above other City standards.
2. The visible aesthetics in relationship to having curbs and a blacktop surface with landscaping or concrete driveways and a sidewalk is generally appealing to the public.
3. Easy maintenance for the Public Works Department for cleaning and minor repair.
4. Storm sewer drainage is confined within the bounds of the curbs during minor flooding periods.
5. Parking is restricted to a solid barrier, that being the curb; this restricts parking in the area on the back side of the curb and confines travel to the street surface.
6. Defined areas for possible cross walks, signs, power poles, and other utilities that are restricted to the outside areas behind the curbs.
7. It allows for a wide range of financing methods and is to City standards for a ten (10) year Bancroft bonding.
8. Provides a dust free surface.

B. Disadvantages

1. The extreme high level of cost that is incurred with this type of development.

SECTION 6.6.003 - CLASS II IMPROVEMENT LEVEL

Streets constructed in this classification shall be constructed to the same standards as Class I Streets with the exception of the form of drainage system. These streets shall meet the standards as shown on the attached drawing. This level of construction shall be only utilized in substitution for Class I Streets when it is determined by the City Council at the recommendation of the City Engineer or Engineering Superintendent, that an adequate drainage system cannot be installed for a Class I Street.

Exhibit 12

Transportation and Traffic Plan

Boardman to Hemingway Transmission Line Project

Table 6. Construction Vehicle Trips per Day per Construction Spread

Construction Crew Type	Construction Vehicles					
	Light Construction Vehicles			Heavy Construction Vehicles		
	Number of Pickups/ Mechanic Trucks (per day)	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)	Number of Other Vehicles	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)
Substation Construction	20	2	40	5	2	10
ROW Clearing	9	4	36	5	4	20
Roads/ Pad Grading	9	4	36	9	2	18
Foundations	9	2	18	5	8	40
Tower Lacing (assembly)	27	2	54	0	0	0
Tower Setting (erection)	20	2	40	0	0	0
Wire Stringing	9	4	36	9	4	36
Restoration	3	2	6	0	0	0
Blasting	5	4	20	0	0	0
Material Delivery	20	8	160	12	2	24
Mechanic and Equipment Mgmt.	5	6	30	0	0	0
Refueling	0	0	0	5	4	20
Dust Control	0	0	0	5	4	20
Construction Inspection	5	8	40	0	0	0
Concrete Testing	5	4	20	0	0	0
Environmental Compliance	9	6	54	0	0	0
Surveyors	5	3	30	0	0	0
Totals	—	—	620	—	—	188

Exhibit 13

7/24/2019

Roadway Design Manual: Minimum Designs for Truck and Bus Turns

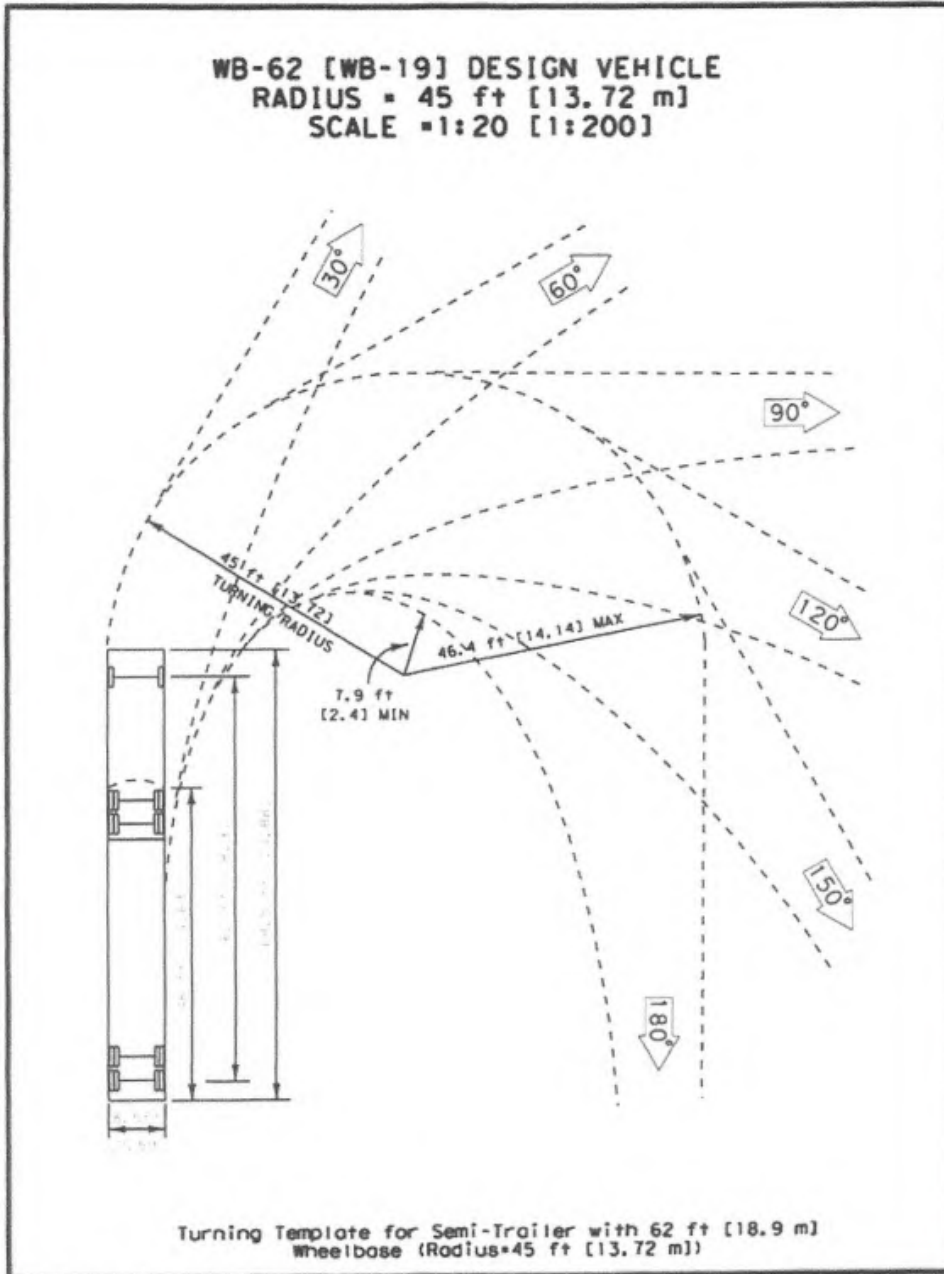


Figure 7-4. Turning Template for Semi-Trailer with 62 ft [18.9 m] Wheelbase, (not to scale). Click [here](#) to see a PDF of the image.

7/24/2019

7-1.png (596x805)

Exhibit 14

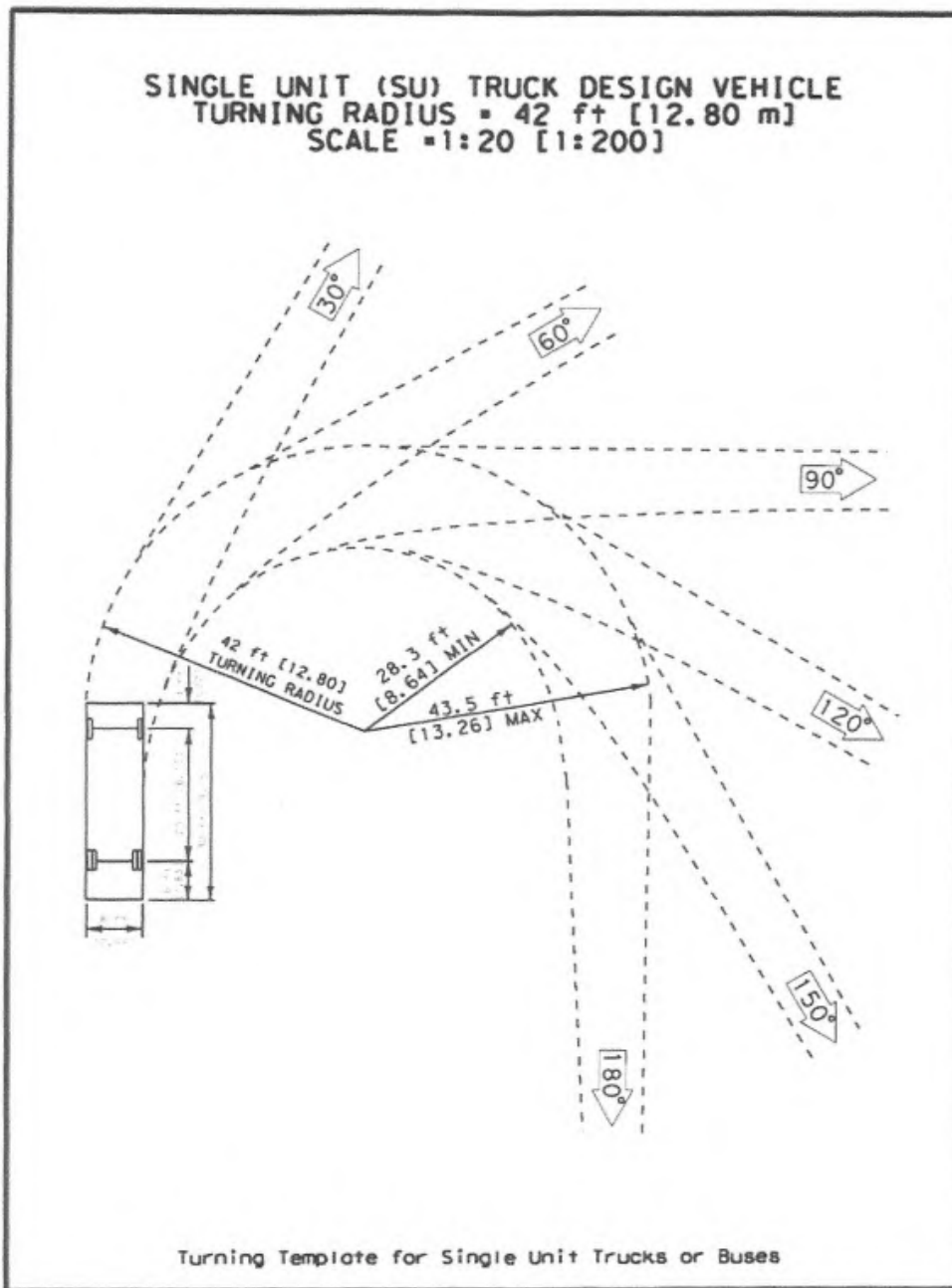


Exhibit 15

**CITY OF LA GRANDE
ORDINANCE NUMBER 3077
SERIES 2009**

**AN ORDINANCE CONTROLLING VEHICULAR AND PEDESTRIAN TRAFFIC, PARADES
AND PROCESSIONS AND ISSUANCE OF PERMITS; PROVIDING PENALTIES; AND
REPEALING ORDINANCE NUMBER 2845, SERIES 1993; ALL AMENDING ORDINANCES
AND ALL OTHER ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH;
AND DECLARING AN EFFECTIVE DATE**

THE CITY OF LA GRANDE ORDAINS AS FOLLOWS:

Section 1. This Ordinance may be cited as the City of La Grande Uniform Traffic Ordinance.

Section 2. APPLICABILITY OF STATE TRAFFIC LAWS.

Oregon Revised Statutes, Chapter 153, and the Oregon Vehicle Code, ORS Chapter 801 and 822, as now constituted, are adopted by reference. Violation of an adopted provision of those chapters is an offense against the City.

Section 3. DEFINITIONS

In addition to those definitions contained in the Oregon state Motor Vehicle Code, the following words or phrases, except where the context clearly indicates a different meaning, shall mean:

a. Alley

A street or highway primarily intended to provide access to the rear or side of lots or buildings in urban areas and not intended for through vehicular traffic.

b. Bicycle

A bicycle is a vehicle that:

1. Is designed to be operated on the ground on wheels;
2. has a seat or saddle for use of the rider;
3. is designed to travel with not more than three (3) wheels in contact with the ground;
4. is propelled exclusively by human power; and,
5. has every wheel more than fourteen inches (14") in diameter or two (2) tandem wheels, either of which is more than fourteen inches (14") in diameter.

c. Bicycle Lane

That part of the highway, adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

d. Bicycle Path

A public way, not part of a highway, which is designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

e. Block

The part of one side of a street lying between the two (2) nearest cross streets.

f. Central Business District

Exhibit 16

ORDINANCE NUMBER 3077
SERIES 2009
Page (8)

a. City Regulation of Special Movement of Oversized Load

The applicant shall submit an application to the City Manager or designee, showing the terminal points of the purported movement; the proposed route; the nature of the movement requested, including the weight and dimensions of the vehicle, load, machine, building, or structure to be moved; the time, date and duration of the proposed movement.

b. Special Movement Permit

A permit shall be required to move any vehicle, structure, or load on, or to access a street when, after preparation for movement, the vehicle, structure or load exceeds fourteen feet (14') in height, requires the use of guy wires, or could result in the blockage of a street. An approved application may serve as a permit, and a copy of the approved application shall be provided to the applicant.

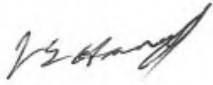
Section 17. TRUCK ROUTES

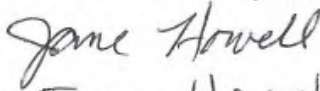
- a. It shall be unlawful for any person, firm, or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes.
- b. Any vehicle with a gross weight over 26,000, pounds specifically picking up deliveries or making deliveries to any business or residence located on a street that is not a truck route will be exempted if the vehicle is driven from the truck route to the destination in the shortest, most direct, and safest route.
- c. The use of Jacob brakes shall not be allowed within the city limits of La Grande, Oregon.
- d. Truck routes will be posted as follows:
 1. Walnut street north from the city limits to C Avenue;
 2. C Avenue east from Walnut Street to Gekeler Avenue;
 3. Gekeler Avenue east to the city limits;
 4. 12th street south from Gekeler Avenue to the city limits;
 5. 2nd Street south from the city limits to Adams Avenue;
 6. Monroe Avenue east from Spruce Street to Highway 82;
 7. Jackson Avenue east from Spruce Street, and
 8. Spruce Street south from the city limits to Monroe.

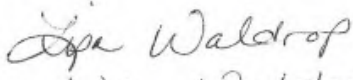
Section 18. IMPOUNDMENT AND DETENTION OF VEHICLES

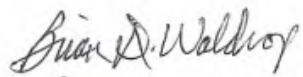
- a. Whenever a vehicle is placed in a manner or location that constitutes an obstruction to traffic or a hazard to public safety, a police officer or enforcement officer shall order the owner or operator of the vehicle to remove said vehicle. If the vehicle is unattended, the officer or enforcement officer may cause the vehicle to be towed and stored at the owner's expense. The owner shall be liable for the costs of towing and storing, notwithstanding that the vehicle was parked by another or that the vehicle was initially parked in a safe manner but subsequently became an obstruction or hazard.

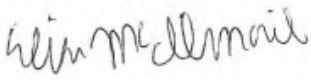
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SIGNATURE 
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ADDRESS 482 Modelaire Dr
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EMAIL bdwaldrop58@gmail.com

SIGNATURE 
PRINTED NAME EUSE McILMAIL
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EMAIL mcilmail151@hotmail.com


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SIGNATURE

PRINTED NAME

ADDRESS

EMAIL



Jessie Huxell
472 Modelaire Dr. LaGrande OR 97850

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL

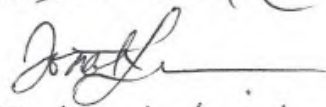

C. Huxell
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CHRIS Huxell @ EMAIL.COM

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL



Jonah Lindeman
702 Modelaire LaGrande
jlindeman@rpi.ag

SIGNATURE

PRINTED NAME

ADDRESS

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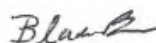

Marie Skinner
208 3rd LaGrande
marieskinner@hotmail.com

SIGNATURE


PRINTED NAME


ADDRESS


EMAIL



Blake Bars
1101 G Ave La Grande
blakebars@gmail.com

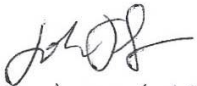
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SIGNATURE 
PRINTED NAME D. Dale Mammox
ADDRESS 405 Balsa, La Grande, Or
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SIGNATURE 
PRINTED NAME Jim Kreider
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EMAIL jkreider@campblackdog.org


SIGNATURE 
PRINTED NAME Judie Arritola
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EMAIL jtol@charter.net


SIGNATURE 
PRINTED NAME Pasco Arritola
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SIGNATURE 
PRINTED NAME JOHN BALUTE
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EMAIL


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SIGNATURE 
PRINTED NAME Andrea Galzow
ADDRESS 486 Hawthorne DR, LA Grande
EMAIL foreverfamily33@aol.com

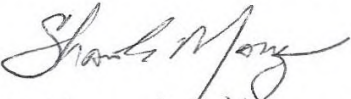
SIGNATURE 
PRINTED NAME Frances E. Lillard
ADDRESS 471 madelaire Dr. L.G.
EMAIL

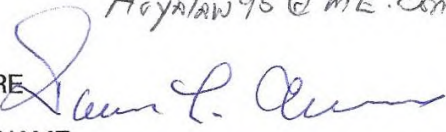
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SIGNATURE 
PRINTED NAME M. Jeannette Smith
ADDRESS 410 Allium Street
EMAIL jeannetterampton@gmail.com

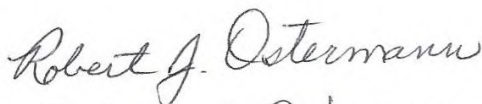
SIGNATURE 
PRINTED NAME KIMBERLEY HEITSTUMAN
ADDRESS 2409 CENTURY LP, LA GRANDE, OR 97850
EMAIL kimheitstuman@hotmail.com


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SIGNATURE: 
PRINTED NAME Shawn K. Mangum
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EMAIL Hoyakaw95@ME.com

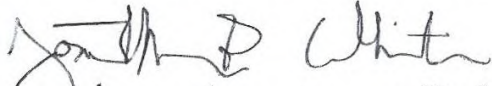
SIGNATURE 
PRINTED NAME
ADDRESS Dennis L. Auer 541-9637720
410 Balsa Street LaGrande, Oregon 97858
EMAIL N/A

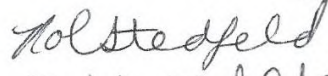
SIGNATURE 
PRINTED NAME Linda Snyder
ADDRESS 491 Modelaire
EMAIL

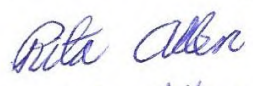
SIGNATURE 
PRINTED NAME Robert J. Ostermann
ADDRESS 495 Modelaire Dr. LaGrande, OR 97850
EMAIL

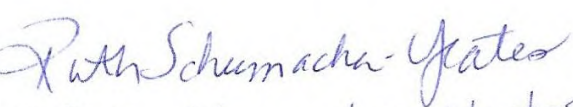
SIGNATURE 
PRINTED NAME Robin J. Ostermann
ADDRESS 495 Modelaire Dr LaGrande, OR 97850
EMAIL

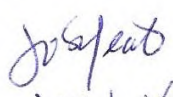
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SIGNATURE 
PRINTED NAME Jonathan D. White
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SIGNATURE 
PRINTED NAME Robin Stedfeld
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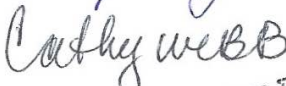
SIGNATURE 
PRINTED NAME Rita Allen
ADDRESS 410 Balsa St. La Grande Or.
EMAIL

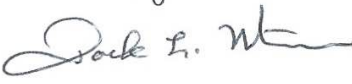
SIGNATURE 
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SIGNATURE 
PRINTED NAME JOHN YEATES
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SIGNATURE 
PRINTED NAME LOIS BARRY
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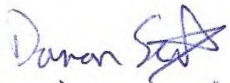
SIGNATURE 
PRINTED NAME CATHY WEBB
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EMAIL hunkski@gmail.com


SIGNATURE 
PRINTED NAME Jack L. Martin
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EMAIL Buff Martin 27 @ @ G Mail . com

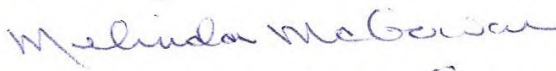
SIGNATURE 
PRINTED NAME GERALDINE BRASETH-PALMER
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EMAIL 


SIGNATURE 
PRINTED NAME Jean BAPH
ADDRESS 1509 MADISON AVE LaGrande, OR 97850
EMAIL Jbaph19@gmail.com


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SIGNATURE 
PRINTED NAME Damon Sexton
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SIGNATURE 
PRINTED NAME Cory Sexton
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SIGNATURE 
PRINTED NAME Laura Elly Hudson
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EMAIL ellyhudson@gmail.com

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SIGNATURE *Gary D. Pierson*
PRINTED NAME Gary D. Pierson
ADDRESS 489 Modelaire Drive, La Grande OR 97850
EMAIL -

SIGNATURE *Lynn Wheeler Duncan*
PRINTED NAME LYNN WHEELER DUNCAN
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SIGNATURE *Anne G. Cavinato*
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SIGNATURE *Joe Horst*
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SIGNATURE *Angela Sherer*
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ADDRESS 91 - W. Hawthorne Dr. LaGrande, OR 97850
EMAIL asherer@frontier.com.

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SIGNATURE *Robert J. Sherer*
PRINTED NAME Robert J. Sherer
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SIGNATURE *Heather M. Null*
PRINTED NAME Heather M. Null
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SIGNATURE *Bert R. Frewing*
PRINTED NAME Bert R. Frewing
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SIGNATURE *Lindsay McCullough*
PRINTED NAME Lindsay McCullough
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EMAIL lindz_mm91@hotmail.com

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

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SIGNATURE *Merle E. Comfort*
PRINTED NAME MERLE E. COMFORT
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SIGNATURE *Robin L. Maille*
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SIGNATURE *Bruce C Kevan*
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SIGNATURE *Carol S. Summers*
PRINTED NAME CAROL S. SUMMERS
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EMAIL carolsummers1935@gmail.com

SIGNATURE *Caroline Kaye Juniper*
PRINTED NAME Caroline Kaye Juniper
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EMAIL

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SIGNATURE *Gerald D. Juniper*
PRINTED NAME *Gerald Darwin Juniper*
ADDRESS *406 4th St. LaGrande OR. 97850*
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

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PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:28 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposal Order 5/23/2019
Attachments: Scan 2019-8-15 17.14.06.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter sign by me and 46 other residents of La Grande expressing our concerns regarding the B2H Project and requesting that EFSC Deny the Site Certificate.

I have also sent a bound copy of this material by US Postal Service.

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, Oregon. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the predicted noise levels resulting from construction and operation of the proposed Boardman to Hemingway Transmission Line Project. I would like to address the noise coming from the blasting and rock breaking specifically above the area at the top of Modelaire Drive 1 both to the north and the south of that area and also the construction traffic noise that that will impact the west hills and the area below.

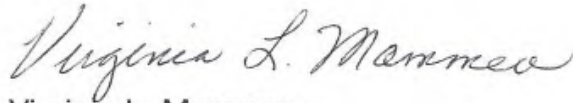
In Exhibit X page X-9 3.3.1.1 2 blasting and rock breaking is mentioned saying that "Modern blasting techniques include the electronically controlled ignition of multiple small explosive charges in an area of rock that are delayed fractions of second, resulting in a total event that is generally less than a second. Impulse (instantaneous) noise from blasts could reach up to 140dBA at the blast location or over 90 dBA within 500 feet." This sounds oh so "don't worry about it, it will be OK just over in a split second." Living in this area off Modelaire Drive, I don't find this at all comforting. And the fact that this will be overseen by properly licensed personnel and all of the necessary authorizations doesn't help anything either.

The area in question, which for such inordinate construction is extremely close to many residents, has been my home for over 50 years and during

related medical problems and exhibit various reactions to loud noises.¹⁰ These children also live in the neighborhoods to be affected by the noise so they would be impacted coming and going to school, at home and also while at school. To impose the constant possibility of loud noises is cruel, disrespectful and totally unacceptable. ¹¹

For a project like this involving blasting and heavy machinery noise so close to homes, schools, and medical facilities impacting hundreds of peoples' daily lives, the day to day agitation, wondering what is coming next, fear and being on constant alert are not just addressed by some type of mitigation but must be addressed by a route that is much less impactful to peoples' safety, sanity, and health.

Sincerely,

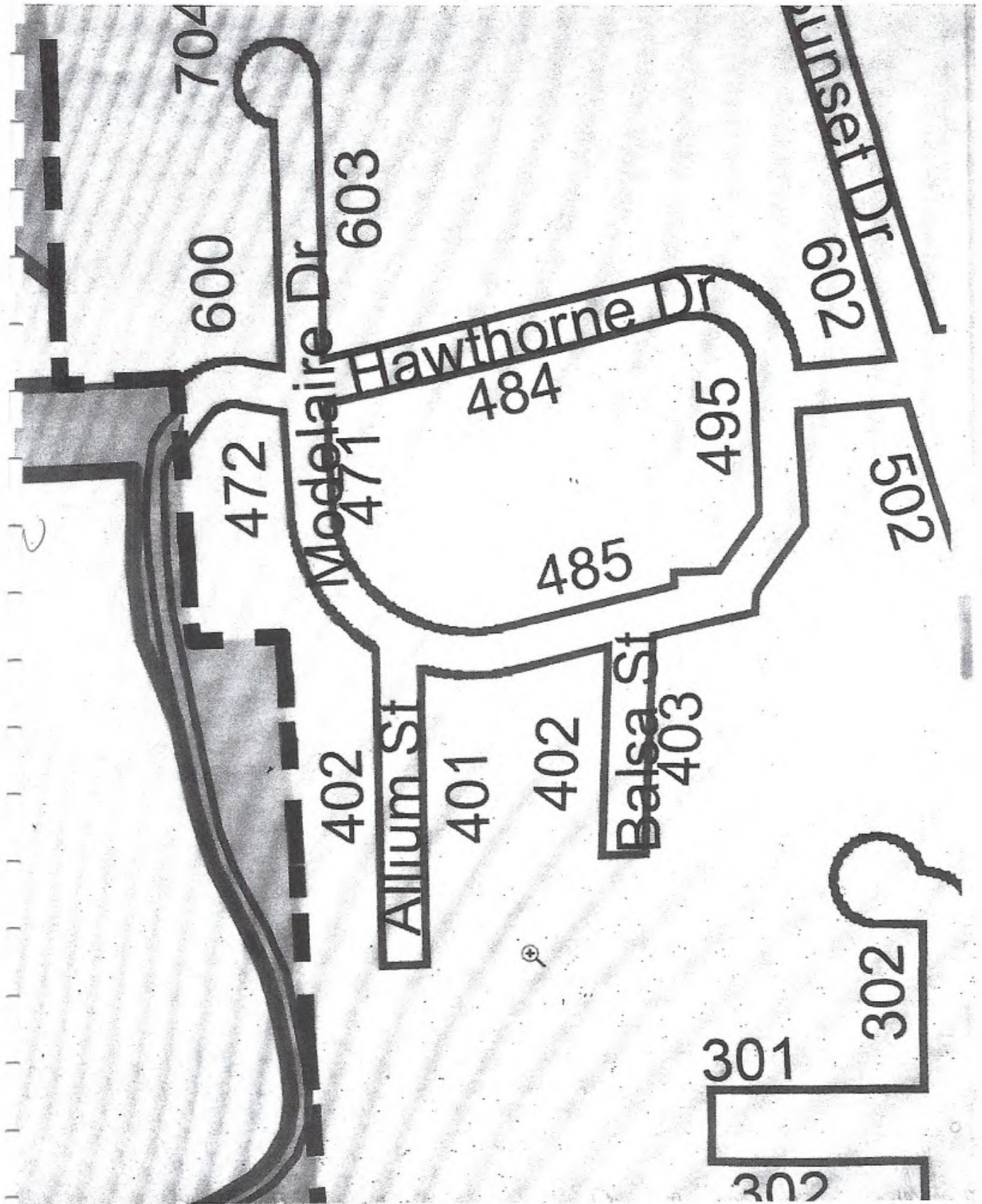


Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

gmammen@eoni.com

Exhibit 1

N



2

11

5

Exhibit 2

Boardman to Hemingway Transmission Line Project

Exhibit X

1 **3.3 Predicted Noise Levels**

2 OAR 345-021-0010(1)(x)(A): Predicted noise levels resulting from construction and operation
3 of the proposed facility.

4 **3.3.1 Construction Noise**

5 **3.3.1.1 Predicted Construction Noise Levels**

6 Project construction will occur sequentially, moving along the length of the Project route, or in
7 other areas such as near access roads, structure sites, conductor pulling sites, and staging and
8 maintenance areas. Overhead transmission line construction is typically completed in the
9 following stages, but various construction activities may overlap, with multiple construction
10 crews operating simultaneously:

- 11 • Site access and preparation
- 12 • Installation of structure foundations
- 13 • Erecting of support structures
- 14 • Stringing of conductors, shield wire, and fiber-optic ground wire

15 The following subsections discuss certain construction activities that will periodically generate
16 audible noise, including blasting and rock breaking, implosive devices used during conductor
17 stringing, helicopter operations, and vehicle traffic.

18 **Blasting and Rock Breaking**

19 Blasting is a short-duration event as compared to rock removal methods, such as using track rig
20 drills, rock breakers, jackhammers, rotary percussion drills, core barrels, or rotary rock drills.
21 Modern blasting techniques include the electronically controlled ignition of multiple small-
22 explosive charges in an area of rock that are delayed fractions of second, resulting in a total
23 event duration that is generally less than a second. Impulse (instantaneous) noise from blasts
24 could reach up to 140 dBA at the blast location or over 90 dBA within 500 feet.

25 Lattice tower foundations for the Project typically will be installed using drilled shafts or piers;
26 however, if hard rock is encountered within the planned drilling depth, blasting may be required
27 to loosen or fracture the rock to reach the required depth to install the structure foundations.
28 Final blasting locations will not be identified until an investigative geotechnical survey of the
29 analysis area is conducted during the detailed design.

30 The contracted blasting specialist will prepare a blasting plan that demonstrate compliance with
31 applicable state and local blasting regulations, including the use of properly licensed personnel
32 and the acquisition of necessary authorizations. The Framework Blasting Plan is set forth in
33 Exhibit G, Attachment G-5.

34 **Implosive Devices**

35 An implosive conductor splice consists of a split-second detonation with sound and flash.
36 Implosive splicing activities are anticipated to be limited to daytime hours. A blasting plan will be
37 developed by an individual certified and licensed to perform the work. The plan will
38 communicate all safety and technical requirements including, but not limited to, delineation of
39 the controlled access zone and distance away from residences.

Exhibit 3

Public Services

OAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

OAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

OAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (OAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (OAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

OAR 345-024-0010 and 345-024-0015

- This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety.
- Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

OAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4a

8/5/2019

Oregon Secretary of State Administrative Rules

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Chapter 340

Division 35

NOISE CONTROL REGULATIONS

340-035-0035

Noise Control Regulations for Industry and Commerce

(1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 7, except as otherwise provided in these rules. [Table not included. See ED. NOTE.]

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind energy facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies. [Table not included. See ED. NOTE.]

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b)-(f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind energy facility may conduct measurements to determine the actual ambient L10 and L50 background level.

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with wind speed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient background level" does not include noise generated or caused by the wind energy facility.

(III) The noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 8), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. The easement or covenant must authorize the wind energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

Exhibit 4b

8/5/2019

Oregon Secretary of State Administrative Rules

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

Exhibit 5a

Controlling the Adverse Effects of Blasting

This module addresses the control of offsite impacts that result from blasting, namely:

- vibrations,
- airblast, and
- flyrock.

Much of the information in the module is derived from the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The performance standards apply to all surface coal mines. Similar standards have been adopted on some State and local levels and applied to non-coal blasting operations such as quarrying and construction.

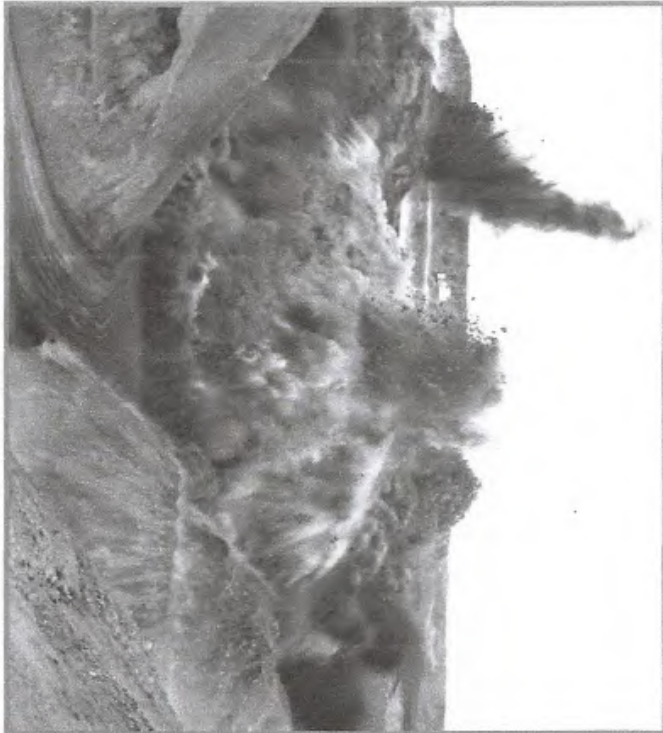
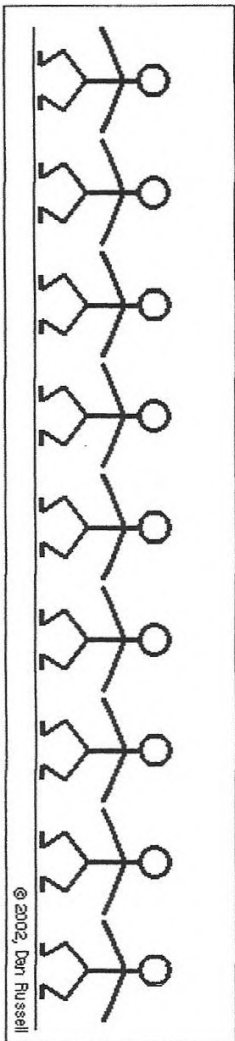


Exhibit 5b

Part I: Ground Vibrations, Airblast, and Flyrock

Explosive energy is used to break rock. However, the use of this energy is not 100-percent efficient. Some of the energy escapes into the atmosphere to generate *airblast or air vibrations*. Some of the energy also leaves the blast site through the surface soil and bedrock in the form of *ground vibrations*.



Both air and ground vibrations create waves that disturb the material in which they travel. When these waves encounter a structure, they cause it to shake. Ground vibrations enter the house through the basement and airblast enters the house through the walls and roof.

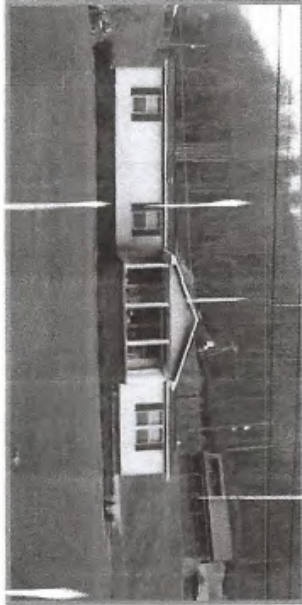
Airblast may be audible (noise) or in-audible (concussion). When outside a house the blast may be heard because of the noise, however noise has little impact on the structure. The concussion wave causes the structure to shake and rattles objects hanging on walls or sitting on shelves. This "interior noise" will alarm and startle people living in the house.

Flyrock is debris ejected from the blast site that is traveling through the air or along the ground. Flyrock the single most dangerous adverse effect that can cause property damage and personal injury or death.

Exhibit 5g

Blasting Impacts on Structures

Both above-ground and below-ground structures are susceptible to vibration impacts. Structures can include onsite mine offices and buildings, as well as offsite residences, schools, churches, power-transmission lines, and buried pipelines. Some of these structures may include historic or cultural features sensitive to even low levels of vibrations.



It is important to understand:

1. the causes of ground vibrations and airblast, and
2. what practices can be followed to control and minimize the adverse effects

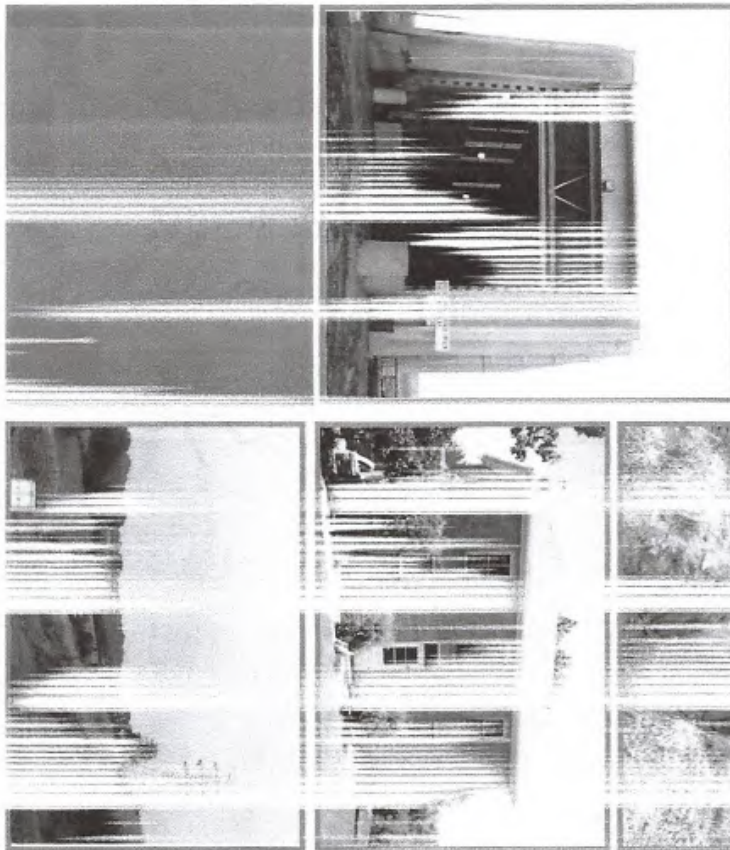
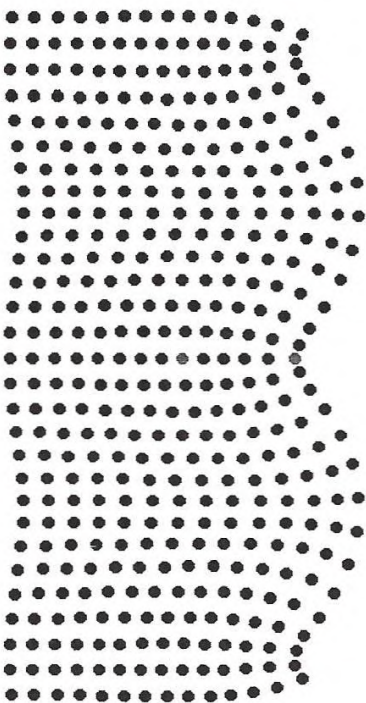


Exhibit 5d

Ground Vibrations

Ground vibrations propagate away from a blast site as Rayleigh (or surface) waves. These waves form a disturbance in the ground that displaces particles of soil or rock as they pass by. Particle motions are quite complicated. At the ground surface (free boundary), measured particle motions have the greatest displacements, and displacements decrease with depth (see the illustration below). At a depth of between 20 to 50 feet below ground surface, particle displacements are barely detectable. Structures that are well coupled to the ground tend to move with this motion; structures buried in the ground are less affected by surface motions.



©1999, Daniel A. Russell

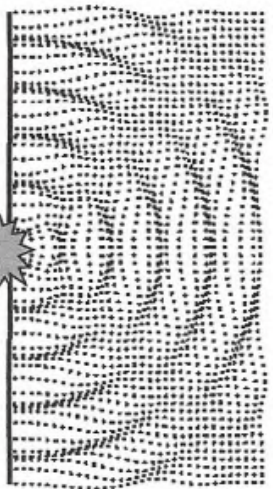
Ground vibrations are measured in terms of **particle velocity** and are reported in inches per second (ips) or the speed at which a particle of soil or rock moves.

At typical blasting distances from residential structures, the ground only moves with displacements equal to the thickness of a piece of writing paper. In terms of displacement, this equates to hundredths of an inch; visually, such movement cannot be detected.

Airblast

Airblast is measured as a pressure in pounds per square inch (psi) and is often reported in terms of **decibels (dB)**.

Airblast is a pressure wave that that may be audible or inaudible. Elevated airblast levels are generated when explosive energy in the form gases escape from the detonating blast holes. Energy escapes either through the top stemming or through fractures in the rock along the face or at the ground surface.



Airblast radiates outward from the blast site in all directions and can travel long distances. Sound waves travel much slower (1,100 ft/s) than ground vibrations (about 5,000 – 20,000 ft/s). Hence, airblast arrives at offsite structures later than do ground vibrations.

Both ground vibrations and airblast cause structures to shake structures. Occupants in structures that are located far from a blast may experience shaking from vibration and airblast as two separate, closely spaced events. This can be particularly bothersome, as it prolongs the duration of structure shaking and leads the property owner to think that two separate blasts occurred.

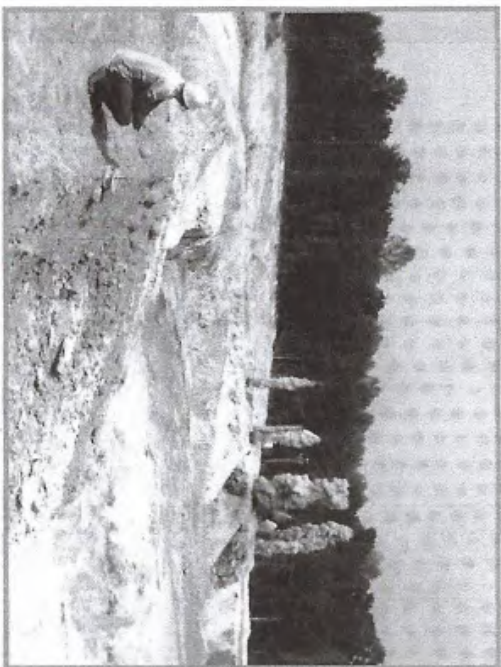


Exhibit 5 e

Structure Response

As ground and air vibrations reach a structure, each will cause it to shake. Structure response is dependant on the vibration characteristics (frequency and amplitude) and structure type.

Exhibit 5 F
Ground Vibrations enter the house through the basement. This is like shaking the bottom of a flag pole. Movement at the top of the pole depends on how (frequency) and how hard (amplitude) the bottom of the pole is shaken. If shaken at just the right pace, or at the pole's natural frequency, the top will move significantly compared to the bottom. Motion at the top is amplified from the bottom motion.

All blast damage studies have measured incoming ground vibrations at the ground surface. The observed structure amplifications were typically between 1 to 4 times the ground vibration. Structure response below ground level is the same or less than the incoming vibrations

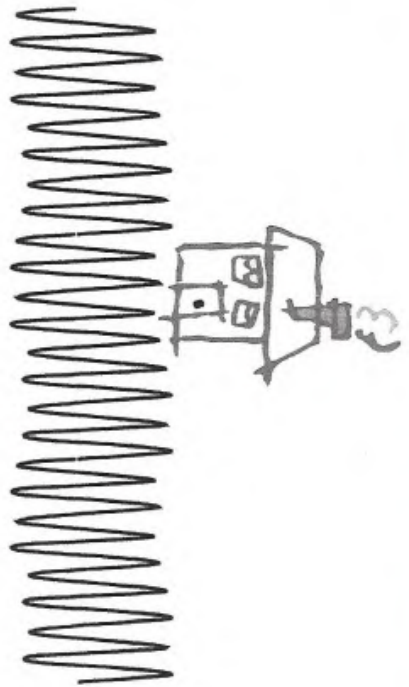
Airblast enters the house through the roof and walls. Like ground vibrations, the frequency and amplitude of the vibrations affect structure response. However the low frequency events (concussion) that most strongly affect structures is normally only a one or two cycle event.

Due to the different arrival times of ground and air vibrations, occupants may feel two distinct impacts on the house.

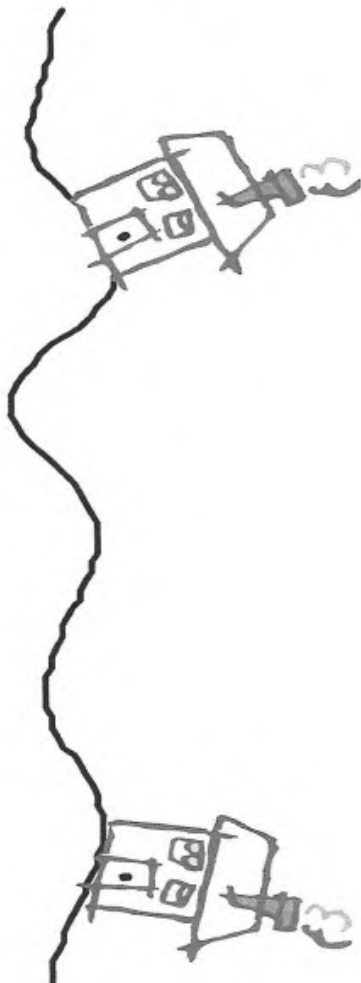


Ground Vibration Structure Response

Exhibit 5g



On the other hand, low-frequency wave cycles are long as compared with the dimensions of structures. Accordingly, low frequencies tend to efficiently couple energy into structures and to promote higher-amplitude, long-duration shaking.



High frequencies do not promote structure shaking. The length of a single high-frequency wave cycle is short as compared with the dimension of a structure. A structure does not significantly respond to high frequencies.

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A noisy problem - Harvard Health

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A noisy problem

People often become more sensitive to noise as they age, which can affect their mental and physical health.

Published: March, 2019



Image: © Juanmonino/Getty Images

Are you more sensitive to noises than you used to be? Do certain sounds now feel too loud and jarring? Don't worry; it's actually quite normal.

Age-related hearing loss is common among older adults and affects about two-thirds of men in their 70s and 85% of men ages 80 and older. Although it's not clear why, this can also make people hypersensitive to sounds that they used to tolerate easily, which in turn can affect their well-being.

"Exposure to noises from crowds, traffic, and other everyday sounds can become harder to tolerate and increase stress levels, leading to anxiety and a reduction in overall quality of life," says Dr. Stephanie Tompkins, an audiologist with Harvard-affiliated Massachusetts Eye and Ear. "As your sensitivity to noises increases, this can lead to greater isolation, too, as you may try to avoid potentially noisy places and situations."

Exhibit 7a

8/4/2019

Hospital Noise: How Noise Reduction Helps Patients Heal



UVM Medical Center Blog (<https://medcenterblog.uvmhealth.org/>) » Blog (<https://medcenterblog.uvmhealth.org/blog/>) »
Quiet in the Hospital: How Noise...

Quiet in the Hospital: How Noise Reduction Helps Patients Heal

on June 7, 2018 (<https://medcenterblog.uvmhealth.org/innovations/hospital-noise-reduction/>) in Innovation (<https://medcenterblog.uvmhealth.org/category/innovations/>) by UVM Medical Center (<https://medcenterblog.uvmhealth.org/author/uvmmedcenter/>)

Noise. It is present in almost every aspect of our lives. From the traffic in the streets, to the fan that provides us white noise in the background to sleep, noise exists. Unfortunately, like stress, too much of it can have a negative impact on a person's health and rest. Some sounds we do like to hear, such as birds chirping, signaling spring in Vermont, but what about sounds in a hospital?

Many of us get admitted to hospitals when we are too sick to take care of ourselves at home. We expect exceptional care from physicians and nurses and, of course, to rest in order to help our bodies heal. We understand that some noises in a hospital are necessary for care; however, others simply aren't.

The Sounds of a Hospital

Many organizations, including the UVM Medical Center, have high tech equipment, which greatly assists in the delivery of care to our patients, but can also be noisy. Sometimes, healthcare providers are the source of the noise as we interact and communicate with our patients and other health team members.

Another factor is visits from families and friends during visiting hours. It is difficult when one's roommate is trying to rest in the opposite bed. Yet, we need to be cognizant of noise in patient care areas as sounds can be magnified and misinterpreted, increasing agitation and even confusion for some patients.

We become accustomed to the noise; our patients are not.

The Research on Noise, Quiet, and Healing

8/4/2019

Hospital Noise: How Noise Reduction Helps Patients Heal

Exhibit 76

Research has shown that noise plays a negative role in healing and that decreasing noise in patient care areas aids in healing processes and helps facilitate speedier recoveries for patients. Patients are able to heal, sleep better and recover more quickly when able to rest. A quieter environment can also help decrease burnout for hospital staff.

Studies show that patients are more likely to develop negative side effects from a noisy hospital, such as sleep disturbances, elevated blood pressure and heart rate, and increased use of pain medications.

Noise can also increase annoyance levels for staff. One study indicated noise, such as talking inside and outside patient rooms, is the most common source of noise as well as visitors' voices, TVs, and behaviors of other patients.

Research concluded that best practices to eliminate noise from talking included staff education about noise reduction, public indicators such as sound monitors, a quiet time protocol, and lower cost environmental fixes, such as fixing noisy doors and squeaky wheels. Lastly, by introducing scripting with routine monitoring, patients' perception of quietness increased and the perception of noise decreased.

How We Address Noise at the UVM Medical Center

We introduced the "Culture of Quiet" Organizational initiative. The Nursing Professional Governance Patient and Family Experience Global council continued this work. After convening a small task force of nurses and assessing current quiet strategies, we introduced the following tactics:

- Many hospital units have designated 'quiet hours' with automatically dimming of lights at quiet hour intervals.
- Signage is visible in most patient care areas to help keep patients, family, and visitors aware. Throughout the hospital, you will see signs with a relaxing pair of Adirondack chairs and the sun setting with details on when a unit has quiet hours.
- Many semi-private rooms have windows in doors, so doors can be closed allowing for patient rest.
- We offer headphones for TVs and earplugs to help minimize sounds.
- In-patient kits contain a sleeping mask and other comfort items that can be provided at time of admission. Each kit contains a card and explains, 'the best healing occurs in a quiet environment.'
- New education material is available for staff, patients and visitors-just ask to review the next time visiting.
- Some units offer white noise machines, others have this built in.
- Noisy equipment such as wheels and doors can be tagged and replaced.
- Our facility and distribution staff have changed their cleaning and supply delivery schedules to accommodate patient care.
- Healthcare teams within the hospital are focusing efforts to cluster patient care to minimize interruptions to provide restful moments.

How you can help us.

We ask patients and visitors to hold us accountable when sounds are too loud. We want our community to alert us when noise levels are high and we will do what we can to minimize sound. In turn, we ask that all members of the healthcare team, patients, family, and friends be aware to keep voices soft, cell phones on vibrate, and hold each other accountable for these are the times of the day when our patients take pause to rest and positively impact their healing.

8/4/2019

Dangerous Decibels: Hospital Noise More Than a Nuisance | RN.com

Exhibit 8a

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Dangerous Decibels: Hospital Noise More Than a Nuisance

By Diane Sparacino, Staff Writer

Imagine a world where hospitals have become so noisy that the annoyance has topped hospital complaints, even more than for the tasteless, Jell-O-laden hospital food (Deardorff, 2011). If you're a nurse, you know that we're already there – with noise levels reaching nearly that of a chainsaw (Garcia, 2012). In fact, for more than five decades, hospital noise has seen a steady rise (ScienceDaily, 2005).

But it wasn't always that way. At one time, hospitals were virtually noise-free like libraries – respected spaces, preserved as quiet zones. The culture was such that a loud visitor might be silenced by a nurse's purposeful glare or sharply delivered "Shhh!" As early as 1859, the importance of maintaining a quiet environment for patients was a topic for discussion. In Florence Nightingale's book, "Notes on Nursing," she described needless noise as "the most cruel absence of care" (Deardorff, 2011).

Fast forward to 1995, when the World Health Organization (WHO) outlined its hospital noise guidelines, suggesting that patient room sound levels not exceed 35 decibels (dB). Yet since 1960, the average daytime hospital noise levels around the world have steadily risen to more than double the



Exhibit 8b

8/4/2019

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acceptable level (from 57 to 72 dB), with nighttime levels increasing from 42 to 60 dB. WHO found that the issue was not only pervasive, but high noise levels remained fairly consistent across the board, despite the type of hospital (ScienceDaily, 2005).

Researchers at Johns Hopkins University began to look into the noise problem in 2003. They maintained that excessive noise not only hindered the ability for patients to rest, but raised the risk for medical errors. Other studies blamed hospital noise for a possible increase in healing time and a contributing factor in stress-related burnout among healthcare workers (ScienceDaily, 2005).

Technology is, of course, partly to blame. State-of-the-art machines, banks of useful alarms, respirators, generators, powerful ventilation systems and intercoms all add up to a lot of unwanted racket. When human voices are added to the mix, (i.e., staff members being forced to speak loudly over the steady din of medical equipment), it's anything but a restful environment. For the recovering patient in need of sleep, that can be a real issue (Deardorff, 2011).

Contributing to the problem, experts say, are the materials used in hospitals. Because they must be easily sanitized, surfaces cannot be porous where they could harbor disease-causing organisms. Rather than using noise-muffling materials like carpet, acoustic tiles and other soft surfaces, hospitals have traditionally been outfitted using smooth, hard surfaces – especially in patient rooms. Good for cleanliness – not so great for dampening sounds, which tend to bounce around the typical hospital (Deardorff, 2011).

Which brings us to the most recent research, published January 2012 in the *Archives of Internal Medicine*. In the report, Jordan Yoder, BSE, from the Pritzker School of Medicine, University of Chicago, and his colleagues associated elevated noise levels with "clinically significant sleep loss among hospitalized patients," perhaps causing a delay in their recovery time (Garcia, 2012). During the 155-day study period, researchers examined hospital sound levels. The numbers far exceeded (WHO) recommendations for average hospital-room noise levels, with the peak noise at an average 80.3 dB – nearly as loud as a chainsaw or electric sander (85 dB), and well over the recommended maximum of 40 dB. And while nights tended to be quieter, they were still noisier than recommended allowances, with "a mean maximum sound level of 69.7 dB" (Garcia, 2012).

Perhaps most interestingly, the researchers broke down the sources of noise into categories: "Staff conversation (65%), roommates (54%), alarms (42%), intercoms (39%), and pagers (38%) were the most common sources of noise disruptive reported by patients" (Garcia, 2012). "Despite the importance of sleep for recovery, hospital noise may put patients at risk for sleep loss and its associated negative effects," they wrote. In addition, researchers found that the intensive care and surgical wards had some work to do in dampening noise levels, with ICU peaking at 67 dB and 42 dB for surgical areas. Both far exceeded WHO's 30 dB patient room recommendation (Garcia, 2012).

Besides patient sleep deprivation, which itself can lead to a multitude of health problems including high blood sugar, high blood pressure and fatigue, studies have reported that elevated noise levels can increase heart and respiratory rates, blood pressure and cortisol levels. Recovery room noise causes patients to request more pain medication, and preterm infants "are at increased risk for hearing loss, abnormal brain and sensory development, and speech and language problems when exposed to prolonged and excessive noise" (Deardorff, 2011).

There is still more research to be done, of course, but Yoder and his colleagues had good news, as well; much of the hospital noise they identified is modifiable, suggesting that hospitals can take steps to successfully create a quieter environment for both patients and healthcare providers (Garcia, 2012).

Exhibit 3

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Around the country, "quiet campaigns" have been launched by hospitals in an attempt to dampen nighttime noise. Besides dimming lights and asking staff to keep their voices down at night, they are working to eliminate overhead paging systems, replace wall and/or floor coverings – even the clang of metal trashcans. Northwestern's Prentice Women's Hospital in Chicago was built with noise reduction in mind, replacing the idea of centralized nursing stations with the advent of smaller, multiple stations (Deardorff, 2011)

Billed as "one of the nation's largest hospital construction projects," Palomar Medical Center in North San Diego County is a state-of-the-art facility that has been designed "to encourage quietness," according to Tina Pope, Palomar Health Service Excellence Manager. Slated to open its doors this August, the hospital will feature a new nursing call system to route calls directly to staff and help eliminate the need for overhead paging, de-centralized nursing stations and clear sig lines, allowing staff to check on patients without having to leave unit doors open. With measures already in place including "Quiet Hospital" badges on staff and posters at the entrance of every unit, a "Quiet at Night" campaign (9 p.m. – 6 a.m.), and a "Quiet Champions" program that encourages staff to report noise problems, Palomar is one of a growing number of hospitals working toward a new era of quiet.

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8/6/2019

<https://knops.co/magazine/noise-and-ptsd/>

Exhibit 9
a



Noises Are Truly Horrible For People Who Have PTSD

20 Mar '2018 [Sound](#)

Noise is a really big issue for PTSD survivors: people who have mental health problems because of their traumas. How are they connected?

Almost everybody has experienced a trauma. But some traumas are more scarring than others and can even result in long-lasting mental disorders like **PTSD**, which can have an extreme impact on someone's life. It's a disorder that can develop in the brain after a horrifying experience, like war or a car crash.

Symptoms

The symptoms of PTSD are, to say the least, not pleasant. They range from nightmares about the traumatic events, disturbing thoughts and feelings, anxiety, trying to avoid anything that has something to do with the traumatic event, and an increase in the fight-or-flight response.

Around ten percent of the population suffers from PTSD, according to data from **NCBI**, a part of the US National Library of Medicine. And, remarkably enough, that percentage is the same for people who suffer from tinnitus (the sound of a constant beep in your ears). The NCBI clearly sees a link between the two.

PTSD survivors also suffer from the Exaggerated Startle Syndrome, with anxiety and actions in an extreme and irrational way too loud noises and bangs. And then there are the sounds that remind them of the sounds during the traumatic events, which can trigger memories of the

Exhibit 9b

8/6/2010

trauma or flashbacks.



Fear

PTSD can also cause a general fear of sounds: phonophobia, or a fear of some specific sounds: misophonia. Survivors of the disorder also are generally much more sensitive to sounds and perceive them as much louder than other people would.

All of this makes the life of people with PTSD very hard. If you think you are suffering from this, consult your doctor. Really, please do it. For yourself, and for the ones you love.

Do you have PTSD and would you like to tell your experiences to us? We are always very open and interested to hear what you have to say. And again: if you haven't done it yet, visit your doctor, please. Thank you!

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8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

Exhibit 10a



Front Psychol. 2013; 4: 578.

PMCID: PMC3757288

Published online 2013 Aug 30. doi: [10.3389/fpsyg.2013.00578](https://doi.org/10.3389/fpsyg.2013.00578)

PMID: [24009598](https://pubmed.ncbi.nlm.nih.gov/24009598/)

Does noise affect learning? A short review on noise effects on cognitive performance in children

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This article was submitted to *Developmental Psychology*, a section of the journal *Frontiers in Psychology*.

Received 2013 May 14; Accepted 2013 Aug 12.

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Abstract

The present paper provides an overview of research concerning both acute and chronic effects of exposure to noise on children's cognitive performance. Experimental studies addressing the impact of acute exposure showed negative effects on speech perception and listening comprehension. These effects are more pronounced in children as compared to adults. Children with language or attention disorders and second-language learners are still more impaired than age-matched controls. Noise-induced disruption was also found for non-auditory tasks, i.e., serial recall of visually presented lists and reading. The impact of chronic exposure to noise was examined in quasi-experimental studies. Indoor noise and reverberation in classroom settings were found to be associated with poorer performance of the children in verbal tasks. Regarding chronic exposure to aircraft noise, studies consistently found that high exposure is associated with lower reading performance. Even though the reported effects are usually small in magnitude, and confounding variables were not always sufficiently controlled, policy makers responsible for noise abatement should be aware of the potential impact of environmental noise on children's development.

Keywords: noise, cognitive performance, cognitive development, children, speech perception, listening comprehension, irrelevant sound effect, classroom acoustics

8/4/2019

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EXHIBIT 1012

In everyday life, cognitive tasks are often performed in the presence of task-irrelevant environmental noise. Accordingly, numerous studies on noise effects on performance have been conducted since the middle of the 20th century (for reviews see Hellbrück and Liebl, 2007; Szalma and Hancock, 2011), showing that—depending on characteristics of sounds and tasks—noise of low to moderate intensity may in fact evoke substantial impairments in performance.

Most of these studies were conducted with adults. The present review, however, will focus on studies including children. Children are especially vulnerable to harmful effects of environmental noise, as cognitive functions are less automatized and thus more prone to disruption. We will report findings concerning effects of acute noise on performance in concurrent auditory and non-auditory tasks, as well as effects of chronic noise on children's cognitive development.

Effects of acute noise on children's performance in auditory tasks

Psychoacoustic studies have consistently shown that children's speech perception is more impaired than adults' by unfavorable listening conditions. The ability to recognize speech under conditions of noise or noise combined with reverberation improves until the teenage years (Johnson, 2000; Wightman and Kistler, 2005; Talarico et al., 2007; Neuman et al., 2010). With stationary noise makers, signal-to-noise ratios (SNRs) have to be 5–7 dB higher for young children when compared to adults in order to achieve comparable levels of identification of speech or nonspeech signals, with adult-like performance reached at about 6 years of age (Schneider et al., 1989; Fallon et al., 2000; Werner, 2007). However, with maskers that vary over time, i.e., with trial-by-trial variation of the maskers' spectral composition (Oh et al., 2001; Hall et al., 2005; Leibold and Neff, 2007) or with fluctuating maskers such as single-talker speech (Wightman and Kistler, 2005), adult-like performance is usually not reached before the age of 10 years. Furthermore, children are less able than adults to make use of spectro-temporal and spatial cues for separation of signal and noise (Wightman et al., 2003; Hall et al., 2005). These findings demonstrate that children are especially prone to *informational* masking, i.e., masking that goes beyond energetic masking predicted by filter models of the auditory periphery.

Studies identified a range of linguistic and cognitive factors to be responsible for children's difficulties with speech perception in noise: concerning the former, children are less able than adults to use stored phonological knowledge to reconstruct degraded speech input. This holds for the level of individual phonemes, as children's phoneme categories are less well specified than adults' (Hazan and Barrett, 2000), but also for the lexical level since children's phonological word representations are more holistic and less segmented into phoneme units. Therefore the probability of successfully matching incomplete speech input with stored long-term representations is reduced (Nittrouer, 1996; Metsala, 1997; Mayo et al., 2003). In addition, young children are less able than older children and adults to make use of contextual cues to reconstruct noise-masked words presented in sentential context (Elliott, 1979). Concerning attention, children's immature auditory selective attention skills contribute to their difficulties with speech-in-noise perception. Children's susceptibility to informational masking has been attributed to deficits in focusing attention on auditory channels centered on signal frequencies, while ignoring nonsignal channels (Wightman and Kistler, 2005). Behavioral and ERP measures from dichotic listening paradigms provide evidence that auditory selective attention improves throughout entire childhood (Doyle, 1973; Pearson and Lane, 1991; Coch et al., 2005; Wightman et al., 2010; Gomes et al., 2012).

Owing to the mediating role of linguistic competence and selective attention, children with language or attention disorders are still more impaired than normally developing children by noise in speech perception tasks (Geffner et al., 1996; Ziegler et al., 2005, 2009). A stronger noise effect is also evident for children tested in their second language when compared to native children (Crandell and Smaldino,

8/4/2011

For example, he might refuse to go to school after a fire drill. He might become fearful of birthday parties after being frightened by a balloon that popped unexpectedly. Other signs of extreme distress can include yelling, crying, clinging and general agitation. Because your son may have difficulty communicating, it's important to observe his behavior for these signs of distress. This can help you determine what's triggering his fears.

Avoidance versus learning to cope

Many parents go to great pains to protect their children by avoiding agitating situations. This approach is sometimes appropriate and even necessary. However, it denies individuals the opportunity to learn how to manage anxiety-provoking situations on their own.

By helping your son learn to manage his fear, you can prepare him for an unpredictable world so that he can participate in it to the maximum extent possible.

Given the severity of your son's anxiety symptoms, I suggest that you seek professional support in addition to the strategies offered here. Families whose children have milder symptoms of anxiety can try these strategies on their own – seeking professional help if symptoms worsen.

Tackling one fear at a time

I suggest making a list of your child's major fears and worries. Try to rank order them from mild to severe. To encourage success, I'd start with a mild-to-moderate fear before taking on his extreme reaction to loud noises.

Key components of a cognitive behavioral approach include introducing coping strategies such as deep breathing and "helpful thoughts" that can help a person manage fearful reactions.

For example, you can teach your son to take deep slow breaths to help manage his body's physical anxiety reactions.

"Helpful thoughts" are statements that your son can say to himself when faced with a situation that makes him anxious. For example, you can coach to your son to say, "This is a loud noise. I don't like it, but I can handle it."

To help your son to learn these strategies, I suggest you model taking deep breaths while repeating a "helpful thought" out loud.

Graded exposure

The most important step is to help your son face his fears a little at a time. We call this "graded exposure." For example, explain to your son that the two of you are going to listen to a recording of thunder. The first time, you might play the recording at a soft volume, then gradually increase the volume over time as he demonstrates increased comfort with the sounds

Or you might try watching a video of a balloon pop – perhaps with the volume off the first time. Then he can watch a real balloon pop while standing some distance away. Over time, he can move closer and closer to the balloon.

After such exercises, you can present him with small rewards for being brave and "facing fears." Remember that even a small act of bravery – such as listening to a recording of thunder for 10 seconds – represents an important step toward handling fears. It deserves to be acknowledged.

Although graded exposure may seem counterintuitive, research indicates that this strategy is the single most effective strategy for getting over a particular fear.

I wish you and your son the very best. Please let us know how you're doing with an email to GotQuestions@autismspeaks.org.

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Pages

Additional Resources & Tools

EXPERT
OPINION

[Help for Child with Autism & Recurring Behavioral Crises: Part 2](#)

EXPERT
OPINION

[Parents Seek Help for Son with Autism and Recurring Behavioral Crises](#)

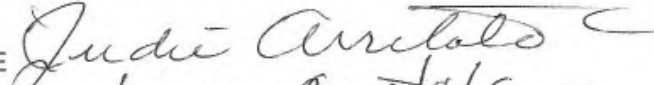


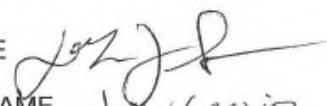
SCIENCE
NEWS


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OPINION

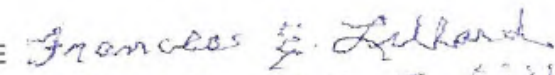
[Parents Seek Help: Child with Severe Autism Eats Only Sweets](#)


I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

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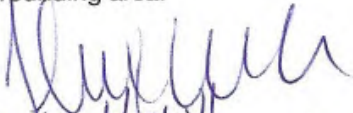
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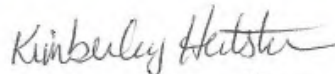
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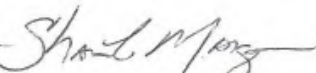
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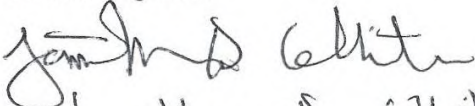
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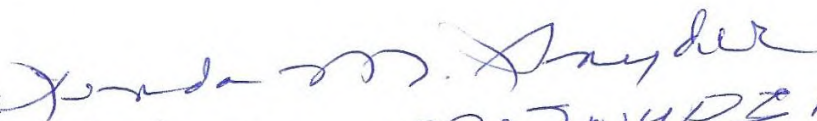
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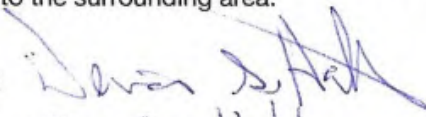
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SIGNATURE



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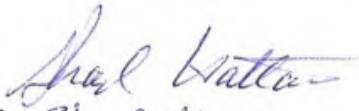
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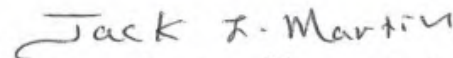
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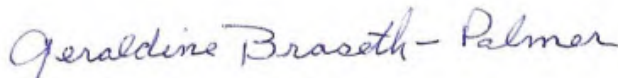
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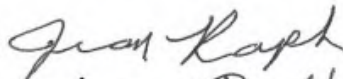
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ESTERSON Sarah * ODOE

From: Jon W <jondwhite418@gmail.com>
Sent: Tuesday, August 20, 2019 10:26 PM
To: B2H DPOComments * ODOE
Cc: Jon White
Subject: Idaho Power Application for a Site Certificate for the B2H Transmission Project
9/28/2018; DPO
Attachments: EFSC_comment_radon.pdf

Dear Chair Beyeler and Members of the Council:

I am writing to express concern about radon emissions due to the seismic activity during the construction phase of the B2H line near La Grande. Please see the attached document.

Jonathan D White

August 20, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the B2H Transmission Project 9/28/2018; DPO

Dear Chair Beyeler and Members of the Council:

I am writing to express concern about radon emissions due to the seismic activity during the construction phase of the B2H line near La Grande (specifically MP 106—108 of the IPC-preferred Mill Creek route). Although the application does not specify where blasting will occur, *Attachment G-5 Framework Blasting Plan* states: “Blasting may be needed in certain areas with rocky terrain to excavate tower footings, prepare station pads, and to construct access roads.”

The relevant standard is the 345-022-0020 Structural Standard:

“(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility;”

Data from the State of Oregon indicates that La Grande has a “high” risk of elevated radon:

<https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/HEALTHYNEIGHBORHOODS/RADONGAS/Documents/Oregon%20Radon%20Risk%20Level%20SummaryTable.pdf>

Couple that with the known unstable slope in the southwest part of La Grande: the map on page 169 of *Exhibit H Geological Hazards and Soil Stability*, shows the B2H line at MP 106—108, where it is within about 2500’ of a populated “Unconsolidated Sediments” zone (labeled Qf) and then crosses a “Landslide Deposits” zone (labeled QIs) near MP 108.

And couple that with studies that correlate fracking with high indoor radon levels: “A new study at The University of Toledo connects the proximity of fracking to higher household concentrations of radon gas, the second leading cause of lung cancer in the U.S.”

<https://www.sciencedaily.com/releases/2019/06/190618083347.htm>

Although the application identifies that the proposed B2H line will be constructed close to a populated area built on unstable ground, the application fails to even mention the possibility that blasting could cause an increase in radon emissions. Each tower footing will require a hole 30—50’ deep, and that the bedrock underneath the line at MP 106—108 will almost certainly require blasting for efficient excavation.

The application does not address this concern, and the proposed construction is simply too close to a populated area to mitigate the risk of increased radon emission. The application simply does not comply with the relevant standard.

Sincerely,

S/N Jonathan D White

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485 Modelaire Dr
La Grande, OR 97850

ESTERSON Sarah * ODOE

From: Christian Wiemer <cawiemer922@gmail.com>
Sent: Wednesday, August 21, 2019 12:59 PM
To: B2H DPOComments * ODOE
Subject: Stop Construction of Power Lines
Attachments: Fish for friends_family.docx

Please consider the land of this beautiful valley and what it means to the people that live and visit there. It's beauty holds deep significance to everyone who bears witness to it and it should be left unsullied. Let's all be stewards of the land together.

With sincerest regards,

Christian Wiemer

August 18, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St, N.E.
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Sent Via E-Mail: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

RE: Anadromous Fish in Ladd Creek, Union County

Dear Chair Beyeler and Members of the Energy Facility Siting Council:

I am writing in protest of the proposed Boardman to Hemingway Transmission Line Project. Specifically, I am protesting as a concerned citizen regarding the B2H Draft Proposed Order, the Final Environmental Impact Statement, and the project's plan regarding wild and threatened fish.

Both of the proposed routes in Union County for the Boardman to Hemingway Transmission Line project include a crossing of the Ladd Creek and/or its tributaries. Ladd Creek flows approximately 14 miles through the Wallowa Whitman National Forest and private land on the east side of the Blue Mountains, into the Ladd Marsh Wildlife area, connecting with Catherine Creek and the Grande Ronde, Snake, and Columbia Rivers.

Historically, there were anadromous fish (steelhead and salmon returning from the ocean) in Ladd Creek. ODFW has documented that steelhead and salmon used Ladd Creek for spawning. However, construction of Interstate 84 in the 1970's stopped the passage of these fish above the interstate due to a vertical culvert being installed (see Power Point "Ladd Creek Fish Passage Project - ODOT FTP").

The Oregon Department of Fish and Wildlife's Mission is to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations. The department is the only state agency charged exclusively with protecting Oregon's fish and wildlife resources. The state Wildlife Policy (ORS 496.012) and Food Fish Management Policy (ORS 506.109) are the primary statutes that govern management of fish and wildlife resources.

The B2H Draft Proposed Order (page 9-10 of *draft Fish Passage Plan in ASC Exhibit BB, Attachment BB-2*), states that Ladd Creek and its tributaries contain only local fish (trout), but **that status has changed** due to major culvert work along and under the I-84 interstate in the last 4 years. As a result, the information contained in the B2H Draft Proposed Order is incorrect and out of compliance with Oregon and Federal statutes.

In 2015, ODOT completed a 2-year project to replace culverts that previously had blocked fish passage in the creek and at the I-84 crossing of Ladd Creek (see <https://www.lagrandeobserver.com/csp/mediapool/sites/LaGrandeObserver/LocalState/story.csp?cid=4108250&sid=824&fid=151>).

According to ODFW Fish biologist Tim Bailey, in the year after completion of the fish passage project (2016) a steelhead redd was documented above the culvert, upstream from the freeway.

ODOT has continued this fish passage project in 2019 along with plans for freeway reconstruction and additional traffic lanes (see <https://www.constructionequipmentguide.com/odot-works-to-improve-i-84-fish-passage-in-ladd-canyon/45648>). Construction has resulted in costs over 32 million dollars, and the list of agencies and individuals in support of this costly fish passage project include ODFW, Union County Board of Commissioners, The Grande Ronde Model Watershed, the US Army Corps of Engineers, Senator Jeff Merkley, Senator Ron Wyden, and the National Marine Fisheries Service (see <https://www.oregon.gov/odot/projects/pages/project-details.aspx?project=20381>) and ([PPT] Ladd Creek Fish Passage Project - ODOT FTP).

An entire watershed is protected when it is determined that it contains federally threatened or endangered fish species. Idaho Power in its application and the B2H Draft Proposed Order have failed to incorporate information regarding identification of the habitat category or locations which will be impacted by the proposed B2H powerline development. Critical habitat is specifically identified in the federal law recording the listing of threatened species (ESA). The current application and site certificate fails to include requirements that would assure that the state is complying with federal laws in providing habitat protection for listed species (salmon and steelhead).

The B2H Draft Proposed Order contains the following outdated information:

1. In *Table 1. Road-Stream Crossing Ownership, Risk Summaries, Proposed Crossing Types, and Fish Passage Information* Idaho Power names 5 waters in the Ladd Creek area (page 9-11 of *draft Fish Passage Plan in ASC Exhibit BB, Attachment BB-2*) with stream crossings. The report states that the only fish in these waters are resident fish. This information is now incorrect.
2. The B2H Draft Proposed Order states that for all of Ladd Creek and its tributary streams that “No new ODFW fish plan anticipated.” (page 9-11 of Attachment BB-2). It cannot be overemphasized that this information is now incorrect.
3. The alternative route Idaho Power has chosen will necessitate a 3a/3b (page 11 BB-2) design change for a bridge crossing on Ladd Creek if this route is chosen, this will trigger an ODFW fish passage plan to be implemented (OAR 17 412-0035) based on Oregon Administrative Rules (OAR) 635-412-0020. Again, the B2H Draft Proposed Order information is now incorrect.

Because of the change of status of the fish population in Ladd Creek, the B2H Draft Proposed Order is out of compliance with several Federal and State laws including:

1. ORS 509.580 through 509.910: *Fish Passage; Fishways; Screening Devices; Hatcheries Near Dams*
2. OAR 635-41-0005 through 635-412-0040: *Fish Passage*
3. *Oregon Forest Practice Administrative Rules and Forest Practices Act, OAR Chapter 629 (ODF 2014)*
4. *Forest Practices Technical Note Number 4, Fish Passage Guidelines for New and Replacement Structures (ODF 2002)*
5. *Fish and Wildlife Mitigation Policy (OAR 635-415-0000), which states that :*

- (a) The mitigation goal if impacts are unavoidable, is no net loss of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality.

- (b) The Department shall act to achieve the mitigation goal for Category 2 habitat by recommending or requiring:
- (A) Avoidance of impacts through alternatives to the proposed development action; or
 - (B) Mitigation of impacts, if unavoidable, through reliable in-kind, in-proximity habitat mitigation to achieve no net loss of either pre-development habitat quantity or quality. In addition, a net benefit of habitat quantity or quality must be provided. Progress towards achieving the mitigation goals and standards shall be reported on a schedule agreed to in the mitigation plan performance measures. The fish and wildlife mitigation measures shall be implemented and completed either prior to or concurrent with the development action.
- (c) If neither 635-415-0025(2)(b)(A) or (B) can be achieved, the Department shall recommend against or shall not authorize the proposed development action.

In conclusion, the B2H Draft Proposed Order contains an improper evaluation of the potential short and long term negative impacts to the fish habitat in the Ladd Creek drainage, including surrounding creeks, given the fact that species listed as threatened under the Endangered Species Act are now returning to Ladd Creek, with their numbers expected to increase in upcoming months and years.

Sincerely,

Christian Wiemer
20229 134th Ave NE
Woodinville, WA 98072
cawiemer922@gmail.com
(980) 214-7533

Wilkinson
10200 W. 3rd Street
Island City OR, 97850

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Department of Energy

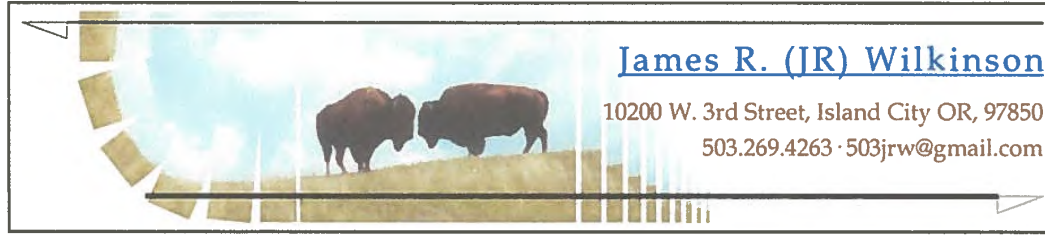
Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem OR, 97301

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August 18, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem OR, 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019

Dear Chair Beyeler and Members of the Council:

You face a decision. On the one hand, the Energy Facilities Siting Council (Council) will carefully consider Idaho Power's Application against Oregon statutes and rules and public comments. This is the charge. On the other hand, no generation has confronted climate change. The Boardman to Hemingway Transmission Project (B2H) is a small inflection point where decisions have ramifications.

Given the Council's narrow regulatory framework, let me focus on my key interest. B2H is a generational commitment of financial and environmental resources. What is the need? Idaho Power failed to support their need to the Council for the B2H site certificate, just as they did in an earlier submittal with the Oregon Public Utilities Commission (PUC).

But first, the Council has many authorities, including Oregon Administrative Rule (OAR) 345-023-0030, System Reliability Rule for Electric Transmission Lines. It requires,

The Council shall find that the applicant has demonstrated need for an electric transmission line that is an energy facility under the definition in ORS 469.300 if the Council finds that:

- (1) The facility is needed to enable the transmission system of which it is to be a part to meet firm capacity demands for electricity or firm annual electricity sales that are reasonably expected to occur within five years of the facility's proposed in-service date based on weather conditions that have at least a 5 percent chance of occurrence in any year in the area to be served by the facility;
- (2) The facility is consistent with the applicable mandatory and enforceable North American Electric Reliability Corporation (NERC) Reliability Standards in effect as of September 18, 2015 as they apply either internally or externally to a utility system; and

Wilkinson Comments to EFSC

- (3) Construction and operation of the facility is an economically reasonable method of meeting the requirements of sections (1) and (2) compared to the alternatives evaluated in the application for a site certificate.

On March 13, 2018, I submitted comments to the PUC on Idaho Power's Integrated Resource Plan (IRP). Only one transmission resource was analyzed: B2H! The questions I raised for the PUC, and remain unanswered for the Council, relate directly to OAR 345-023-0030. I'll repeat them here to aid review:

- I read reports challenging Idaho Power Company's forecasts for future electric demand. Since the B2H transmission line is a multi-generational contract, these forecasts must be based a realistic and verified assumptions and data.
- Grid security and reliability are fundamental to our well-being and growth. How does the 2017 IRP provide measurable steps towards ensuring grid security and reliability? Have they accurately represented their grid status, their ability to monitor and manage fluctuations, and their flexibility as new technologies and markets emerge?
- Local, distributed generation provides for community resiliency, especially given the potentials for large-scale, catastrophic events. Does the 2017 IRP support this goal?
- Battery technology is evolving as is energy efficiency and conservation. We should be leading the deployment of storage technologies, energy efficiency, and conservation for the time period 2017-2036.
- How did Idaho Power balance cost, risk, and environmental concerns in the 2017 IRP given climate change? What is their overall contribution? What commitments are they making on our behalf?
- Who pays for B2H? Is this a financial burden we want our children to inherit? An immediate B2H decision locks future generations into a questionable commitment.
- Fundamentally, is the B2H transmission line needed? Is it "lowest-cost" when considering a 2017-2036 timeframe and the above questions?

My review of Idaho Power's submittals for the site certificate revealed no significant change. Based on Idaho Power's failure to clarify their needs under OAR 345-023-0030, the Council should deny the site certificate application. There are many other reasons that *also* support the denial. I incorporate by reference comments submitted by Stop-B2H.

I live in Island City and enjoy Union County for its beauty and outdoor resources. I believe B2H changes the landscape. More importantly, it commits future generations to its scar.

Sincerely,



James R. (JR) Wilkinson
10200 W. 3rd Street, Island City OR, 97850
Phone: 503.269.4253; Email: 503jr@gmail.com

Attached comments to Oregon Public Utilities Commission

c.c. Stop-B2H

Wilkinson Comments to EFSC

Attachment: Wilkinson Comments to PUC on Idaho Power 2017 IRP



March 13, 2018

Public Utility Commission of Oregon
PO Box 1088
Salem, OR 97308-1088

Submitted via email:

puc.commission@state.or.us
Lisa.Hardie@state.or.us
Stephen.Bloom@state.or.us
Mezan.Decker@state.or.us

RE: Docket LC 68, Idaho Power Company 2017 Integrated Resource Plan (IRP)

Dear Commissioners Hardie, Bloom, and Decker:

I humbly request my comments regarding Docket LC 68 be considered by members of the Oregon Public Utility Commission (OPUC). Your leadership is crucial. Idaho Power Company offers its 2017 Integrated Resource Plan (IRP) as a vision for 2017-2036. Therefore, future generations will bear its costs and risks. Let's be prudent.

There is dissonance in the record regarding the 2017 IRP and the Boardman to Hemingway (B2H) transmission line. A decision-making body, and me as a member of the public, should expect transparency in Idaho Power's decision processes, completeness in its data sets and assumptions on which decisions rest, and thoroughness in their information.

On September 26, 2017, Idaho Power briefed the 2017 IRP to the OPUC. They claimed their 2017 IRP will for the 2017-2036 planning period:

- Identify sufficient resources to reliably serve the growing demand for energy within Idaho Power's service area throughout the 20-year planning period.
- Ensure the selected resource portfolio balances cost, risk, and environmental concerns.
- Give equal and balanced treatment to supply-side resources, demand-side resources, and transmission resources.
- Involve the public in the planning process in a meaningful way.

However, their only transmission resource option for 2017-2036 was the B2H route! Idaho Power assumed increased demand when that appears not true. Such contradictions serve to repeat past mistakes, stifle innovation, and impair our commitment and investment to reduce climate change contributions. With rapidly evolving technology and changing consumer demands, locking future ratepayers into a \$1-1.2 billion transmission line should be avoided.

Page 1 of 2

Wilkinson Comments to EFSC

*Wilkinson OPUC Comments
Page 2 of 2*

Assumed increased demand by Idaho Power is one example of unresolved dissonance. I put forth the following for consideration:

- I read reports challenging Idaho Power Company's forecasts for future electric demand. Since the B2H transmission line is a multi-generational contract, these forecasts must be based a realistic and verified assumptions and data.
- Grid security and reliability are fundamental to our well-being and growth. How does the 2017 IRP provide measurable steps towards ensuring grid security and reliability? Have they accurately represented their grid status, their ability to monitor and manage fluctuations, and their flexibility as new technologies and markets emerge?
- Local, distributed generation provides for community resiliency, especially given the potentials for large-scale, catastrophic events. Does the 2017 IRP support this goal?
- Battery technology is evolving as is energy efficiency and conservation. We should be leading the deployment of storage technologies, energy efficiency, and conservation for the time period 2017-2036.
- How did Idaho Power balance cost, risk, and environmental concerns in the 2017 IRP given climate change? What is their overall contribution? What commitments are they making on our behalf?
- Who pays for B2H? Is this a financial burden we want our children to inherit? An immediate B2H decision locks future generations into a questionable commitment.
- Fundamentally, is the B2H transmission line needed? Is it "lowest-cost" when considering a 2017-2036 timeframe and the above questions?

To conclude, Idaho Power failed to demonstrate the need to proceed with the B2H transmission line. Please expect transparency in their decision processes, completeness in their data sets and assumptions, and thoroughness in their information. We should ensure future generations can sustainably manage what resources we were given.

I encourage OPUC commissioners to "Not Acknowledge" Action Item #6:
Conduct preliminary construction activities, acquire long-lead materials, and
construct the B2H project.

I see no need to rush to a decision given the considerable, unresolved dissonance in the record. Thank-you for your service and for staffs' efforts.

Sincerely,

/s/ JRW

James R. (JR) Wilkinson
10200 W. 3rd Street
La Grande OR, 97850

c.c.
nadine.hansen@state.or.us
ruchi.sadhir@oregon.gov
stopb2h@gmail.com



Oregon Department of Energy and the Energy Facility Siting Council

Public Hearing on the Draft Proposed Order
for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) John Williams

Mailing Address (mandatory) Bx 1384
La Grande OR 97850

Phone Number (optional) 541.962.4521 Email Address (optional) _____

Today's Date: 6/20/19

Do you wish to make oral public testimony at this Hearing: Yes No

Written comments can also be submitted today.

All written comments must be received by the deadline, July 23, 2019, 5 p.m. PDT to:

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony

(Please print legibly – Use the back for additional space if needed. Additional written comments may be attached to this card.)

Input on Draft Proposed Order for the Boardman to Hemingway Transmission Line

**Hearing
 June 20, 2019**

<p style="text-align: right;">Page 78</p> <p>1 fairly large area. 2 And what's ended up happening is they've had 3 to ask the Oregon Department of Energy and the Energy 4 Facility Siting Council to give them an exception to the 5 Goal 5 land use rules. And what the developers have 6 asked is they have asked the Oregon Department of Energy 7 to give them the exception to this for putting roads 8 through forest lands that are not on part of the site. 9 Now, this is kind of interesting, because I 10 had a contested case before the Siting Council because 11 of the developer who was not including a transmission 12 line in their order. What happened is I lost that 13 contested case because the Department of Energy decided 14 that if the developer didn't include it in their 15 application, then it wasn't considered part of the site. 16 I was not real happy about losing that 17 contested case until now, because now Idaho Power wants 18 you to approve this exception to the forest damages that 19 they are going to create. And unfortunately for them, 20 it's clear in the state statutes, the agency rules, 21 contested case results I referred to, that for site 22 certificates the Council can only approve construction 23 within the site. 24 So Idaho Power now has four options for these 25 roads outside of the area of their site, as I see it.</p>	<p style="text-align: right;">Page 80</p> <p>1 Mr. Williams, we will hear from Peter Barry. 2 MR. JOHN WILLIAMS: Appreciate the opportunity 3 to talk here. John Williams, I live at Box 1384, 4 La Grande. I own property northwest and west of Morgan 5 Lake, and both power lines are going to cross my 6 property. 7 I would like to start off and go back to 8 something from 2009, which is the Sixth Power Plan 9 Overview from Northwest Power Conservation Council. And 10 this is the memo that apparently the folks didn't get. 11 The first full paragraph says, this is a 12 summary: "The Pacific Northwest power system is faced 13 with significant uncertainties about the direction and 14 form of climate change policy, future fuel prices, 15 salmon recovery actions, economic growth, and 16 integrating rapidly growing amounts of variable wind 17 generation. And yet the focus of the Council's power 18 plan is clear, especially with regard to the important 19 near-term actions. 20 "The Council's power plan addresses the risks 21 these uncertainties pose for the region's electricity 22 future and seeks an electrical resource strategy that 23 minimizes the expected cost of, and risks to, the 24 regional power system over the next 20 years. Across 25 multiple scenarios considered in the development of the</p>
<p style="text-align: right;">Page 79</p> <p>1 They can go through each individual county and go 2 through their processes to get approval for every one of 3 these roads they are going to put on people's property 4 who have received no notice and have no clue what is 5 going on. That will allow people to participate in 6 another process like this. 7 They can amend the site certificate and start 8 over with the Energy Facility Siting Council. They can 9 try to win a court case by arguing that they should be 10 able to have an exception for property where people have 11 no idea that this thing is coming through and get the 12 Energy Facility Siting Council to say, Yes, you can 13 build roads anywhere you want outside the site. 14 And the fourth option, which I recommend, is 15 to recognize that this transmission line is not needed 16 and build local energy developments in Idaho to meet 17 their perceived need, assuming they actually do occur. 18 I've said it before and I'll say it again: 19 The Travel Management Plan is not the only government 20 action eastern Oregon citizens can stop if the people 21 are active in participating and resisting. 22 And I am really glad to see, I want to thank 23 everyone who showed up, because we can stop and we will 24 stop the Boardman to Hemingway transmission line. 25 HEARING OFFICER WEBSTER: Following</p>	<p style="text-align: right;">Page 81</p> <p>1 plan, one conclusion was constant: the most 2 cost-effective and least risky resource for the region 3 is improved efficiency of electrical use. 4 "In each of its power plans, the Council has 5 found substantial amounts of conservation to be cheaper 6 and more sustainable than most other types of 7 generation. In this Sixth Power Plan, because of the 8 higher costs of alternative generation sources, rapidly 9 developing technology, and heightened concerns about 10 global climate change, conservation holds an even larger 11 potential for the region. 12 "The plan finds enough conservation to be 13 available and cost effective to meet 85 percent of the 14 region's load growth for the next 20 years. If 15 developed aggressively, this conservation, combined with 16 the region's past successful development of energy 17 efficiency could constitute a resource comparable in 18 size to the Northwest federal hydroelectric system. 19 This efficiency resource will complement and protect the 20 Northwest's heritage of clean and affordable power." 21 The list goes on to address -- 22 HEARING OFFICER WEBSTER: If you could just 23 slow down because we are trying to listen and she's 24 trying to get it all down. 25 MR. JOHN WILLIAMS: It goes on to address the</p>

Page 82

1 reasons stated for this project in the first place,
2 which is enervation of variable power sources, such as
3 wind and solar into the grid and it will increase the
4 capacity that the transmission lines would have to
5 provide. You can read that, and I'll skip over to what
6 is going on with particular storage in the past
7 10 years.
8 I would like to start with 2008 or '09 when
9 Nissan Leaf came out with all-electric cars that weighed
10 2,000 pounds and went 100 miles. And then Tesla comes
11 along with a 4200-pound car that runs like a rocket and
12 did 300 miles. Then Tesla further, in the aftermath of
13 Maria in Puerto Rico, they supplied the hospital down
14 there with power until the juice got turned back on to
15 them.
16 Kodiak Island is an independent grid that was
17 run by diesel and now is being powered by renewables.
18 The John Day Dam on the Washington side had a project
19 permitted for a wind farm, and that wind farm would take
20 water from below the John Day Dam and back up above it,
21 therefore, making the John Day Dam a more efficient
22 battery. And then in Turkey, General Electric developed
23 an integrated project of solar, wind, and a gas turbine
24 to produce electricity.
25 It seems like this technology has moved rather

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1 rapidly. I think we are in the crossroads of whether we
2 need increased transmission or see if storage technology
3 is going to make that obsolete. There is going to be a
4 few more cards dealt in this. I've always thought at
5 this point in time this project just needs to be kicked
6 down the road and see what happens.
7 That's it.
8 HEARING OFFICER WEBSTER: Thank you.
9 Following Mr. Barry, we will hear from Steven
10 Clements.
11 MR. PETER BARRY: Yeah, I've got my 7 minutes
12 here. I'd really appreciate it if you guys would all
13 listen to me. Hanley, all you guys, I wish you would
14 all listen to me. Maybe you are all listening intently
15 but you are not making eye contact with these good
16 people who have come far and worked hard all day long,
17 and they deserve to be heard. And maybe some of their
18 comments are not germane and they are not perfectly
19 denoted by page and appendix and which tower that Idaho
20 Power dreamt up, but none of us want this line.
21 Who wants this line? Anybody?
22 UNIDENTIFIED SPEAKERS: Not me.
23 MR. PETER BARRY: Stand up and --
24 HEARING OFFICER WEBSTER: Mr. Barry.
25 MR. PETER BARRY: These people need to be

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1 heard.
2 HEARING OFFICER WEBSTER: And they need the
3 opportunity to do so.
4 MR. PETER BARRY: I'm just using some of my 7
5 minutes. I'll burn a minute or two for that one.
6 But I'm passionate about this. You have seen
7 this beautiful valley. Hanley used to live here.
8 Unfortunately, he was a community planner, he didn't
9 protect the viewshed. But we're NIMBYs; right? Oh, we
10 don't want you going up our road, we don't want you
11 going on our land.
12 But 300 miles, 300 miles of Oregon and you
13 guys have a chance to derail this stupid idea. You can
14 slow it down, derail it, you know you can. You have all
15 of these different ways. You can allow contested case
16 hearings. You can look at all of the stuff Stop B2H is
17 going to submit. You can look at every one and go, Huh,
18 that's a pretty good point. Can Idaho Power really
19 prove that verifiably? Can they really prove it?
20 Ten years ago, more than 10 years ago they said, We want
21 to build this line. A for-profit corporation.
22 I used to think utilities were like a public
23 service agency. They brought you water and electricity.
24 We all love electricity. It turns out Idaho Power is a
25 terrible juggernaut. They wanted to plug up Hells

Page 85

1 Canyon, the last free-flowing stretch of the Snake
2 River, the last stretch. They lobbied hard. They spent
3 millions of their ratepayers' dollars trying to plug up
4 the last wide beautiful stretch of the Snake River.
5 Took it all the way to the Supreme Court of our land,
6 and fortunately, they had the wisdom to slam them back.
7 They wanted to build a coal-fired plant right
8 by Boise that has horrific air quality. Fortunately,
9 that was slammed down, too.
10 This is your chance to stop this stupid idea.
11 We are talking about should it be built here or there.
12 Oh, we love our view, we love our backyard. We love it
13 here. Maybe you don't, maybe you want to live
14 somewhere, that's fine, but we love this place. And 300
15 miles, and it's not federal land; it's public land, we
16 own it. We all own the federal land; right? It's ours,
17 it's yours.
18 And you guys have a chance, you have a little
19 slice of voice; we don't. We get our 7 minutes, that's
20 it. We can try to comprehend 20,000 pages of gibberish
21 while trying to raise a family and hold down two jobs or
22 raise four kids. That's what we can do. We can try to
23 discern this crap.
24 It's difficult. Have you guys, have any of
25 you read all 20,000 pages? Any of you? No one can do

August 12, 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

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AUG 22 2019

DEPARTMENT OF ENERGY

Dear Chair Beyeler and Members of the Council:

Page 62 (T-57) ASC refers to “extensive work in the siting study of the Morgan Lake Alternative.” I doubt it was extensive because it is entirely inaccurate:

Page 145 (T-4-46) Morgan Lake Park is described as 204 acres, containing one lake, which is developed with primitive campsites and fishing docks.

Morgan Lake Park actually contains two lakes. Morgan Lake covers 70 acres; the other, Twin Lake, [also known as Little Morgan Lake] is in plain sight, within 300’ of Morgan Lake; it covers 27 acres.

Twin Lake is undeveloped, a wild life and bird sanctuary, home to nesting bald eagles. It is designated as protected wetlands. In their application, Idaho Power conveniently omits any references to Twin Lake.

Page 156, (T-4-6) ASC purports to be a map of Morgan Lake Park. According to the map legend, the purple cross hatch amoeba-shaped area is Morgan Lake Park. That’s wrong. The purple cross hatch is Morgan Lake. The actual boundaries of the 204 acre park are not indicated. Obviously, it’s difficult to believe “extensive work on this siting study” ever occurred.

The applicant also used aerial photography to identify and avoid, where practical, irrigation pivots, houses, barns, private runways, other structures (e.g., wind turbines), and land use features. The corridors were adjusted using topographic maps to avoid or minimize distance across very steep slopes and other physical features less desirable for transmission line construction and operation. The corridors were again checked against the constraint and opportunity geographic information system (GIS) database to avoid, where possible, exclusion areas and areas of high permitting difficulty such as potential Oregon Department of Wildlife (ODFW) Category 1 habitats. The applicant then grouped the alternative corridors into 14 regions and evaluated on the basis of permitting difficulty, construction difficulty and mitigation costs. Using the constraint database, which incorporated the eight siting factors, the applicant reviewed the alternatives to determine the most reasonable corridor within each region. (DPO p. 11)


It is distressing to think that this is only one of many errors in Idaho Power’s ASC. If the IPC surveying and engineering staffs are unable to detect a 27 acre lake within a 204 acre park, it’s disquieting to imagine the difficulties in identifying and analyzing less obvious and life-threatening situations like fault zones, slide areas and other potential dangers to public safety

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If this slipshod effort is typical of IPC's careful attention to engineering a route, it may also explain IPC's egregious error in choosing to site the B2H on their preferred Mill Creek or alternative Morgan Lake route rather than on the carefully studied and analyzed BLM Environmentally Preferred route.

YES

Following the DEIS, Idaho Power made a hasty and ill-advised effort to avoid litigation threatened by a individuals whose remote properties and summer cabins would have been impact by the line. If Idaho Power had chosen to follow the BLM Environmentally Preferred route, miles to the west of La Grande, rather than in the immediate view of 13,000 La Grande residents, there might have been ten people at the public meetings in La Grande, rather than the hundreds who have consistently appeared to protest various serious problems associated with the routes proposed for the B2H. The haste of this effort is evident in the abundant errors of omission and misinformation typical of the B2H ASCand DPO which will be addressed in a separate comment.

✓ ✕


Signature

John Williams

Name:

Bx 1384

Address:

La Grande OR 97850

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AUG 22 2019

Aug 21, 2019

Energy Facilities Siting Council DEPARTMENT OF ENERGY
% Kellen Tardewether, Senior Siting Analyst
Oregon Dept of Energy
550 Capital St NE
Salem, OR 9730

Subject: Idaho Power Application for a Site Certificate for the B2H Transmission Project & potential damage to Cultural & Historic Sites.

I am John Williams. I own land in Union Co. Oregon west of La Grande (parcel 03537601300). The Proposed & Morgan Lake Alternative Routes both cross it.

In the summer of 2016, Tetra Tech on behalf of IPC conducted several surveys on the property, one of which was for Cultural & Historic Resources. Attached is their summary & figure 14 which depicts the results for archeological resources.

Two resources are of concern - 6B2H-RP-08, & 6B2H-MC-10. According to figure 14, both are within the ROW of the access road to B2H. (Page 5, line 26 of the Programmatic Agreement Regarding Compliance with the National Historic Preservation Act, regarding stipulations of Area of Potential Effects, A.P.E. "The direct effects APE for new or improved access roads will be 100 feet either side of the center line (200 feet total)."

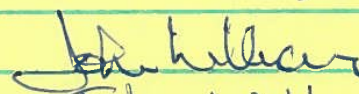
Both resources should appear in the Draft Proposed Order on page 431, table 4CA-5 (Potentially Impacted Resources under OAR 345-022-0010 (1)(a), but only 6B2H-RP-08 is listed. It's Generalized Resource Description/Resource

type is stated as "Girns) / Precontact Archaeological Site; N.R.H.P. Recommendation stated as Unevaluated Project Component stated as "Direct Analysis Area (Construction Foot print); Applicable FSC Standard stated as "a) Potential Historic Property; b) Archaeological site on private land"; Project Impacts and Management Comments stated as "Potential direct/indirect impact. Avoid direct until eligibility determined. Consultation needed."

These standards should apply to Resource # 6B2H-MC-10 as well.

Page 380, lines 6-9 of section VI.K. Historic, Cultural, and Archaeological Resources; OAR 345-022-000 of the Boardman to Hemingway Transmission Line Application for Site Certificate Draft Proposed Order states "A resource designation of unevaluated indicates that the resource may have been investigated however, additional investigations or evaluations are recommended so the resource is assumed to be likely eligible for listing on the N.R.H.P."

I contend that without further evaluation on these resources for eligibility, the Application is incomplete. Thank you for your time


John Williams
BX 1384
La Grande OR 97850



To: John C. Williams
From: Tetra Tech
On Behalf of: Idaho Power Company
Date: September 23, 2017
Subject: Parcel Number: 03S37E01300
Owner: John C. William
Boardman to Hemingway Transmission Line Project Survey Results

Introduction

In September 2017, Idaho Power Company (IPC) requested that Tetra Tech, Inc. (Tetra Tech) provide a summary of the surveys that were completed for the Boardman to Hemingway Transmission Line Project (B2H) on Parcel No. 03S37E01300, owned by Mr. John C. Williams.

Parcel Information

Table 1 shows information of the parcel for which survey results were requested.

Table 1. Parcel Information

Parcel Number(s):	03S37E01300
GIS ID(s):	7612
County:	Union
State:	Oregon
Property Owner:	John Collier Williams
Contact Name/Address:	PO Box 1384, La Grande, OR, 97850

Survey Timing

Mr. Williams denied right of entry to IPC contractors in 2011 and 2012. Mr. Williams granted right of entry in 2016. Table 2 shows the surveys performed on the parcel by year.

Landowner-Specific Survey Results Memo Boardman to Hemingway Transmission Line Project

Table 2. Surveys by Year in Parcel 03S37E01300

Survey Type	Year Performed
Terrestrial Visual Encounter Survey (Habitat Types, Noxious Weeds, and Special Status Animals)	2016
Special Status Plants	2016
Aerial Raptor Nest	2011 and 2016
Northern Goshawk and American Three-toed Woodpecker	Right of Entry Denied; 2011 and 2012
Great Gray Owl and Flammulated Owl	Right of Entry Denied; 2011 and 2012
Wetlands	2016
Cultural and Historical Resources	2016

Summary of Findings

Biological surveys were performed according to the methods discussed in the Biological Surveys Summary Report 2010-2016 (Attachment P1-7A of the Amended Preliminary Application for Site Certificate, June 2017) and the Wetlands Report. Cultural resources surveys were performed according to the methods discussed in the Archaeological Survey Plan (Attachment S-1 of the Amended Preliminary Application for Site Certificate, June 2017) and the Cultural Resources Technical Report (Attachment S-6 of the Amended Preliminary Application for Site Certificate, June 2017). Survey findings for the following resources are summarized below:

- Habitat type characterizations;
- Noxious weed occurrences;
- Wildlife observations;
- Raptor observations;
- Wetland characterizations; and
- Archaeological resources.

Additionally, Appendix A to this document includes figures showing the location of the resource characterizations and observations.

Landowner-Specific Survey Results Memo Boardman to Hemingway Transmission Line Project

Biological Resources

Table 3. Habitat Types in Parcel 03S37E01300

Habitat Type	Route
Emergent Wetland	Morgan Lake Alternative
Forested Wetland	Morgan Lake Alternative
Mixed Grand Fir / Douglas Fir	Morgan Lake Alternative
Native Grasslands	Morgan Lake Alternative, Proposed Route
Ponderosa Pine	Morgan Lake Alternative, Proposed Route

Table 4. Noxious Weeds in the Morgan Lake Alternative Site Boundary in Parcel 03S37E01300

Common Name
Bull Thistle
Canada Thistle
Common Mullein
Diffuse Knapweed
Field Bindweed
Houndstongue
Medusahead
Puncturevine
Scotch Thistle
Sulfur Cinquefoil

Table 5. Wildlife Observations in the Morgan Lake Alternative Site Boundary in Parcel 03S37E01300

Common Name	Observation ID(s) ¹
American kestrel	2465, 2556
American robin	2224, 2447, 2455, 2462, 2479, 2484, 2522, 2523, 2527, 2536, 2545
Bald eagle-Nest	2506
Black-billed magpie	2464, 2509, 2531
Black-capped chickadee	2226, 2541
Black-headed grosbeak	2473

Landowner-Specific Survey Results Memo **Boardman to Hemingway Transmission Line Project**

Brewer's blackbird	2466, 2489, 2526, 2542
Brown-headed cowbird	2490
Cassin's vireo	2227, 2471,
Chipping sparrow	2223, 2451, 2459, 2475, 2510, 2514, 2519, 2520, 2528
Common garter snake	2538
Common raven	2456
Dark-eyed junco	2450, 2467, 2472, 2491, 2513, 2517, 2533, 2537, 2540
Dusky flycatcher	2222
Elk	2453, 2507, 2535, 2555
Greater sandhill crane	2552
House wren	2452, 2482, 2486, 2493, 2518, 2525, 2543
Least chipmunk	2225
Mountain chickadee	2454, 2485, 2487
Mourning dove	2530
Northern flicker	2446, 2458, 2463, 2477, 2511, 2521, 2524
Orange-crowned warbler	2480
Red-breasted nuthatch	2515
Red-tailed hawk	2483
Red-winged blackbird	2488, 2551
Song sparrow	2553
Spotted towhee	2492, 2544
Steller's jay	2449, 2460, 2468, 2474, 2508
Vesper sparrow	2532
Warbling vireo	2478
Western meadowlark	2219, 2448, 2494, 2546, 2554, 2557
Western tanager	2457, 2469, 2470, 2476, 2534
Western wood-pewee	2220, 2461, 2481, 2516, 2539
White-tailed deer	2445, 2512
Yellow-rumped warbler	2221

Bold indicates special status animal

¹Observation IDs correspond to the labels on Figures 7 - 9

Table 6. Raptor Observations in the Morgan Lake Alternative Site Boundary in Parcel 03S37E01300

Common Name	Observation ID ¹	Year
Red-tailed hawk	304	2011
	2186	2016
Bald eagle	2326	2016 (active nest)
	2328	2016 (inactive or alternate nest)

¹Observation IDs correspond to the labels on Figure 11

Wetlands

During the 2016 wetland surveys, wetlands and other waters were identified and their boundaries were delineated in the Proposed Route and in the Morgan Lake Alternative. A total of 13 wetland or other waters were identified during the survey effort (Table 7 and Figure 13).

Table 7. Wetlands and Streams in Parcel 03S37E01300

Wetland ID ¹	Feature Type	Route
UN_MC_W_018	Wetland	Proposed
UN_MC_W_019	Wetland	Proposed
UN_ML_W_004	Wetland	Morgan Lake
UN_ML_W_005	Wetland	Morgan Lake
UN_ML_W_006	Wetland	Morgan Lake
UN_ML_W_008	Wetland	Morgan Lake
UN_ML_W_015	Wetland	Morgan Lake
UN_ML_W_016	Wetland	Morgan Lake
UN_ML_W_017	Wetland	Morgan Lake
UN_ML_STRM_013	Stream	Morgan Lake
UN_ML_STRM_014	Stream	Morgan Lake
UN_ML_STRM_015	Stream	Morgan Lake
UN_ML_STRM_016	Stream	Morgan Lake

¹Wetland ID corresponds to the labels on Figure 13

Landowner-Specific Survey Results Memo Boardman to Hemingway Transmission Line Project

Archaeological Resources

Archaeological resource surveys were conducted on the Proposed Route and in the Morgan Lake Alternative on the Williams parcel in the summer of 2016. These surveys included cultural resource surveys and a desk top analysis of historic resources. Three resources were previously recorded and were on the Oregon State Historic Preservation Office database (Table 8 and Figures 14 and 15). One resource was identified on historic maps of the area (Table 9 and Figure 14). During surveys, three new archaeological resources were discovered on the Williams parcel (Table 10 and Figures 14 and 15).

Table 8. Previously Recorded Archaeological Resources in Parcel 03S37E01300

Resource #	Site Type	Description	NRHP Status	Route
35UN 00096	Pre-contact	Lithic Scatter	Unevaluated	Parcel Only
35UN 00540	Multicomponent	Lithic Scatter & Homestead	Unevaluated	Parcel Only
Oregon National Historic Trail	Historic	Oregon National Historic Trail	Listed	Parcel Only

Table 9. Potential Archaeological Resources Identified from Historic Maps of Parcel 03S37E01300

Potential Resource Description	Route
Immigrant Roads	Morgan Lake Alternative & Parcel Only

Table 10. Newly Recorded Archaeological Resources in Parcel 03S37E01300

Temporary Resource #	Site Type	Description	NRHP Recommendation	Route
6B2H-MC-09	Historic	Road	Not eligible	Morgan Lake Alternative
6B2H-MC-10	Pre-contact	Hunting Blind	Unevaluated	Parcel Only
6B2H-RP-08	Pre-contact	Cairn(s)	Unevaluated	Morgan Lake Alternative

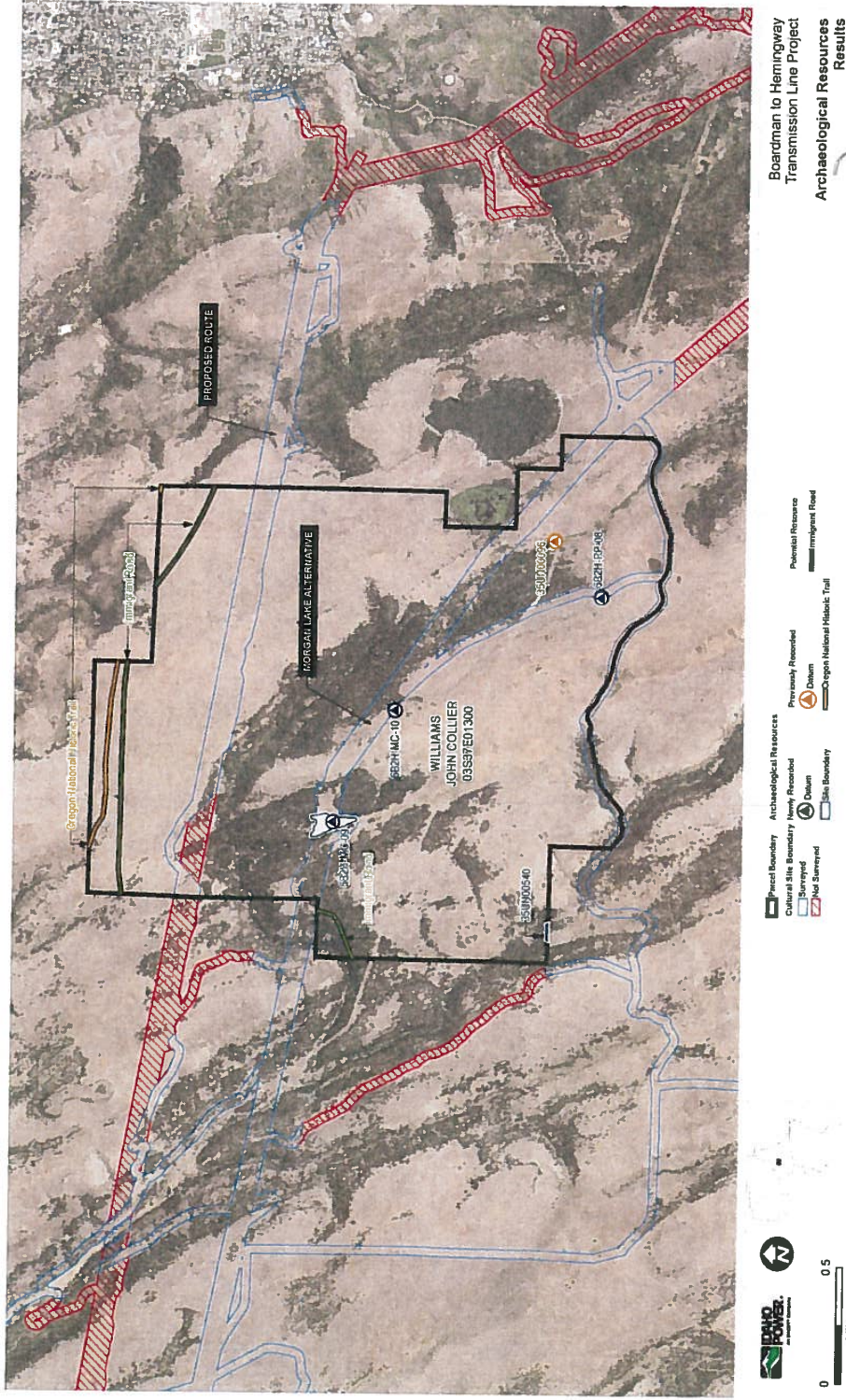


Figure 14. Survey Results for Archaeological Resources

12 August 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

As I understand it, the applicant did not complete noise modeling on multiple noise sensitive properties within ½ mile of the development as required by OAR 340-035-0015(38). In fact, the closest noise modeling was performed at Hilgard, the junction of I-84 and 244, about 8 miles air miles away, with a train track near by. Applicant could scarcely have chosen a site less representative of the absolute silence typical of the Morgan Lake setting.

Page 145 (T-4-46) Baseline condition: "... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users..." Solitude, of course, suggests an absence of distraction from external stimuli including noise. Campers often comment on the tranquility of the park where a 5 mph speed limit is enforced to limit noise, and no shooting or motorized craft are allowed on the lake. Even when the campground is full, it's possible to picnic or hike beside the lake in absolute silence.

Noise Sensitive Property is "property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Obviously the noise corona of popping, humming transmission lines will interfere with the silence campers have every right to expect in a natural setting.

This transmission line is planned to be sited within 500' west of the park boundary, which would place it easily within less than 1/5 of a mile of overnight camp sites.

The applicant's ASC should be denied until all required and adequate noise modeling has been performed.


(Signature)

Name: SALLIE WILLIAMS

Address 62460 HALLEY RD.
LA GRANDE, OR 97850

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Email: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project (B2H) 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

This letter is a public comment for the above referenced project. Specifically, this letter will discuss Idaho Power's compliance with Standard 345-022-0110 - Public Services, in Exhibit U (3.5.6.2 and 3.5.6.5) of the EFSC application for B2H to ODOE. The letter will discuss the impact potential wildfires caused by the B2H transmission line will have on the ability of public and private providers within the analysis area to provide fire protection.

The effect of transmission lines on wildfire impact in western states has been well documented. In California, PG&E lines have caused 5 of the 10 most destructive fires since 2015, producing a liability of over 30 billion for PG&E. When considering the impact of B2H's operation, residents of Union County find the similarities between La Grande and Paradise California, where the infamous Camp Fire struck in 2018, deeply concerning. La Grande and Paradise share similar elevations and populations, however, La Grande has several characteristics that make it significantly more vulnerable to the ravages of wildfire than Paradise. For instance, La Grande averages 18 inches of rain yearly while Paradise enjoys 55 inches. Additionally, the proposed line runs adjacent to La Grande, while the line causing the Camp Fire was 7 miles from Paradise. *Oregon's 2006 Communities at Risk Assessment* by the Oregon Department of Forestry cites a startling fact: **The fire risk of the wildland urban interface (WUI) in La Grande has been rated the #1 WUI fire risk in Oregon!**

There is no doubt that construction of the proposed B2H transmission line would significantly increase the risk of wildfire in our area. From Idaho Power's own Draft Protection Order (Exhibit U-3.5.6.2, p. U-24): "Most activities will occur during summer when the weather is hot and dry. Much of the proposed construction will occur in grassland and shrub-dominated landscapes where the potential for naturally occurring fire is high. Project construction-related activities, including the use of vehicles, chainsaws, and other motorized equipment, will likely increase this potential risk in some areas within the Site Boundary. Fire hazards can also be related to workers smoking, refueling, and operating vehicles and other equipment off roadways. Welding on broken construction equipment could also potentially result in the combustion of native materials near the welding site." Idaho Power recognizes this hazard but makes no consideration of it in its application.

There are several specifics to examine in an analysis of the proposed B2H line's effects on Union County's ability to provide fire protection services. Firstly, firefighting crews in our region are

limited and volunteer. In their application, Idaho Power avers, "Most of the fire districts within the analysis area comprise volunteers, and in some cases, it takes considerable time to collect and mobilize an entire fire crew." As well, JB Brock, Union County emergency Manager states in Idaho Power's application "volunteer fire departments (rural fire protection districts) have a hard time finding volunteers due to budget constraints, similarly to budget constraints at the state and federal level. The wildland fires are getting bigger and cost more to fight" (U-1C-6). Fire crews in Union County are not equipped to handle potential wildfires generated by the proposed B2H transmission line.

The fact that fire crews are unstable, small and volunteer affects many aspects of their ability to respond to wildfires. Delayed response times, as noted in the quote from the previous paragraph, is one effect. Estimates of response time in the EFSC application are best-case scenarios. The estimate of 4 to 8 minutes as the response time in Union County (Table U-10) is far from even a best-case scenario (p. U-17). Residents that live on Morgan Lake Road concur that driving time is at least 10-15 minutes to the most accessible areas of the line from the base of Morgan Lake Road. Add to this estimate travel time from the La Grande Fire Station (approximately 7 minutes) and the time needed for individual fire fighters to travel to the Fire Station for a more realistic best-case scenario response time. The Paradise Camp Fire burned at a rate of over 1 acre per second!

Another factor in transmission line fires particularly impactful for small volunteer fire departments is the complications to firefighting introduced by the transmission lines themselves. According to Marvin Vetter, ODOF's Rangeland Coordinator, "local crews have no training in this scenario and will wait for the lines to be de-energized." JB Brock, Union County Emergency Manager, states, "The project (transmission line) could limit the ability on initial attack if fire fighters have to wait for power lines to be de-energized." (U-1C-6) These delays allow fires to grow even more.

How can communities struggling to maintain volunteer fire crews hope to address the overwhelming additional challenges and risks imposed by a project such as the B2H transmission line? Where is this addressed in Idaho Power's application and how can Idaho Power conclude that the proposed B2H transmission line is "not expected to have significant adverse impacts on fire protection services" (Exhibit U 3.5.6.2)? Considering the current capacities of fire protection services in Union County and the additional risks of wildfire imposed by the B2H transmission line, I urge you to act in accordance with state statute OAR 345-022-0110 and reject Idaho Power's application to construct the Boardman to Hemingway transmission line.

Sincerely,

Sallie Williams

Name *SALLIE WILLIAMS*
Address *62460 HALLEY RD.*
LA GRANDE, OR 97850

ESTERSON Sarah * ODOE

From: Jeanne Williamson <jeanne@evermine.com>
Sent: Thursday, August 22, 2019 8:07 AM
To: B2H DPOComments * ODOE
Subject: [Fortimail Spam Detected] NO B2H

Energy Facilities Siting Council
c/o Kellen Tardaewether

Hi Kellen and team,

This is a letter recommending to NOT INSTALL a transmission line from Boardman to Hemingway.

Thank you for allowing me to express my opinion as you consider the practicality of this transmission line.

I am STRONGLY AGAINST this transmission line. Two reasons as follows.

Reason 1.

The Oregon Trail. I am a big fan; call me a Rut Nut. Your transmission line, as it goes through the Blue Mountains, will directly cross - many times - this pristine section of the Oregon Trail; one of the few that remains. In addition to crossing the Trail, your transmission line will also be within a few yards or a few hundred yards of it for many miles. The powerline will be visible and audible, and will change the flora and fauna of the area. No visitor of the Trail can imagine themselves 175 years ago crossing this country, as they stand under the shadow of your transmission line. The Oregon Trail is a route that tens of thousands of emigrants followed, and which took many lives – of men, women, children, and babies. Most emigrants were out of food by the time they got to these mountains, and had lost most of their possessions as a result of the deaths of their animals along the way. In honoring their efforts, I believe in preserving this pristine portion, as an example to all those of us who go after, and to allow people an opportunity to experience in a small way what they went through to set up a new life for themselves.

Idaho Power and their consultants have not acknowledged trail crossings shown on submitted maps and do not acknowledge visual intrusion of the line for 10 miles per standards. Trail protections have been put into documents only upon ODOE's RAE's. This has been consistent from the BLM process to current day. Considering this, Idaho Power does not comply with the state standards for cultural resources OAR 354-022-0090, or 345-022-0080, Scenic resources.

Reason 2. This is not the way of the future. Better technology is available now, and would be a better use of resources than doing things the old way.

USE SOLAR.

USE WIND.

USE LOCAL ENERGY.

DON'T MOVE ENERGY FROM ONE PLACE TO ANOTHER.

USE RESOURCES WISELY.

USE YOUR IMAGINATION.

DON'T KEEP ON GOING DOWN THE OLD ROAD JUST BECAUSE.

DON'T BE STUPID.

GO THE SMART ROUTE!!
REMEMBER YOUR GRANDCHILDREN!!

Thank you for the opportunity to express my opinion. I trust that your board will carefully consider all options and will in the end choose an environmentally sound method to bring power to your area.

Jeanne Williamson
5 Pine Crest Drive
La Grande Oregon 97850

TARDAEWETHER Kellen * ODOE

From: John & Susan Winner <swinner@dataentree.com>
Sent: Monday, October 21, 2019 10:18 AM
To: TARDAEWETHER Kellen * ODOE
Subject: [Fortimail Spam Detected] FW: B2H Draft Project Order
Attachments: B2H JAW.docx

Kellen,

Here is the July 26th. email that I sent regarding the B2H comments.

John Winner

From: John & Susan Winner
Sent: Friday, July 26, 2019 4:39 PM
To: B2H.DPOComments@oregon.gov
Subject: B2H Draft Project Order

Attn. Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR 97301

Please find attached comments regarding the B2H Draft Project Order.

John Winner, National Preservation Officer
Oregon-California Trails Association

OREGON-CALIFORNIA TRAILS ASSOCIATION

July 26, 2019

To: Members of the Energy Facility Siting Council

Thank you for the opportunity to provide comments. My comments are regarding the proposed B2H Draft Order.

I am the National Preservation Officer for the Oregon-California Trails Association (OCTA). I've also served previously as the President of OCTA.

OCTA is a national, nonprofit organization headquartered in Independence MO. with 11 chapters throughout the western United States. OCTA is seen as the nation's pre-eminent guardian and promoter of the 19th century westward migration, The largest peacetime movement in the history of the United States.

OCTA's mission is to protect the Historic Emigrant Trail legacy through preservation, research, education and public awareness of the trails. OCTA's number one goal is to preserve the Historic Emigrant Trails.

The B2H Project would devastate the Oregon National Historic Trail:

The Historic Emigrant Trails are the pathway created by the many thousands of pioneers who traveled across the Great Plains and the Northwest in the historic westward migration in the 19th century. As these travelers made their way west, largely in covered wagons drawn by oxen, they left behind telltale marks of their passage some of which remained clearly visible today. In some places pristine stretches of the historic emigrant trails are so well preserved and so undisturbed by modern development that they offer an opportunity to share this part of history of the United States by seeing the land as The Pioneers would have 170 years ago.

OCTA works to identify and preserve the Oregon National Historic Trail in partnership with private landowners and governments including local government, states and the federal government. OCTA ranks stretches of the Oregon National Historic Trail using 5 classes. Class 1 trail segments are pristine unaltered segments of a trail that look as they did 170 years ago. Trail segments ranked Class 2 through 5 are areas where the trail is still identifiable but where modern development has impacted the historic nature of the area to varying degrees.

Segments of the Oregon National Historic Trail that would be impacted by the B2H project are some of the finest most pristine segments of any historic emigrant trail in the entire nation. OCTA ranks several segments as Class 1 due to their pristine historic character largely unmarked by modern development and it has been designated by Congress as a National Historic Trail that is managed by the National

Park Service. In short, trail segments of the Oregon National Historic Trail impacted by the B2H Project are irreplaceable and an unparalleled historical resource.

The proposed B2H Transmission Line and associated wind energy development will devastate segments of the Oregon National Historic Trail. To begin with, construction of the B2H Transmission Lines including access roads for maintenance, risk causing direct physical damage to the trail. As designed, the B2H Transmission Line crosses the Oregon National Historic Trail 8 times. Although the trail has withstood the passage of time, the Direct Effects by severe impacts of heavy construction equipment is a different matter altogether. The intrusion of massive transmission towers power lines will fundamentally change this area and the historic character setting and feeling that is currently experienced. These modern developments will dominate the landscape setting and it will no longer be possible to experience the immerse sense of history that the Oregon National Historic Trail currently provides. The Indirect Effects of the visual setting is prevalent throughout the proposed project including but not limited to, the National Historic Oregon Trail Interpretive Center at Baker City, Oregon. The Center located on Flagstaff Hill provides visitors a visual opportunity to experience a sense of the emigrant's experience from long ago.

In summary, The B2H project will irreparably injure the unique and irreplaceable historic resources for future generations of Americans by physically destroying or fundamentally degrading the historic character of the Oregon National Historic Trail.

John Winner, National Preservation Officer
Oregon-California Trails Association
3541 Sundance Trail
Placerville, California 95667



Oregon Department of Energy and the Energy Facility Siting Council

Public Hearing on the Draft Proposed Order
for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) John Winters ^{Winters}

Mailing Address (mandatory) 60214 Morgan Lake Rd

Phone Number (optional) () _____ Email Address (optional) wintersend@gmail.com

Today's Date: Jun 20, 19

Do you wish to make oral public testimony at this Hearing: Yes No

Written comments can also be submitted today.

All written comments must be received by the deadline, July 23, 2019, 5 p.m. PDT to:

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony
(Please print legibly – Use the back for additional space if needed. Additional written comments may be attached to this card.)

<p style="text-align: right;">Page 134</p> <p>1 MR. JOHN WINTERS: I'll be brief. Thank you 2 very much for being here tonight. It's a long day for 3 you guys, I'm sure. And I hope you get to enjoy our 4 beautiful valley a little bit while you are here. 5 John Winters, W-i-n-t-e-r-s, I live at 60214 6 Morgan Lake Road, La Grande. 7 And being at Morgan Lake, I go up and down the 8 hill a lot, and there are some summers where you are 9 afraid to walk through the grass it gets so dry. I'm 10 just afraid some time it's going to blow up in fire. So 11 I am just going to speak to the possibility of any 12 increase in fire risk is something that doesn't make a 13 lot of sense to me. 14 Especially in light of California's 15 experience, it just occurred to me that the fire risk is 16 a little underappreciated. Five of the ten most 17 destructive fires since 2015, as you may well know, are 18 linked to the PG&E network. PG&E is now bankrupt. They 19 have 50 lawsuits and \$30 billion in liabilities. And I 20 kind of wonder if Idaho Power wants to go that route. 21 Californians are served by PG&E. Idaho Power 22 does not serve any Oregonians. So it's not as if we are 23 getting anything out of the deal. 24 Paradise, interestingly, is somewhat similar 25 to La Grande. Its elevation is 1,800 feet; we are about</p>	<p style="text-align: right;">Page 136</p> <p>1 firefighters from Australia, they had almost 300 2 engines, 4,300 law enforcement and 2,300 National Guard. 3 I just don't get the impression that Idaho 4 Power takes very seriously the even small increase in 5 risk that they may present with their power line, and 6 it's us that is going to have to be paying the price. 7 So that is all I have to say. Thank you very 8 much for your time. 9 HEARING OFFICER WEBSTER: Thank you. 10 On deck is Rod Muilenburg. But first we have 11 Mr. DeLashmutt. 12 MR. BILL DeLASHMUTT: My name is Bill 13 DeLashmutt, and I'm here representing myself. Thank you 14 for the opportunity to present my thoughts about the 15 B2H. 16 I am speaking in support of the B2H, and 17 invite you to consider some of the reasons for 18 supporting the line and the effect on our lives. 19 I understand the concerns of the opposition, 20 particularly those of you on the route or near the 21 route; that has to be hard. So I have a question to 22 start things with, and nobody has to answer it, but did 23 you apply the brakes on your car and increase energy 24 consumption as you drove to the meeting? When you have 25 the heat on in your house, do you open the windows and</p>
<p style="text-align: right;">Page 135</p> <p>1 1,200 feet. They are about twice the population of 2 La Grande. And they get three times as much rain as we 3 do. So we are a far more arid region than they are, and 4 we do get winds coming through here and drying patterns. 5 I talked to John Panches, OSU Extension 6 forester here, and he demurred on the B2H question, but 7 he did say that they are tracking weather and there is 8 more hotter days -- the days are hotter and there is 9 more of them. He says it only takes a couple of extra 10 hot days for a tree to turn the corner and to stress a 11 tree and it will die usually by the next year. He is 12 seeing a pattern, as we've probably all heard, that 13 things are going in that direction. So to me it makes 14 no sense to invite an additional risk when we have got 15 plenty of existing risks as it is. 16 The proposal states in Exhibit U, 3.5.6.2, 17 Exhibit U, it says: The project is not expected to have 18 significant adverse impacts on fire protection as 19 they've talked to all the various volunteer units along 20 the way. 21 I wonder what California would say. Cal Fire, 22 again, I talked to them; they wouldn't comment. But the 23 Santa Rosa Fire Chief has been quoted as saying, they 24 have 17 states that -- I believe it was the Woolsey 25 Fire, they had firefighters from 17 states. They had</p>	<p style="text-align: right;">Page 137</p> <p>1 heat the outside air? Of course the answer is no. That 2 wouldn't be smart. We should not ask Idaho Power, 3 PacifiCorp, and Bonneville Power Administration to waste 4 energy either. 5 I want to discuss power line losses and a few 6 causes. We are all concerned about energy efficiency. 7 So are Idaho Power Company, PacifiCorp, and Bonneville 8 Power Administration. B2H will lower line losses. I 9 can help you visualize that. Power line temperature 10 rises when you add load to the line. The larger the 11 load, the hotter the line becomes. This is a problem 12 with the existing system. And we are wasting energy. 13 B2H will lower the line losses on the existing system. 14 If you force Idaho Power Company, PacifiCorp, 15 and Bonneville Power Administration to operate without 16 B2H, you are doing the same thing as driving your car 17 with the brake applied and turning up the heat in your 18 house while you open the windows. 19 Idaho Power Company is demonstrating good 20 corporate practices by providing low-cost power that is 21 in the bottom 10 percent of the nation. Idaho Power 22 Company provides you power at 25 percent less cost than 23 the national average. That is good corporate practice. 24 Wind farm activity increases losses. We all 25 talk about microgrids that locate power generation close</p>

ESTERSON Sarah * ODOE

From: JOHN WINTERS <wintersnd@gmail.com>
Sent: Wednesday, August 21, 2019 11:29 AM
To: B2H DPOComments * ODOE
Attachments: B2H Fire Risk letter, August 21, 2019.doc

Thank you for your time ! John Winters ND

August 21, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street, N.E.
Salem, Oregon 97301

SUBJECT: Idaho Power Application for a Site Certificate for the Boardman-to-Hemingway
Transmission Project 9-28-18; Draft Proposed Order 5-23-19

Dear Chair Beyeler and Members of the Council:

This letter focuses on increased wildfire risk.

While there are many reasons not to proceed with B2H, increased risk of wildfire is the most compelling. Concerns of environmental degradation, view sheds and even the need for this obsolete project are well founded, but pale in comparison to the possibility of wildfire. Paradise, California is incinerated, gone.

September 21, 2018 Gov. Jerry Brown signed into law a measure allowing utilities to bill their customers to pay for legal settlements stemming from 2017 wildfires. Weeks later the disastrous Camp Fire struck. Now PG&E faces over 30 billion in liability from over 50 lawsuits. The company is bankrupt. Do IP stock holders and customers really need this risky project?

Exhibit U, Section U-1C "Contact with Fire Departments"---Burnt River RFD chief Burt Siddoway estimates a 45 minute response time to a fire in the B2H right of way (ROW). Lookout-Glasgow RFD chief Kirk Jacobs guesses a 30-60 minute response time, which seems reasonable. The La Grande RFD chief claims a 4-8 minute response time! I know from decades of living on Morgan Lake Road that this is impossible. Driving time alone is at least 10-15 minutes to the most accessible locations. A much longer response time is likely. This is important because this area is rated the #1 fire risk WUI (wildland urban interface) in Oregon. B2H also passes through #5 rated Perry-Hilgard and #10 rated Kamela. La Grande, home to 13,000 people is adjacent to the Morgan Lake area. Any fire in this high risk area would be in town within minutes.

The Camp Fire started 7 miles from the town of Paradise and arrived one hour later, burning over 1 acre PER SECOND. La Grande is similar to Paradise, only a lot drier. La Grande has 13k people, at 2200 feet elevation, and averages 18 inches rain yearly. Paradise HAD 26k people, at 1800 feet elevation, and averages 55 inches rain yearly. La Grande is more vulnerable than Paradise! Putting power lines through this area and right next to town is too risky.

The DPO claims the project is: "Not expected to have significant adverse impacts on fire protection services" (Exhibit U 3.5.6.2) This type of claim is often made throughout the DPO, but is based on best- case scenarios. Established trends in forest health and climate indicate increased fire risk in the future. Union County OSU Extension Forester John Punches has observed increasing tree mortality. He says there are more hot days each year and that even one or two additional really hot days is enough to stress a tree and cause death. More dead trees contribute to increased fire risk. And, talk about "no significant adverse impacts..." ask Santa Rosa Fire Chief who had to call in firefighters from 17 states, Australia, and needed 266 engines, 79 crews, 4300 law enforcement officers, and 2300 National Guard for a power line caused fire!

Electrical transmission lines have a poor record of causing wildfires. In California, PG&E lines have caused 5 of the 10 most destructive fires since 2015. Research shows new equipment, proper maintenance and diligence help, but people or even birds can start a fire anyway.

Transmission lines complicate the way you fight a fire, according to Marvin Vetter ODOF's Range land Coordinator. Local crews have no training in this scenario and will wait for the lines to be de-energized. (a complicated issue in itself) This delay allows the fire to grow even more.

IPC states construction will progress at about 1 ½ miles weekly (U-1C-D) That exposes any

nearby town to 30 weeks of increased traffic and risks.

The Oregon PUC Wildfire Response Council said in January 2019 that “California wildfires and the resulting devastation are linked to the electrical system...” “Increased wildfire risk is only the beginning and will continue for decades to come.” Why should we risk SO much, when we don’t need to?

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301
email: B2H.DPOComments@Oregon.gov

June 27, 2018
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AUG 22 2013

DEPARTMENT OF ENERGY

**EFSC LACKS AUTHORITY TO APPROVE CONSTRUCTION OR
MODIFICATION OF ROADS OR OTHER DEVELOPMENT OUTSIDE THE
SITE BOUNDARY FOR THE BOARDMAN TO HEMINGWAY
TRANSMISSION LINE.**

The Oregon Department of Energy and Energy Facility Siting Council span of control for approving development is limited to the area within the site boundary. In order to be covered under the site certificate, roads or other construction must be included in the site boundary. The decision regarding whether or not to include these areas in the site was made by the developer. They chose to limit the area of the site to exclude some of the roads they planned to modify or build. Due to this decision, these areas must be approved through the local county or city planning process. They do not fall under the rules contained in OAR 345-022-0030.

Prior decisions and a contested case decision by the Energy Facility Siting Council support the above, for example: The Oregon Department of Energy and Energy Facility Siting Council allowed Wheatridge Wind Development to not include the gen-tie transmission line in the site certificate. That decision gave control of the gen-tie line, roads and other actions related to building the transmission line to the contractor and the developer and removed the Oregon Department of Energy and Energy Facility Siting Council from involvement.

Definitions contained in the Oregon Statutes and EFSC Rules clearly define the area which is controlled by the site certificate.

1. A site certificate by definition contained in ORS 469.300(26), ORS 469.401(4) and ORS 369.503(3) means “the binding agreement between the State of Oregon and the applicant, authorizing the applicant to *construct and operate a facility on an approved site*, incorporating all conditions imposed by the council on the applicant.”
2. The “site” is defined in ORS 469.300 as “any proposed location of an energy facility and related or supporting facilities.”
3. ORS 469.300 also defines “Related or supporting facilities” as “means any structure, proposed by the applicant, to *be constructed or substantially*

modified in connection with the construction of an energy facility, including associated transmission lines, reservoirs, storage facilities, intake structures, road and rail access.-----"

4. ORS 469.401(4) and ORS 369.503(3) state that the council does not have jurisdiction over matters that are not *included in and governed by the site certificate* or amended site certificate.

In construing a statute, you may not "insert what has been omitted, or ***omit what has been inserted." ORS 174.010.

The area of EFSC control of modifications to existing roads or development of new roads is also contained in counsel standards contained in OAR 345-001-0010 including:

5. (54) ""Site" as defined in ORS 469.300. "Energy facility site" means all land upon which an energy facility is located or proposed to be located. "Related or supporting facilities site" means all land upon which related or supporting facilities for an energy facility are located or proposed to be located.

6. (55) ""Site boundary" means the perimeter of the site of a proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors proposed by the applicant."


7. (56) ""Site certificate" as defined in ORS 469.300." "means the binding agreement between the State of Oregon and the applicant, authorizing the applicant to *construct and operate* an energy facility *on an approved site*, incorporating all conditions imposed by the state on the applicant."

The above definitions, particularly the definition of "site certificate" in the statute clearly limit the extent of the Oregon Department of Energy and Energy Facility Siting Council evaluation and control to activities occurring on the "site" as defined in the above rules and statutes and impacts those development activities occurring on the site have on the surrounding area. Any modifications to road segments or new roads which are not included in the site boundary are outside the jurisdiction of the Energy Facility Siting Council. The site certificate cannot authorize exceptions to local or state land use goals or plans in order to approve development outside the site.

The applicant claims on Page K-216 of their application that the access roads and other such facilities outside the site boundary are related and supporting facilities.

Since the applicant chose not to include these facilities in the site certificate, they are not related or supporting facilities. The Energy Facility Siting Council and the Department of Energy made this very clear in the contested case decision regarding the developer's choice not to include the gen-tie line in the site for the Wheatridge Wind Facility. That decision was incorporated into the Final Order for Wheatridge Wind Facility issued April 2017. For example: Page 1, Line 10 states "A site certificate is a binding agreement between the State of Oregon and the applicant, authorizing the applicant to design, construct, operate, and retire a facility on an approved site, incorporating all conditions imposed by the Council on the applicant" In the footnotes on that page there is additional comment relating to this issue, "On the record of the public hearing, Ms. Gilbert/FGRV requested that the Council impose a condition restricting construction and construction impacts to the area within the site boundary. In response, on the record of the June 6, 2016 public hearing, the applicant stated that a specific condition limiting impacts to within the site boundary should not be required as this limitation is self-implementing through approval of the site boundary and site certificate. The department generally agreed with the applicant's statement. Construction activities must be restricted to areas within the site boundary, which as defined at OAR 345-001-0010 means the perimeter of the site of the proposed energy facility, its related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors. Once issued, the site certificate becomes a binding, contractual agreement between the certificate holder and the State of Oregon, which authorizes the certificate holder to design, construct, operate and retire a facility only on an approved site, incorporating all conditions imposed by the council."

The applicant's reference to OAR 660-006-0025(4)(q) applies only to transmission lines. The applicant's reference to 215.283(1) talks to dwellings related to farm use. These arguments are moot since decisions regarding the roads or any other construction activities outside the site boundary are not included in the site certificate.


John Williams
Bx 1384
La Grande OR 97050

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AUG 22 2019

DEPARTMENT OF ENERGY

12 August 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

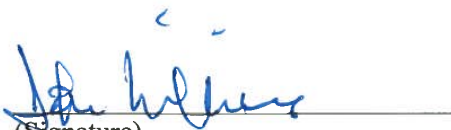
As I understand it, the applicant did not complete noise modeling on multiple noise sensitive properties within ½ mile of the development as required by OAR 340-035-0015(38). In fact, the closest noise modeling was performed at Hilgard, the junction of I-84 and 244, about 8 miles air miles away, with a train track near by. Applicant could scarcely have chosen a site less representative of the absolute silence typical of the Morgan Lake setting.

Page 145 (T-4-46) Baseline condition: "... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users..." Solitude, of course, suggests an absence of distraction from external stimuli including noise. Campers often comment on the tranquility of the park where a 5 mph speed limit is enforced to limit noise, and no shooting or motorized craft are allowed on the lake. Even when the campground is full, it's possible to picnic or hike beside the lake in absolute silence.

Noise Sensitive Property is "property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Obviously the noise corona of popping, humming transmission lines will interfere with the silence campers have every right to expect in a natural setting.

This transmission line is planned to be sited within 500' west of the park boundary, which would place it easily within less than 1/5 of a mile of overnight camp sites.

The applicant's ASC should be denied until all required and adequate noise modeling has been performed.


(Signature)

Name: John Williams

Address Bx 1384
La Grande OR 97850

August 12, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

RECEIVED

AUG 22 2019

DEPARTMENT OF ENERGY

Via E-MAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project
9/28/2018; Draft Proposed Order 5/23/2019

To: Chairmen Beyeler and Members of the Council

I appreciate the opportunity to comment on the Draft Project Order for the Boardman to Hemingway Transmission Project. I am very supportive of the Oregon California Trails Association (OCTA) and the work that they have done to protect the Oregon Trail, especially here in Oregon. OCTA is mentioned numerous times in **Exhibit S** and the **Historic Properties Management Plan and Programmatic Agreement**. OCTA does NOT believe that Exhibit S Historic Properties Management Plan is complete in 7.2.3 Field Crew, and offers this additional condition.

ADDITIONAL CONDITION #1 OCTA recommends that the Council add an Oregon Trail expert to the Cultural Resource Team. This Oregon Trail individual will have qualifications similar to Field crew members. For example, they will have an undergraduate degree in anthropology, archaeology, or in a field such as geology, engineering or history. It will not be necessary to have attended a field school. This individual will be recommended by the National OCTA President and agreed to by the Field Director.

The field surveys, even with SHPO and NPS data, have missed and/or mislabeled some sections of the emigrant trail. OCTA wants the public to know where the Trails are and I do too! OCTA over the years has marked the trail location with wooden signs, small triangles attached to trees, and more recently, carbonite posts and steel rails. Most private property owners are proud of the trail on their property, and after obtaining permission allow the public to walk and hike on the trail.

Idaho Power and their consultants have not acknowledged trail crossings shown on submitted Maps and do not acknowledge visual intrusion of the line for 10 miles per standards, and only upon ODOE's RAI's, put into documents some trail protections. This has been consistent from the BLM process to current day.

Considering the points above, Idaho Power does not comply with the state standards for cultural resources OAR 354-022-0090, or 345-022-0080, Scenic resources. **EFSC Must Deny the Site Certificate!**



Signature

Printed name:

John Williams

Mailing address:

Bx 1384

Le Grande OR 97850

Email address:

phone number: (optional)

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AUG 29 2019

DEPARTMENT OF ENERGY

Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St. NE

Salem, Oregon 97301

email: B2H.DPOComments@Oregon.gov

The introduction of the Boardman to Hemingway Transmission line creates an unacceptable increased risk of catastrophic fire. Of the six counties in Oregon which the transmission line would cross, five of them are rated as having a high risk of wildfire.

Morgan Lake area is rated #1 risk in Oregon

Idaho Power has indicated that they do not plan to provide their own fire protection, but plan instead to rely upon local fire fighting resources to deal with fires caused by the transmission line. They have rejected the suggestion from Baker County that they develop a specialized fire fighting resource to fight wild fires in the unpopulated areas the transmission line would cross and provide them with the specialized equipment that local fire departments in the area are lacking. They also have not responded to comments from Union County Fire Departments indicating a need for them to provide specialized equipment to address wildfires.

The issue is further problematic due to the fact that at least in Union County, the developer has stated their intent to rely upon local firefighting resources. In Union County there are only four fire departments that are not Rural Fire Protection Districts, RFPD's. These RFPD's are trained to fight structural fires, not wildfires. Further, the definition of a RFPD limits them to "providing structural fire protection to its constituents." Idaho Power must establish their own methods of fighting wildfires along the transmission line. They cannot rely upon the local resources identified to address structural fires to provide protection from wildland fires.

BAR 345-022-0110

John Winters III 60214 Morgan Lk. Rd, LG, OR 97858

Last year - the Woolsey Fire necessitated crews come from 17 states & Australia! Thousands of fighters, law enforcement & National Guard were needed. LaCumbre gets about a third the rain as does Paradise. Building B2H right adjacent to Labrandes or in and Eastern Oregon is a bad idea - for Oregonians, even Idaho Power investors & customers.

RECEIVED

AUG 22 2019

DEPARTMENT OF ENERGY

12 August 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

As I understand it, the applicant did not complete noise modeling on multiple noise sensitive properties within 1/2 mile of the development as required by OAR 340-035-0015(38). In fact, the closest noise modeling was performed at Hilgard, the junction of I-84 and 244, about 8 miles air miles away, with a train track near by. Applicant could scarcely have chosen a site less representative of the absolute silence typical of the Morgan Lake setting.

True! - This area is quiet - birds, wind - you can hear the roar of I-84 and LaGrande

Page 145 (T-4-46) Baseline condition: "... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users..." Solitude, of course, suggests an absence of distraction from external stimuli including noise. Campers often comment on the tranquility of the park where a 5 mph speed limit is enforced to limit noise, and no shooting or motorized craft are allowed on the lake. Even when the campground is full, it's possible to picnic or hike beside the lake in absolute silence.

miles away

proposed to pass near Grande Ronde Hospital

Noise Sensitive Property is "property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Obviously the noise corona of popping, humming transmission lines will interfere with the silence campers have every right to expect in a natural setting.

Also, many residents in the area,

This transmission line is planned to be sited within 500' west of the park boundary, which would place it easily within less than 1/5 of a mile of overnight camp sites.

The applicant's ASC should be denied until all required and adequate noise modeling has been performed.

Thank you!

John Winters

(Signature)

Name: *John Winters ND*
Address: *60214 Morgan Lake Road
LaGrande, OR 97850*

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

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AUG 23 2019

DEPARTMENT OF ENERGY

Email: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project (B2H) 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

This letter is a public comment for the above referenced project. Specifically, this letter will discuss Idaho Power's compliance with Standard 345-022-0110 - Public Services, in Exhibit U (3.5.6.2 and 3.5.6.5) of the EFSC application for B2H to ODOE. The letter will discuss the impact potential wildfires caused by the B2H transmission line will have on the ability of public and private providers within the analysis area to provide fire protection.

The effect of transmission lines on wildfire impact in western states has been well documented. In California, PG&E lines have caused 5 of the 10 most destructive fires since 2015, producing a liability of over 30 billion for PG&E. When considering the impact of B2H's operation, residents of Union County find the similarities between La Grande and Paradise California, where the infamous Camp Fire struck in 2018, deeply concerning. La Grande and Paradise share similar elevations and populations, however, La Grande has several characteristics that make it significantly more vulnerable to the ravages of wildfire than Paradise. For instance, La Grande averages 18 inches of rain yearly while Paradise enjoys 55 inches. Additionally, the proposed line runs adjacent to La Grande, while the line causing the Camp Fire was 7 miles from Paradise. Oregon's 2006 Communities at Risk Assessment by the Oregon Department of Forestry cites a startling fact: **The fire risk of the wildland urban interface (WUI) in La Grande has been rated the #1 WUI fire risk in Oregon!**

just outside city limits

Even with careful planning things happen

car 40 min drive
The fire was in Paradise 1 hour after ignition!
Burning 1 acre/sec

There is no doubt that construction of the proposed B2H transmission line would significantly increase the risk of wildfire in our area. From Idaho Power's own Draft Protection Order (Exhibit U-3.5.6.2, p. U-24): "Most activities will occur during summer when the weather is hot and dry. Much of the proposed construction will occur in grassland and shrub-dominated landscapes where the potential for naturally occurring fire is high. Project construction-related activities, including the use of vehicles, chainsaws, and other motorized equipment, will likely increase this potential risk in some areas within the Site Boundary. Fire hazards can also be related to workers smoking, refueling, and operating vehicles and other equipment off roadways. Welding on broken construction equipment could also potentially result in the combustion of native materials near the welding site." Idaho Power recognizes this hazard but makes no consideration of it in its application.

There are several specifics to examine in an analysis of the proposed B2H line's effects on Union County's ability to provide fire protection services. Firstly, firefighting crews in our region are

limited and volunteer. In their application, Idaho Power avers, "Most of the fire districts within the analysis area comprise volunteers, and in some cases, it takes considerable time to collect and mobilize an entire fire crew." As well, JB Brock, Union County emergency Manager states in Idaho Power's application "volunteer fire departments (rural fire protection districts) have a hard time finding volunteers due to budget constraints, similarly to budget constraints at the state and federal level. The wildland fires are getting bigger and cost more to fight" (U-1C-6). Fire crews in Union County are not equipped to handle potential wildfires generated by the proposed B2H transmission line.

The fact that fire crews are unstable, small and volunteer affects many aspects of their ability to respond to wildfires. Delayed response times, as noted in the quote from the previous paragraph, is one effect. Estimates of response time in the EFSC application are best-case scenarios. The estimate of 4 to 8 minutes as the response time in Union County (Table U-10) is far from even a best-case scenario (p. U-17). Residents that live on Morgan Lake Road concur that driving time is at least 10-15 minutes to the most accessible areas of the line from the base of Morgan Lake Road. Add to this estimate travel time from the La Grande Fire Station (approximately 7 minutes) and the time needed for individual fire fighters to travel to the Fire Station for a more realistic best-case scenario response time. The Paradise Camp Fire burned at a rate of over 1 acre per second!

Another factor in transmission line fires particularly impactful for small volunteer fire departments is the complications to firefighting introduced by the transmission lines themselves. According to Marvin Vetter, ODOF's Rangeland Coordinator, "local crews have no training in this scenario and will wait for the lines to be de-energized." JB Brock, Union County Emergency Manager, states, "The project (transmission line) could limit the ability on initial attack if fire fighters have to wait for power lines to be de-energized." (U-1C-6)
These delays allow fires to grow even more.

*consider
Idaho Power would have to turn off
power to Boise hospitals & residents*

How can communities struggling to maintain volunteer fire crews hope to address the overwhelming additional challenges and risks imposed by a project such as the B2H transmission line? Where is this addressed in Idaho Power's application and how can Idaho Power conclude that the proposed B2H transmission line is "not expected to have significant adverse impacts on fire protections services" (Exhibit U 3.5.6.2)? Considering the current capacities of fire protection services in Union County and the additional risks of wildfire imposed by the B2H transmission line, I urge you to act in accordance with state statute OAR 345-022-0110 and reject Idaho Power's application to construct the Boardman to Hemingway transmission line.

Sincerely,

John Winter

Name
Address

*John Winter MD
60214 Morgan Lake Road
La Grande, OR. 97850*

Kellen Tardaewether, Senior Siting Analyst
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AUG 29 2019

DEPARTMENT OF ENERGY

REGARDING; CONCERNS DUE TO THE INCREASED RISK AND LACK OF RESPONSE CAPABILITIES IN THE EVENT OF A FIRE ALONG THE TRANSMISSION LINE

5 of 10 major California fires since 2015 were caused by power lines
The increased potential for wildfire has been established as a given along any transmission line.

Not only is there an undetermined and potentially significant amount of time that will elapse prior to the identification of the fire, but then there may be a response time of up to 40 minutes after a fire is located in some areas according to Union County fire fighting resources. There will be ample opportunity for the fire to grow significantly. Given the potential lack of speed in getting to the location, the difficulty traversing the terrain, and the lack of specialized equipment available to fight forest fires, local resources are not adequate to protect the public from wildfires occurring due to the construction and ongoing operation and maintenance of this transmission line. Responding to fires that do occur will limit local resources available to provide service to their local areas of responsibility and the developer is planning to rely upon those local resources to deal with fires along the transmission corridor. Concern over the increased risk of fire as a result of this transmission line including multiple comments voiced by the citizens of the counties as well as special advisory groups prompted both Union and Baker counties to request funding for an analysis and recommendation to identify and mitigate the increased risk created by the construction and operation of the transmission line. Funding for that activity is not being supported by the developer. This development will have a significant impact on the local service providers to provide protection and respond to fires. There would be construction occurring during the hot, dry summer, that they will be establishing Right of Ways with abundant low lying, heavy brush and grass which burns fast and hot. There are long distances along the entire length of the transmission line with no designated fire response unit, the employees building and maintaining the transmission line are not going to be qualified to fight fires they create, there is a lack of specialized equipment needed to fight transmission line caused fires, response times will be excessive, there is a lack of paid personnel available to deal with these remote fires, some fire stations have old equipment, and they will be creating hundreds of miles of new and improved roads to allow and increase access for human caused fires. According to the Forest Service, between 88% and 90% of wildfires are human caused. There will be a significant increase in access for both people and vehicles along the entire right of way for the life of the transmission line.

Also - crews have pro training in with power lines.

For example, Union County identified the following needs if the developer is going to rely upon local fire protection resources:

- Each volunteer firefighter needs to be provided with a phone and GPS system utilizing current technology able to provide service in remote areas along the transmission line
- There is a need for two heavy duty all terrain water trucks and any additional equipment needs identified by the Fire Chief.

- An additional full time position with the County fire department during any construction occurring in Union County.
- A permanent 1/2 time position to provide monitoring, training and firefighting during the life of the development.
- The county needs to participate in the development of a fire plan prior to it being accepted
- There is a need to provide resources to assure a response time of 14 minutes or less 90% of the time as required by NFPA.

A matter that adds significantly to the risk is the fact that the developer is stating they will rely upon Rural Fire Protection Services to respond and fight fires along the transmission line. These fire departments are only authorized to fight structural fires.

I hope you take these comments seriously, as the risk of catastrophic fires in the areas being impacted by the Boardman to Hemingway Transmission line are high. No acceptance of *this application* Condition Number 6 should be given until the developer has shown that they are dealing with the increased fire potential they are creating through this development. *AR 345-022-0110*

Sincerely

John Winters
00214 Marge Road
LeBron, OR 97858

Also - fire risk is likely to increase. Alaska's power line caused wildfire (McKinley Sunday Aug 8, 19) is more evidence of generally hotter/drier conditions. We need to ~~be~~ be more careful.

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AUG 23 2019

DEPARTMENT OF ENERGY

August 12, 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

Page 62 (T-57) ASC refers to "extensive work in the siting study of the Morgan Lake Alternative." I doubt it was extensive because it is entirely inaccurate:

Page 145 (T-4-46) Morgan Lake Park is described as 204 acres, containing one lake, which is developed with primitive campsites and fishing docks.

Morgan Lake Park actually contains two lakes. Morgan Lake covers 70 acres; the other, Twin Lake, [also known as Little Morgan Lake] is in plain sight, within 300' of Morgan Lake; it covers 27 acres.

Twin Lake is undeveloped, a wild life and bird sanctuary, home to nesting bald eagles. It is designated as protected wetlands. In their application, Idaho Power conveniently omits any references to Twin Lake.

Page 156, (T-4-6) ASC purports to be a map of Morgan Lake Park. According to the map legend, the purple cross hatch amoeba-shaped area is Morgan Lake Park. That's wrong. The purple cross hatch is Morgan Lake. The actual boundaries of the 204 acre park are not indicated. Obviously, it's difficult to believe "extensive work on this siting study" ever occurred.

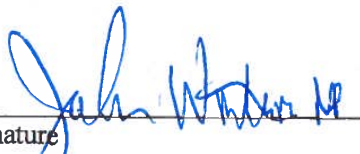
The applicant also used aerial photography to identify and avoid, where practical, irrigation pivots, houses, barns, private runways, other structures (e.g., wind turbines), and land use features. The corridors were adjusted using topographic maps to avoid or minimize distance across very steep slopes and other physical features less desirable for transmission line construction and operation. The corridors were again checked against the constraint and opportunity geographic information system (GIS) database to avoid, where possible, exclusion areas and areas of high permitting difficulty such as potential Oregon Department of Wildlife (ODFW) Category 1 habitats. The applicant then grouped the alternative corridors into 14 regions and evaluated on the basis of permitting difficulty, construction difficulty and mitigation costs. Using the constraint database, which incorporated the eight siting factors, the applicant reviewed the alternatives to determine the most reasonable corridor within each region. (DPO p. 11)

It is distressing to think that this is only one of many errors in Idaho Power's ASC. If the IPC surveying and engineering staffs are unable to detect a 27 acre lake within a 204 acre park, it's disquieting to imagine the difficulties in identifying and analyzing less obvious and life-threatening situations like fault zones, slide areas and other potential dangers to public safety

True - this area is steep, hard to access with prevailing winds from the west - any fire started on the B2H line would likely blow into La Grande within minutes.

If this slipshod effort is typical of IPC's careful attention to engineering a route, it may also explain IPC's egregious error in choosing to site the B2H on their preferred Mill Creek or alternative Morgan Lake route rather than on the carefully studied and analyzed BLM Environmentally Preferred route.

Following the DEIS, Idaho Power made a hasty and ill-advised effort to avoid litigation threatened by a individuals whose remote properties and summer cabins would have been impact by the line. If Idaho Power had chosen to follow the BLM Environmentally Preferred route, miles to the west of La Grande, rather than in the immediate view of 13,000 La Grande residents, there might have been ten people at the public meetings in La Grande, rather than the hundreds who have consistently appeared to protest various serious problems associated with the routes proposed for the B2H. The haste of this effort is evident in the abundant errors of omission and misinformation typical of the B2H ASCand DPO which will be addresser in a separate comment.


Signature

Name: John Winters ND

Address: 60214 Morgan Lake Rd.
LaGrande, OR. 97850

I am a 20 yr. resident on this steep hill above LaGrande, & enjoy the Morgan Lake ~~area~~ park 4-5 times/wk. There are many good reasons not to allow B2H, Views, environmental damage, noise & ~~no~~ Increased risk of wildfire incinerating the region is truly scary. We are drier than Paradise, Morgan Lake is rated Oregon's #1 WUI fire risk - Idaho Power hasn't done their homework - and LaGrande shouldn't suffer for it.

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301
Email: B2H.DPOComments@Oregon.gov

RECEIVED

AUG 23 2019

DEPARTMENT OF ENERGY

Magnetic Fields from 500 kV line create a public health risk

The Draft Site Certificate allows up to 9mA of exposure. While this is the standard that is being used, it has had no formal review by the statutorily required review committee for at least 15 years or longer. ORS 469.480(4) states, "The council by rule shall form an Electric and Magnetic Field Committee which shall meet at the call of the council chair. The committee shall include representatives of the public, utilities, manufacturers and state agencies. The committee shall monitor information being developed on electric and magnetic fields and report the committee's findings to the council. The council shall report the findings of the Electric and Magnetic Field Committee to the Legislative Assembly." This requirement is repeated in OAR 345-022-0000.

In spite of the clear legislative and rule requirement, the Oregon Department of Energy and Energy Facility Siting Council have refused to establish this committee in spite of a specific request that they do so. The standard has not been reviewed for over a decade, in spite of the fact that it is one of the highest in the nation and the world for residences. The last time there was any consideration, it was not as a result of a multi-expertise group, but was conducted by a single person, Dr. Kara Warner. She clearly recommended that the committee should be meeting on an ongoing basis in her report.(EFSC 2009).

The Oregon Department of Energy and EFSC continue to make unilateral decisions in spite of the fact that they do not have the expertise represented by the stakeholders required by the legislature to be reviewing this issue and in spite of the mounting evidence indicating this standard is too high. For example, the National Electric Safety Code limits workplace exposure to 5 mA and the National Radiation Laboratory states workplace limits should not be used for the public. The limits need to be lower due to potential prolonged exposure, and different ages, health, etc. They indicate induced current should not exceed 2 mA for public exposure.

Due to the mounting evidence that a health and safety issue exists due to the large amount of exposure being allowed and the fact that the council has not met the requirements of the statute specifically requiring them to do so, the site certificate cannot be issued. In order to issue a site certificate, the required committee must be brought together, a review of the appropriate amount of exposure needs to occur, and this issue needs to be reviewed based upon credible, current research and standards being used by other agencies and groups.

Name, Address and e-mail

John Winters ND
60214 Morgan Lk. Rd.
LG, OR 97857

Signature

the electric field is inversely proportional to the distance from the conductors; the electric field strength declines as the distance from the conductor increases. The strength of the electric field is measured in units of kilovolts (kV) per meter (m) or kV/m. Electric fields are readily weakened or blocked by conductive objects such as trees or buildings. The direction of force within the electric field alternates at a frequency of 60 Hz, in direct relation to the charge on each conductor. However, the overall transmission line voltage, and therefore the overall strength and reach of the electric field, remains practically steady and is not affected by the common daily and seasonal fluctuations in usage of electricity by customers.

Magnetic fields around transmission lines are produced by the movement of electrical charge, measured in terms of amperage, through the conductors. Like the electric field, the magnetic field alternates at a frequency of 60 Hz. Magnetic field strength is expressed in units of milligauss (mG).³ The magnetic field strength is directly proportional to the amperage; that is, increased current flow produces a stronger magnetic field. As with electric fields, the magnetic field is inversely proportional to the distance from the conductors, declining in strength as the distance from the conductor increases. Magnetic fields are not blocked or shielded by most materials. Unlike voltage, the amperage and the resulting magnetic field around a transmission line fluctuate daily and seasonally as the usage of electricity varies and the amount of current flow varies.

Each AC three-phase circuit carries power over three conductors. One phase of the circuit is carried by each of the three conductors. The AC voltage and current in each phase conductor is out of sync with the other two phases by 120 degrees, or one-third of the 360 degree cycle. The fields from these conductors tend to cancel out because of this phase difference. However, when a person stands under a transmission line, one conductor is significantly closer and will contribute a net uncanceled field at the person's location.

3.2.2 EMF Standards

No federal regulations or guidelines apply directly to the EMF levels for the Project's proposed lines in Oregon. The National Institute of Environmental Health Sciences (NIEHS) performed an extensive review of field-related issues in the 1990s that resulted in the decision that regulatory actions are unwarranted (NIEHS 1999).

Although there are no federal regulations on power-frequency EMF in the United States, international recommendations and guidelines exist. Table AA-1 lists power-frequency EMF guidelines recommended by the European Union (EU 1999), the International Committee on Electromagnetic Safety (ICES), and the International Commission on Non-Ionizing Radiation Protection (ICNIRP), which is an affiliate of the World Health Organization (ICES 2002; ICNIRP 2010).

³ Magnetic field strength may also be measured in terms of the Tesla, an International System unit of measurement. 1 Gauss = .0001 Tesla, or 1 Tesla = 10,000 Gauss; 1 Gauss = 1,000 mG.

Table AA-1. International Guidelines for Alternating Current Power-frequency EMF Levels

Agency	Exposure	Electric Field (kV/m)	Magnetic Field (mG)
European Union	General public	4.2	833
ICES ¹	Occupational	20	27,100
	General public	5	9,040
	General public within ROW	10	NA
ICNIRP	Occupational	8.3	10,000
	General public	4.2	2,000

¹ ICES recommendations have been adopted as standards by the Institute of Electrical and Electronics Engineers (IEEE); see Standard C95.6 -2002 (R2007).

Magnetic fields are measured in gauss (G) and milligauss. 1 G = 1,000 mG

NA = Not Applicable (no requirements)

Transmission line projects in Oregon must comply with the electric field standard found in OAR 345-024-0090, which requires that the applicant design, construct, and operate the proposed transmission line so that AC electric fields do not exceed 9 kV/m at 1 meter above the ground surface in areas accessible to the public. There is no similar Oregon design standard for magnetic fields.

Six other states have adopted limits for electric field strength either at the edge or within the ROW of the transmission line corridor. Only Florida and New York currently limit magnetic field levels from transmission lines. The magnetic field levels set in those two states only apply at the edge of the ROW and were developed to prevent magnetic fields from increasing beyond levels currently experienced by the public. Table AA-2 shows the AC electric field and magnetic field standards that have been adopted by states in the U.S.

Table AA-2. Other State Alternating Current Power-frequency EMF Standards

State	Location	Electric Field (kV/m)	Magnetic Field (mG)
Florida	230- to 500-kV lines	10	NA
	Edge of ROW	2	200 ¹
	230 kV or less	8	NA
	Edge of ROW	2	150
Minnesota	Within ROW	8	NA
Montana	Within ROW—road crossing	7	NA
	Edge of ROW	1 ²	NA
New Jersey	Within ROW	NA	NA
	Edge of ROW	3	NA
New York	Within ROW—open	11.8	NA
	Within ROW—public road	7	NA
	Within ROW—private road	11	NA
	Edge of ROW	1.6	200
North Dakota	Within ROW	9	NA
	Edge of ROW	NA	NA

State	Location	Electric Field (kV/m)	Magnetic Field (mG)
Oregon	Within ROW Edge of ROW	9 NA	NA NA

¹ Magnetic field strength is limited to 250 mG for new double-circuit 500-kV lines constructed on a previously existing right-of-way.

² Can be waived by landowner.

NA = Not Applicable (no requirements)

In the fall of 2009, the Energy Facility Siting Council (EFSC or Council) commissioned a review of existing information to prepare for the review of several transmission lines under discussion at that time. That review was conducted by Dr. Kara Warner and presented to the Council on November 20, 2009, during a regular Council meeting. The prevailing conclusions were that there is a need to continue to monitor the science on EMF; that low-cost, prudent avoidance measures of public EMF exposure are appropriate; and that health-based limits are not appropriate given the scientific data available (EFSC 2009).

3.3 Distance Between Transmission Line Center Lines and Right-of-Way Edge

OAR 345-021-0010(1)(aa)(A)(i): The distance in feet from the proposed center line of each proposed transmission line to the edge of the right-of-way.

The transmission line will be located approximately in the middle of the ROW. The ROW width will typically be 150 feet, but in a few areas for very short distances may extend to 250 feet; accordingly, the distance from the center line to the ROW edge will be 75 to 125 feet. While crossing the Naval Weapons System Training Facility Boardman, the ROW will be 90 feet. The ROW width for the single-circuit 230-kV rebuilding portion of the Project will be up to 125 feet. The ROW width for the 1.1 miles of 138-kV rebuilding will be 100 feet. The required ROW width will be determined during final design.

3.4 Occupied Structures Within 200 Feet of Transmission Lines

OAR 345-021-0010(1)(aa)(A): . . . (ii) The type of each occupied structure, including but not limited to residences, commercial establishments, industrial facilities, schools, daycare centers and hospitals, within 200 feet on each side of the proposed center line of each proposed transmission line. (iii) The approximate distance in feet from the proposed center line to each structure identified in (A). . . .

3.4.1 Methods for Identifying Occupied Structures Within 200 Feet

Geographic information system and aerial photographs were used to identify and classify potential structures near the transmission line and rebuild segments that could be affected by Project EMF. A field reconnaissance was then undertaken to determine occupancy. Occupied structures included in this analysis are defined by OAR 345-021-0010 as including but not limited to residences, commercial establishments, industrial facilities, schools, daycare centers, hospitals, and rest areas. Receptors that were not included as occupied structures consisted of silos, tanks, gravel pits, mines, quarries, and water features.

3.4.2 Occupied Structures Identified Within 200 Feet

Based on review of aerial photography from 2012-2016, IPC identified six possible structures within 200 feet of the transmission line. IPC investigated the nature of those structures further, finding that

RECEIVED

AUG 22 2013

DEPARTMENT OF ENERGY

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301
email: B2H.DPOComments@Oregon.gov

Regarding: THERE WILL BE AN INCREASED RISK OF WILD FIRES AND THERE IS A LACK OF LOCAL RESOURCES TO RESPOND IN A TIMELY AND EFFECTIVE MANNER.

The Boardman to Hemingway transmission line will increase the potential and severity of wildfires due to opening up additional access for people, lightning strikes, remoteness of much of the line, the fact that high voltage transmission lines increase the height and heat of fires along the transmission lines, and limitations on local human and equipment resources to fight wildfires in remote locations.

Both Union County and Baker County have submitted comments regarding the fact that they do not have the manpower or specialized equipment necessary to fight fires in the new remote areas which will have an increased risk of catastrophic fires. Part of the area which will be crossed by the transmission line has no designated fire protection other than the Oregon Forest service.

Also - no training with power lines.

Given the timeframes for contacting and assembling volunteers, and the long travel times to respond to multiple areas along the transmission line, fires will have an opportunity to grow significantly prior to any fire response being able to access the area. Reports from volunteers called on to fight a fire which occurred during the construction of the Elkhorn Wind development stated they had difficulty accessing the area, the terrain was steep and there were multiple rattlesnakes in the area which made the job of fighting the fire very difficult.

Both Union and Baker Counties have submitted written comments to the Oregon Department of Energy stating they would need additional manpower and equipment if they are to be in a position of being able to effectively protect the citizens and resources from potential wildfires resulting from the development of the transmission line.

This is a serious issue due to the fact that the developer has indicated their intent to rely upon local resources in the event a fire occurs along the transmission line.

Sincerely, John Winters - I am a 20 yr. resident of Mangan Lake Road - 1 mile from the lake. It takes >15 min under ideal conditions to access the area - if your crew are already sitting in the trucks. The road is steep/crummy/rough and kills people that are careless & unlucky. This area is #1 wild fire danger in Oregon! We are driven thru Paradise. Voluntarily INCREASING our fire risk is insanity - sorry! Paradise is incinerated. Lets do better!
John Winters

60214 Mangan Lake Road, LG, OR
wintersj@ gmail.com

TARDAEWETHER Kellen * ODOE

From: katie fite <katie@wildlandsdefense.org>
Sent: Monday, August 19, 2019 6:44 PM
To: B2H DPOComments * ODOE
Subject: B2H Comments

Energy Facilities Siting Council

c/o Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St N.E.

Salem, OR 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

WildLands Defense is greatly concerned about the myriad adverse direct, indirect and cumulative effects of the B2H high voltage transmission line,

It will degraded, destroy and fragment vital wildlife habitats that are necessary to sustain viable wildlife populations in the region. It will outright destroy significant habitats including forested and sagebrush areas, It will cause new habitat fragmentation and disrupt wildlife use of seasonal ranges. It will cause wildlife like sage-grouse and big game to avoid use of the areas surrounding it, due to the visual flashing effect that animals perceive,

It will elevate dangerous wildfire risk - from raptor electrocutions as well as malfunction of the line.

The disturbance from the project will cause irreversible flammable weed expansion, which will result in the subsequent use of many kinds of toxic herbicides that will drift and foreseeably pollute water and kill non-target vegetation.

It will cause increased sedimentation and water pollution of aquatic species habitats as new roads are punched in for the project, as shallow-rooted weeds infest watersheds and soil erosion risk escalates, and as the result of future disturbance linked to it.

It will disturb wildlife and people with noise.

It will be visually very harmful and will mar public use of public lands for many kinds of recreational purposes, as well as, historic trails and other nationally significant areas.

It will carve a path for future development in its surroundings, with unassessed impacts.

It is not needed, as smart grid and other changes will soon render it obsolete - and the public will have a very expensive dinosaur on its hands - whose costs will be reflected in rate increases.

It will kill innumerable migratory birds and other avian species that collide with the lines, WLD has raised this issue time and time again yet Idaho Power refused to seriously study and mitigate these impacts.

All of these adverse environmental effects will be made worse by climate change stress the environment.

WLD asks that you deny authorization of the out-moded B2H project, as it is very harmful to the environment and is not in the public interest.

Thank you,

Katie Fite
Public Lands Director
WildLands Defense
PO Box 125
Boise, ID 83701
208-871-5738

ESTERSON Sarah * ODOE

From: Roni Wood <wood.roni@gmail.com>
Sent: Thursday, August 22, 2019 8:16 AM
To: B2H DPOComments * ODOE
Subject: Stop B2H
Attachments: Wood_Letter.pdf

Attached please find my letter in opposition to B2H.

Veronica Wood
807 Spring Ave
La Grande, OR 97850

August 10, 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Email: B2H.DPOComments@Oregon.gov

Dear Chair Beyeler and Members of the Council:

Morgan Lake Park, analyzed as part of the Morgan Lake Alternative - (Attachment T-3, Table T-2, p. T-3-2; Table T-3-1, p. T-13) and Summary of Impacts, pp. T-27-28, 43, (T-4-51-56), inaccurately describes features of the park itself and severely underestimates the permanent impact of development on this unique city park.
See OAR 345-021-0010 (1) (T) (A) (B) (D) & OAR 345-022-0100

Morgan Lake Park is an important opportunity primarily because of its unique designation status as a city park, rareness, and special qualities per OAR 345-021-0010(1)(t)(A) Attachment T-3, Table T-3-1 (p. T-13)

Page 62 (T-57) refers to “extensive work in the siting study of the Morgan Lake Alternative.” That is doubtful because it is completely inaccurate:

Page 145 (T-4-46) Morgan Lake Park is described as 204 acres, containing one lake, which is developed with primitive campsites and fishing docks.

Morgan Lake Park actually contains two lakes. Morgan Lake covers 70 acres; the other, Twin Lake, [also known as Little Morgan Lake] is in plain sight, within 300’ of Morgan Lake; it covers 27 acres.

Twin Lake is undeveloped, a wild life and bird sanctuary, home to nesting bald eagles. In their application, Idaho Power omits any references to Twin Lake.

Page 156, (T-4-6) purports to be a map of Morgan Lake Park. According to the map legend, the purple cross hatch area is Morgan Lake Park. That’s wrong. The purple cross hatch is Morgan Lake. The actual boundaries of the 204 acre park are not indicated. Obviously, it’s difficult to believe “extensive work on this siting study” ever occurred.

2) b. A specific example of unsupported conclusion:

Page 145 (T-4-46) Baseline condition: “... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users...”

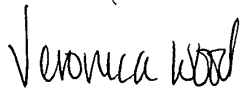
Page 146 (T-4-47) “The landscape character is natural appearing. Scenic integrity is high as the human developments are harmonious with the landscape.”

Page 49 (T-44) “Vegetation will block views of the towers from most locations in the park.” In reality, one tower would dominate the entrance to the park, all 130’ in plain view. Within the Park, the trees bordering the lake are no more than 80’ high. 130’ transmission towers will rise more than 50’ above those trees, dominating the current landscape.

Idaho Power does not provide a graphic representation of Morgan Lake Park, with the accurate height of existing trees, and elevation of towers above the trees. It simply concludes that the inescapable sight of 500 kV transmission lines and towers around a natural lake setting will have "no significant impact" on Morgan Lake Park.

This is the park whose baseline "should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users" [because 50 years ago, no one ever imagined anything larger than a human being, might ever intrude]..."

I urge the Commission to deny this application for a site certificate until each comment submitted and sent to the Commission by August 22 has been thoroughly analyzed, and Idaho Power has provided credible evidence to support each of its conclusions of "no significant impact."



Signature

Name: Veronica Wood

Mailing Address: 807 Spring Ave
LaGrande OR 97850

August 12, 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

Page 62 (T-57) ASC refers to “extensive work in the siting study of the Morgan Lake Alternative.” I do not believe it was extensive because it is entirely inaccurate:

Page 145 (T-4-46) Morgan Lake Park is described as 204 acres, containing one lake, which is developed with primitive campsites and fishing docks.

Morgan Lake Park actually contains two lakes. Morgan Lake covers 70 acres; the other, Twin Lake, [also known as Little Morgan Lake] is in plain sight, within 300’ of Morgan Lake; it covers 27 acres.

Twin Lake is undeveloped, a wild life and bird sanctuary, home to nesting bald eagles. It is designated as a protected wetlands. In their application, Idaho Power conveniently omits any references to Twin Lake.


Page 156, (T-4-6) ASC purports to be a map of Morgan Lake Park. According to the map legend, the purple cross hatch amoeba-shaped area is Morgan Lake Park. That’s wrong. The purple cross hatch is Morgan Lake. The actual boundaries of the 204 acre park are not indicated. Obviously, it’s difficult to believe “extensive work on this siting study” ever occurred.

The applicant also used aerial photography to identify and avoid, where practical, irrigation pivots, houses, barns, private runways, other structures (e.g., wind turbines), and land use features. The corridors were adjusted using topographic maps to avoid or minimize distance across very steep slopes and other physical features less desirable for transmission line construction and operation. The corridors were again checked against the constraint and opportunity geographic information system (GIS) database to avoid, where possible, exclusion areas and areas of high permitting difficulty such as potential Oregon Department of Wildlife (ODFW) Category 1 habitats. The applicant then grouped the alternative corridors into 14 regions and evaluated on the basis of permitting difficulty, construction difficulty and mitigation costs. Using the constraint database, which incorporated the eight siting factors, the applicant reviewed the alternatives to determine the most reasonable corridor within each region. (DPO p. 11)

It is distressing to think that this is only one of many errors in Idaho Power’s ASC. If the IPC surveying engineering staffs are unable to detect a 27 acre lake within a 204 acre park, it’s disquieting to imagine the difficulties in identifying and analyzing less obvious and life-threatening situations like fault zones, slide areas and other potential dangers to public safety

If this slipshod effort is typical of IPC's careful attention to engineering a route, it may also explain IPC's egregious error in choosing to site the B2H on their preferred Mill Creek or alternative Morgan Lake route rather than on the carefully studied and analyzed BLM Environmentally Preferred route.

Following the DEIS, Idaho Power made a hasty and ill-advised effort to avoid litigation threatened by individuals whose remote properties and summer cabins would have been impacted by the line. If Idaho Power had chosen to follow the BLM Environmentally Preferred route, miles to the west of La Grande, rather than in the immediate view of 13,000 La Grande residents, there might have been ten people at the public meetings in La Grande, rather than the hundreds who have consistently appeared to protest various serious problems associated with the routes proposed for the B2H. The haste of this effort is evident in the abundant errors of omission and misinformation typical of the B2H ASC and DPO which will be addressed in a separate comment.



Signature

Name: Erin Wunz

Address: 1704 Cedar St
La Grande, OR 97850

August 2, 2019

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301
email: B2H.DPOComments@Oregon.gov

THE APPLICANT SIGNIFICANTLY UNDERSTATES THE IMPACTS TO EMPLOYMENT AND FOREST LANDS AS A RESULT OF THE PROPOSED B2H TRANSMISSION LINE

Exhibit K, Attachment K-2, Pages 19 and 20, Section 7.0

The applicant claims that removal of forestland by clearing of trees for a period of over 50 years will have little economic impact to forest sector jobs in Umatilla and Union County. They value the loss of 245.6 acres of forestland in Umatilla County at \$488.60 per acre. However, they value the removal of 530.1 acres lost to the transmission line in Union County at \$182.98 per acre. The applicant provides no justification or documentation to support the difference in value per acre between Umatilla and Union Counties.

Some forest facts related to this section:

According to US Forest Service Tech. Rept. PNW-GTR-578 Rev. 2004 entitled "Forests of Eastern Oregon: an Overview", Eastern Oregon Forests produce an average of 20 cubic feet per acre of timber each year. That would mean that an acre of land would produce approximately 240 board feet of lumber per year per acre during the life of the transmission line. According to Scott Hartell, Planning Director, Union County, forest land in Union County is classified as either 20 cubic feet per acre per year, or 50 cubic feet per acre per year, so the value amounts could be significantly higher. The "Forest Facts Oregon's Forests: Some Facts and Figures" published in 2009 by the Oregon Department of Forestry states that economists estimate that for every billion board feet that is harvested in Oregon 11 forest sector jobs are created or retained.

Idaho Power's stated timber values are unrealistically low according to individuals owning forest land in both counties. No one would be using land for trees which precludes other uses if the economic benefits were as the developer is stating.

The applicant's identification of the acres of forest land impacted is incorrect due not only to the failure to use soil types to identify forest lands, but also, the fact that they are requesting a 300 foot right of way and they need to include the value of any additional trees they will be removing in the 100 foot area on each side of the right of way.

The applicant claims that the value of the land in the right of way will not be significantly reduced due to the owner's opportunity to use the land for agricultural or range land after the transmission line is constructed. This is completely unfounded. The lineal nature of a transmission line precludes any productive use of land taken for the transmission line. The right of way is too narrow to make it available for production of crops, and the costs associated with purchasing equipment for agricultural operations would be prohibitive.

It would be unusual for a forest operator to already own equipment for a crop operation. In order to use the right of way as grazing land, it would have to be fenced. According to "Estimated Livestock Fencing Costs for the Small-Farm Owner" by Derek L. Barber, the average cost of materials for ¼ mile (1,320 ft.)

of field fence is \$1,108.53 plus the cost of building it. The Iowa State University Extension identified 2011 costs for constructing ¼ mile of fencing to be \$1,947.75 installed. Enclosing a square acre requires 820 feet of fence. In other words, the cost of fencing an acre of lost forest land would exceed the value the applicant claims the land would add to the local economy per acre for the 50 years the transmission line is predicted to be in place.

The applicant also claims that the transmission line right of way through forest lands will not cause a substantial change in accepted forest practices or cause a significant increase in the cost of accepted forest practices on lands to be directly impacted by the Project or on surrounding lands. Removing trees from land currently being used to grow them certainly will create a substantial change in accepted forest practices. It also will substantially increase the costs of growing and harvesting trees on the surrounding lands. Soil compacted by heavy equipment used to access the line will discourage regrowth.

The transmission line will make it impossible to use aerial equipment to harvest trees on steep hillsides adjacent to the line; it will increase costs of harvest due to the need to avoid equipment contact with the transmission lines, avoid trees falling on the transmission lines, require new access and egress from the forested lands that avoid having log trucks and equipment moving below the transmission line, It will decrease the harvest along the transmission line due to tree loss along the corridor from wind and weather conditions impacting weakened root infrastructure once the transmission corridor is cleared.


Removing forested land along the transmission line will result in nearly a total loss of the economic value of the land removed from production of trees, and will impact the landowners and county economy not only by the loss of the production of trees and taxes, fees, employment and other benefits coming from that activity, but there will be related losses to the productivity of adjacent land, increased costs of harvesting along the transmission line, introduction of noxious weeds, increased risk of wildfire, potential increase in the number of trespassers, interference with wildlife activities including displacement of wildlife to what may be less desirable habitat, opening the area up to increased predation on the multiple non-raptor species utilizing the forested areas, decreased value of land if it is sold, long-term reduction in assessed value of the land, etc. The conclusions stated by the applicant in section 8.0 are false, absolutely without merit.

In addition, the applicant has failed to provide documentation to support their conclusions. The only reference the applicant cites that relates at all to this issue is the publication from the Oregon Forest Resources Institute.

In summary:

The applicant has failed to document that they will comply with Land Use Goal 4 OAR 660-006-000 through OAR 660-006-0010; There is no documentation provided that would indicate they are in compliance with OAR 345-022-0030 and they have not documented, nor are they able to meet the requirement contained in OAR 345-022-0030(4) to allow an exception.

Therefore, the Council should DENY the application for site certificate.



Signature

Erin Wunz

Printed Name

Mailing Address:

1704 Cedar St
La Grande, OR 97850

Kellen Tardaaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

August 5, 2019

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

To: Chairman Beyeler and Members of the Council

I am very concerned about the risks to our communities during construction of the proposed transmission line. I take particular exception to the Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN. The document states; "This plan framework serves as baseline document to guide development of the complete Blasting Plan developed with the Plan of Development **before** issuance of the site certificate and commencement of construction."

On page 7, at 3.4, Design Feature 32 states; "Watering facilities (tanks, natural springs and/or developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction and/or maintenance activities to their pre-disturbed condition as required by the landowner or land-management agency. Should construction and/or maintenance activities prevent use of a watering facility while livestock are grazing in that area, then the Applicant will provide alternate sources of water and/or alternate sources of forage where water is available."

The stated purpose of blasting is to "crack" rocks to facilitate geotechnical drilling. Introducing new or expanded fissures/cracks into rock may alter the flow direction or amount of water to existing natural springs or wells.

Since there is no indication that Idaho Power will determine "predisturbed" water flow from wells or springs, how will the landowner prove that flow has been reduced? Without an agreed upon baseline, negotiation or legal action will be required. In the case of private landowners, that will mean legal expenses that may not be available.

Prior to the issuance of a Site Certificate, EFSC should require the additional condition:

ADDED CONDITION TO BLASTING PLAN, DESIGN FEATURES:

Idaho Power will determine baseline flow of natural springs or wells within ¼ mile of blasting site.

Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN on page 5 at 3.3 Safety Procedures, 3.3.3 Fire Safety: Posting fire suppression personnel at the blast site during high-fire danger periods and prohibiting blasting during extreme fire danger periods is not sufficient to minimize fire risk.

Idaho Power has written terminology, "high-fire danger periods" and "extreme fire danger periods" without definition or concurrence with Oregon Department of Forestry. Fire Suppression Personnel have been previously identified in the Fire Suppression and Prevention Plan as a "watchman." This is inadequate!

ADDED CONDITION TO BLASTING PLAN, FIRE SAFETY:

During blasting Idaho Power will provide a water tender staffed by a crew of at least two personnel.

Sincerely,



Name: Erin Wunz

Address: 1707 Cedar St
La Grande, OR 97850

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

Chair Beyeler and Members of the Council:

I am very concerned about the Boardman to Hemingway Transmission Project as it is proposed. My concerns are for the safety of myself and all of the citizens of La Grande if this line is permitted. My primary concerns are slope instability and wildfire hazard.

The proposed route sited to the west of La Grande is placed on a ridge noted to have instability and high risk for slides. The geologic study provided by Idaho Power references several studies (below).

Table H-2. USGS Quaternary Faults within 5 Miles of Project by County on page H-12 clearly shows that the project is placed right on an active fault in the West Grande Ronde Valley Fault Zone. In addition, in exhibit H, Geological Hazards and Soil Stability, Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated "severe." Below is part of the report:

5.2 La Grande Area Slope Instability

As part of our study, we reviewed DOGAMI's open file report: Engineering Geology of the La Grande Area, Union County, Oregon, by Schlicker and Deacon (1971). The study identified several landslides in the areas west and south of La Grande. The majority of the landslide features mapped by Schlicker and Deacon (1971) were similarly mapped as landslides or alluvial fans in Ferns and others (2010). The current SLIDO database uses the feature locations mapped in Ferns and others (2010). While the two map sets generally agree, there are differences in the mapped limits of some landslide and alluvial fan areas, and there is one landslide area in Schlicker and Deacon (1971), near towers 106/3 and 106/4, which is not included in SLIDO or Ferns and others (2010). The Landslide Inventory in Appendix E includes mapped landslide and alluvial fan limits from both SLIDO and Schlicker and Deacon (1971).

This slope instability is not inconsequential to a project like this. Recall in 2014, Oso, Washington, was the site of a catastrophic mudslide as the result of logging disturbance of the soil upslope from the town combined with significant rainfall. This resulted in 43 fatalities. We must learn from previous mistakes in not heeding the geologists' warnings. The area down slope from the proposed B2H line lies the Grande Ronde Hospital and Clinics, which employs hundreds of people and is the critical access hospital for this region. La Grande High School and Central Elementary School are also positioned down slope from the proposed towers. At least 100 homes are positioned down slope of the proposed towers. According to "Engineering Geology of the La Grande Area, Union County, Oregon" maps published by Schlicker, and Deacon (1971), the ENTIRE area of the hillside is deemed a "landslide area" in the La Grande SE quadrangle. This is not a safe place for a transmission line.

The next significant hazard to our community is wildfire. Oregon is ranked 8th Most Wildfire Prone state in the United States according to Verisk Wildfire Risk analysis. La Grande is ranked in the top 50 communities in Oregon with the greatest cumulative housing-unit exposure to wildfire as referenced in "Exposure of human communities to wildfire in the Pacific Northwest," by Joe H. Scott, Julie Gilbertson-Day and Richard D. Stratton (available at http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf). Finally the proposed route is in the vicinity of Morgan lake, the highest risk area (#1) in Union County in terms of wildland-urban interface, according to the County's Community Wildfire Protection Plan, August 10, 2005.

Cal Fire cites Pacific Gas and Electric equipment and power lines as the cause of numerous wildfires in the state in the last 2 years. This includes the Camp Fire in Butte County (2018), Tubbs Fire in Napa/Sonoma Counties (2017), Witch Fire in San Diego (2007), Valley Fire in Lake/Napa/Sonoma Counties (2015), Nuns Fire in Sonoma County (2017), which were all attributed to transmission.

The Boardman To Hemingway Transmission Line Project proposal places lines about 2000 feet or less than half a mile from the La Grande city limits, including medium density housing within the city as well as Grande Ronde Hospital. If a line from this proposed route were to spark a fire, La Grande residents would have little time to react. According to National Geographic, wildfires can move as fast as 6.7 mph in forests and 14 mph in grasslands. A fast-moving fire starting at the B2H lines could move to residential areas of La Grande and HOSPITAL in 10 minutes. This is frightening and an unacceptable risk for our citizens.

The current proposal for a Boardman to Hemingway transmission line does not adequately address the issue of landslides, basically by stating it will be mitigated somehow when the time comes to build. The proposal offers no analysis of wildfire risk, which is an unacceptable omission. All of the routes proposed are unsafe and create an unacceptable risk to the citizens of La Grande.

The Council should DENY the request for a site certificate.

Sincerely,



Name: *Erin Wunz*
Address: *1704 Cedar St*
La Grande, OR. 97850

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

APPLICANT FAILED TO INCLUDE ALL REQUIRED SOURCES OF NOISE IN THEIR MODELING OF NOISE IMPACTS OF DEVELOPMENT

Idaho Power did not include any of the items listed in OAR 340-035-0035(l)(b)(B)(ii), which are only exempt from the noise measurement when the development occurs on a previously used site. When establishing ambient noise level for a new development on a site not previously used, it states: "Sources exempt from the requirements of section (l) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement."

The applicant's noise modeling only includes the noise generated from the transmission line itself. Noise modeling must be corrected to include (b) Warning Devices, (c) sounds created by road vehicles, (d) Sounds from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576 ; (e) bells, chimes, or carillons; (f) aircraft subject to pre-emptive federal regulations and (k) sounds created by the operation of road vehicle auxiliary equipment.

The application is incomplete. Without having the information regarding these additional noise sources, the department and the siting council lack the information regarding how many noise sensitive properties are impacted and by how much.

A proposed order cannot be issued until the developer submits all the information regarding the noise impacts of this development. This information must be available to decide if the standard is met or if it can be met with additional site conditions.

Sincerely,



Signature

Printed Name: *Erin Wunz*
Mailing Address: *1704 Cedar St
La Grande, OR 97850*

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

COMMENT REGARDING THE BOARDMAN TO HEMINGWAY TRANSMISSION LINE DRAFT PROPOSED ORDER

The application is incomplete as Section X must include information regarding all receptors within ½ mile of site and include all noise sources required to be included in establishing the noise level generated directly or indirectly by the development. Idaho Power has not provided information adequate to determine if they are able to meet the noise standard, even with site certificate conditions.

IDAHO POWER FAILED TO COMPLY WITH OAR 345-021-0010(1)(x) which states that Exhibit X must include information about noise generated by construction and operation of the Project within ½ mile of the site boundary. The site boundary means "the perimeter of the site of a proposed energy facility, it's related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors proposed by the applicant" (OAR 345-001-0010(55)).

1. The applicant lists the areas which are included in the site boundary in Exhibit F, Page F-2, however, they failed to include noise modeling or include all the receptors within the ½ mile area beyond the entire site perimeter.
2. The applicant failed to do noise modeling for all noise sensitive property as they did not include churches, schools, libraries, or hospitals as is required by the definition in OAR 340-035-0015(38).
3. The applicant also failed to include the noise identified in OAR 340-035-0035(1)(b)(B)(ii) as not being exempt from the ambient statistical noise level indirectly caused by or attributable to that source including all its related activities. This section states, "Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement." The application is not complete prior to the applicant finishing Exhibit X to include all sources required by this rule as

well as all receptors within ½ mile of the entire site boundary. No decisions can be made absent an accurate accounting of the predicted noise impacts which has not occurred.

No Proposed Order can be issued until the developer has shown that they meet the requirements at the time a site certificate is issued. OAR 345-015-0190(5) allows the Department to find the application is complete when the applicant has submitted information adequate for the Council to make findings or impose conditions on all applicable Council standards. While not all information required by OAR 345-021-0000 and 0010 must be submitted, there must be information adequate to show they meet the requirements or will meet them by implementing the conditions contained in the site certificate. The draft site certificate does not assure that the noise standard will not be exceeded, and the developer has not provided noise modeling or included modeling for all required sources of noise to establish the ambient statistical noise level of the development for all NSR's. Missing information includes: 1. Identification of all noise sensitive receptors within ½ mile of the entire site boundary; 2. Identification and notice to the owners of all noise sensitive properties; and 3. Modeling which includes Items (5)(b) - (f), (j), and (k) which cannot be excluded from the ambient noise measurement.

Sincerely,



Signature

Printed Name: Erin Wunz

Mailing Address: 1704 Cedar St
La Grande, OR 97850

July 27, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Siting Senior Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018;
Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

I am an Eastern Oregonian and have traveled and recreated in the vicinity of Hilgard State Park for many years. I have concerns about the steep slopes, soils hazards, landslide risks, and erosion impacts that the construction of the Boardman to Hemingway Transmission line will pose in an already dangerous canyon.

Re: Soil Protection - **Drill site 95/3 and 95/4 on unstable and steep slopes**
345-022-0020

(c) ...The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soil hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility...

Permanent Administrative Order EFSC 2-2017 Chapter 345 Department of Energy; Energy Facility Siting Council;
effective date 10/18/2017; agency approved date 09/22/2017.

Geological Hazards and Soil Stability; Exhibit H. Attachment H-1, Engineering Geology and Seismic Hazards Supplement to Exhibit H Boardman to Hemingway 500 kV Transmission Line Project Boardman, Oregon to Hemingway, Idaho January 25, 2018; Shannon & Wilson, Inc. 3990 Collins Way, Suite 100, Lake Oswego, Oregon. 97035.

Drill sites 95/3 and 95/4 are shown on the following tables and maps and analysis by Shannon & Wilson, Inc.:

Soils; Map page 18 of 44:

Table B3: Soil Descriptions, described as:

5776CN; erosion hazard; severe, percent of slope Low; 30: High; 60. (sheet 3 of 4)

Table C1: Summary of Proposed Borings; Map Sheet 36

95/3 – Angle change along alignment; Slope stability/landslide; Geo-Seismic Hazard; Road and railroad crossing

95/4 - Angle change along alignment; Road and railroad crossing

Appendix E: Landslide Inventory, E.2.3; PLS-002 Sheet 5, 6

“PLS-002 is an approximately 460-acre potential landslide that was identified in available LiDAR data. PLS-002 has not been verified in the field and should not be considered a landslide based solely on interpretation of LiDAR data. The IPC Proposed Route passes above this potential landslide between towers 93/5 and 95/3, potentially affecting the stability of these proposed towers and associated work areas. A field reconnaissance along this portion of the alignment should be performed as part of the geotechnical exploration program.”

Idaho Power Corporation, in Exhibit H 2.2.4 states *“The soils (in Union County) vary from a few inches to a few feet thick over weathered bedrock, are generally well-drained, and are typically characterized as having a severe erosion hazard.”* Idaho Power Corporation admits in ASC page B-12 that *“The mountainous area such as the Blue Mountains present very challenging topography with many areas of steep slopes in excess of 35 percent and other areas of unstable slopes*

presenting design and construction challenges." IPCs stated original intention to the EFSC was the following: "Using topographic maps the corridors were adjusted to avoid or minimize distance across very steep slopes and other physical features less desirable for construction and operation of a transmission line.

Hazard Analysis Union County Emergency Operations Plan Updated 6/30/16 lists Winter weather as the highest weighted risk item before Seismic, Fire, Hazmat-Transportation, and Drought. Most of the area receives a large percentage of the annual moisture as snowfall and both the winter storms and the spring melt can be precipitous and unpredictable.

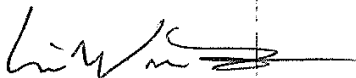
The area surrounding the drill site **95/3 and 95/4** is within a mile of the Hilgard Junction State Park and Recreation area and the heavily traveled I84 transportation/utility corridor.

Conclusion and Requested Relief:


Drill site 95/3 and 95/4, and its vicinity, represent a significant risk of several possible adverse effects. This area encompassed by the lands shown in PLS-002 should be removed for consideration as a site for a transmission "facility." While Idaho Power Corporation attempts to mitigate problems of unstable soil with structure and footing modifications, this should not be considered an acceptable risk when the entire area is unstable.

I appreciate your consideration and your attention to this matter.

Sincerely,



Signature



Printed Name:

Mailing Address: 1704 Cedar St
La Grande, OR 97850

References

Burns, W. J., Mickelson, K. A., Saint-Pierre, E. C., 2011 SLIDO-2, Statewide Landslide Information Database for Oregon, Release 2; Oregon Department of Geology and Mineral Industries.

Idaho Power Corporation, 2017, *Exhibit H of the Application for the Boardman to Hemingway Transmission Line Project*: Report Prepared by Idaho Power Corporation, Boise, Idaho.

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Permanent Administrative Order EFSC 2-2017 Chapter 345 Department of Energy; Energy Facility Siting Council; effective date 10/18/2017; agency approved date 09/22/2017.

Oregon Department of Energy; Energy Facility Siting Council – Chapter 345, Division 22 General Standards for Siting Facilities; OAR Amend: 345-022-0022; Soil Protection

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12 August 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

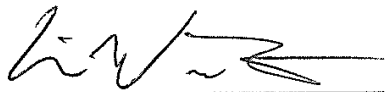
As I understand it, the applicant did not complete noise modeling on multiple noise sensitive properties within ½ mile of the development as required by OAR 340-035-0015(38). In fact, the closest noise modeling was performed at Hilgard, the junction of I-84 and 244, about 8 miles air miles away, with a train track near by. Applicant could scarcely have chosen a site less representative of the absolute silence typical of the Morgan Lake setting.

Page 145 (T-4-46) Baseline condition: "... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users..." Solitude, of course, suggests an absence of distraction from external stimuli including noise. Campers often comment on the tranquility of the park where a 5 mph speed limit is enforced to limit noise, and no shooting or motorized craft are allowed on the lake. Even when the campground is full, it's possible to picnic or hike beside the lake in absolute silence.

Noise Sensitive Property is "property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Obviously the noise corona of popping, humming transmission lines will interfere with the silence campers have every right to expect in a natural setting.

This transmission line is planned to be sited within 500' west of the park boundary, which would place it easily within less than 1/5 of a mile of overnight camp sites.

The applicant's ASC should be denied until all required and adequate noise modeling has been performed.



(Signature)

Name: Erin Wunz

Address 1704 Cedar St, La Grande, OR 97850

July 27, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Siting Senior Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018;
Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

I am an Eastern Oregonian and have traveled and recreated in the vicinity of Hilgard State Park for many years. I have concerns about the steep slopes, soils hazards, landslide risks, and erosion impacts that the construction of the Boardman to Hemingway Transmission line will pose in an already dangerous canyon.

Re: Soil Protection - **Drill site 95/3 and 95/4 on unstable and steep slopes**
345-022-0020

(c) ...*The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soil hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility...*

Permanent Administrative Order EFSC 2-2017 Chapter 345 Department of Energy; Energy Facility Siting Council; effective date 10/18/2017; agency approved date 09/22/2017.

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Drill sites 95/3 and 95/4 are shown on the following tables and maps and analysis by Shannon & Wilson, Inc.:

Soils; Map page 18 of 44:

Table B3: Soil Descriptions, described as:

5776CN; erosion hazard; severe, percent of slope Low; 30: High; 60. (sheet 3 of 4)

Table C1: Summary of Proposed Borings; Map Sheet 36

95/3 – Angle change along alignment; Slope stability/landslide; Geo-Seismic Hazard; Road and railroad crossing

95/4 - Angle change along alignment; Road and railroad crossing

Appendix E: Landslide Inventory, E.2.3; PLS-002 Sheet 5, 6

“PLS-002 is an approximately 460-acre potential landslide that was identified in available LiDAR data. PLS-002 has not been verified in the field and should not be considered a landslide based solely on interpretation of LiDAR data. The IPC Proposed Route passes above this potential landslide between towers 93/5 and 95/3, potentially affecting the stability of these proposed towers and associated work areas. A field reconnaissance along this portion of the alignment should be performed as part of the geotechnical exploration program.”

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presenting design and construction challenges." IPCs stated original intention to the EFSC was the following: "Using topographic maps the corridors were adjusted to avoid or minimize distance across very steep slopes and other physical features less desirable for construction and operation of a transmission line.

Hazard Analysis Union County Emergency Operations Plan Updated 6/30/16 lists Winter weather as the highest weighted risk item before Seismic, Fire, Hazmat-Transportation, and Drought. Most of the area receives a large percentage of the annual moisture as snowfall and both the winter storms and the spring melt can be precipitous and unpredictable.

The area surrounding the drill site 95/3 and 95/4 is within a mile of the Hilgard Junction State Park and Recreation area and the heavily traveled I84 transportation/utility corridor.

Conclusion and Requested Relief:

Drill site 95/3 and 95/4, and its vicinity, represent a significant risk of several possible adverse effects. This area encompassed by the lands shown in PLS-002 should be removed for consideration as a site for a transmission "facility." While Idaho Power Corporation attempts to mitigate problems of unstable soil with structure and footing modifications, this should not be considered an acceptable risk when the entire area is unstable.

I appreciate your consideration and your attention to this matter.

Sincerely,


Signature

Chris Wunz
Printed Name:

Mailing Address: 1704 Cedar St
La Grande, OR 97850

References

Burns, W. J., Mickelson, K. A., Saint-Pierre, E. C., 2011 SLIDO-2, Statewide Landslide Information Database for Oregon, Release 2; Oregon Department of Geology and Mineral Industries.

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Permanent Administrative Order EFSC 2-2017 Chapter 345 Department of Energy; Energy Facility Siting Council; effective date 10/18/2017; agency approved date 09/22/2017.

Oregon Department of Energy; Energy Facility Siting Council – Chapter 345, Division 22 General Standards for Siting Facilities; OAR Amend: 345-022-0022; Soil Protection

Idaho Power Corporation, 2017, *Exhibit H of the Application for the Boardman to Hemingway Transmission Line Project*: Report Prepared by Idaho Power Corporation, Boise, Idaho.

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Kellen Tardaaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

August 5, 2019

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

To: Chairman Beyeler and Members of the Council

I am very concerned about the risks to our communities during construction of the proposed transmission line. I take particular exception to the Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN. The document states; "This plan framework serves as baseline document to guide development of the complete Blasting Plan developed with the Plan of Development **before** issuance of the site certificate and commencement of construction."

On page 7, at 3.4, Design Feature 32 states; "Watering facilities (tanks, natural springs and/or developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction and/or maintenance activities to their pre-disturbed condition as required by the landowner or land-management agency. Should construction and/or maintenance activities prevent use of a watering facility while livestock are grazing in that area, then the Applicant will provide alternate sources of water and/or alternate sources of forage where water is available."

The stated purpose of blasting is to "crack" rocks to facilitate geotechnical drilling. Introducing new or expanded fissures/cracks into rock may alter the flow direction or amount of water to existing natural springs or wells.

Since there is no indication that Idaho Power will determine "predisturbed" water flow from wells or springs, how will the landowner prove that flow has been reduced? Without an agreed upon baseline, negotiation or legal action will be required. In the case of private landowners, that will mean legal expenses that may not be available.

Prior to the issuance of a Site Certificate, EFSC should require the additional condition:

ADDED CONDITION TO BLASTING PLAN, DESIGN FEATURES:

Idaho Power will determine baseline flow of natural springs or wells within ¼ mile of blasting site.

Exhibit G Materials Analysis, Attachment G-5 FRAMEWORK BLASTING PLAN on page 5 at 3.3 Safety Procedures, 3.3.3 Fire Safety: Posting fire suppression personnel at the blast site during high-fire danger periods and prohibiting blasting during extreme fire danger periods is not sufficient to minimize fire risk.

Idaho Power has written terminology, "high-fire danger periods" and "extreme fire danger periods" without definition or concurrence with Oregon Department of Forestry. Fire Suppression Personnel have been previously identified in the Fire Suppression and Prevention Plan as a "watchman." This is inadequate!

ADDED CONDITION TO BLASTING PLAN, FIRE SAFETY:

During blasting Idaho Power will provide a water tender staffed by a crew of at least two personnel.

Sincerely,



Name: *Chris Wunz*

Address: *1704 Cedar St
La Grande, OR 97850*

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, OR 97301

B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposal Order May 23, 2019.

Chair Beyeler and Members of the Council:

I am very concerned about the Boardman to Hemingway Transmission Project as it is proposed. My concerns are for the safety of myself and all of the citizens of La Grande if this line is permitted. My primary concerns are slope instability and wildfire hazard.

The proposed route sited to the west of La Grande is placed on a ridge noted to have instability and high risk for slides. The geologic study provided by Idaho Power references several studies (below).

Table H-2. USGS Quaternary Faults within 5 Miles of Project by County on page H-12 clearly shows that the project is placed right on an active fault in the West Grande Ronde Valley Fault Zone. In addition, in exhibit H, Geological Hazards and Soil Stability, Table B3: Soils Descriptions, Union County, much of the erosion hazard is rated "severe." Below is part of the report:

5.2 La Grande Area Slope Instability

As part of our study, we reviewed DOGAMI's open file report: Engineering Geology of the La Grande Area, Union County, Oregon, by Schlicker and Deacon (1971). The study identified several landslides in the areas west and south of La Grande. The majority of the landslide features mapped by Schlicker and Deacon (1971) were similarly mapped as landslides or alluvial fans in Ferns and others (2010). The current SLIDO database uses the feature locations mapped in Ferns and others (2010). While the two map sets generally agree, there are differences in the mapped limits of some landslide and alluvial fan areas, and there is one landslide area in Schlicker and Deacon (1971), near towers 106/3 and 106/4, which is not included in SLIDO or Ferns and others (2010). The Landslide Inventory in Appendix E includes mapped landslide and alluvial fan limits from both SLIDO and Schlicker and Deacon (1971).

This slope instability is not inconsequential to a project like this. Recall in 2014, Oso, Washington, was the site of a catastrophic mudslide as the result of logging disturbance of the soil upslope from the town combined with significant rainfall. This resulted in 43 fatalities. We must learn from previous mistakes in not heeding the geologists' warnings. The area down slope from the proposed B2H line lies the Grande Ronde Hospital and Clinics, which employs hundreds of people and is the critical access hospital for this region. La Grande High School and Central Elementary School are also positioned down slope from the proposed towers. At least 100 homes are positioned down slope of the proposed towers. According to "Engineering Geology of the La Grande Area, Union County, Oregon" maps published by Schlicker, and Deacon (1971), the ENTIRE area of the hillside is deemed a "landslide area" in the La Grande SE quadrangle. This is not a safe place for a transmission line.

The next significant hazard to our community is wildfire. Oregon is ranked 8th Most Wildfire Prone state in the United States according to Verisk Wildfire Risk analysis. La Grande is ranked in the top 50 communities in Oregon with the greatest cumulative housing-unit exposure to wildfire as referenced in "Exposure of human communities to wildfire in the Pacific Northwest," by Joe H. Scott, Julie Gilbertson-Day and Richard D. Stratton (available at http://pyrologix.com/ftp/Public/Reports/RiskToCommunities_OR-WA_BriefingPaper.pdf). Finally the proposed route is in the vicinity of Morgan lake, the highest risk area (#1) in Union County in terms of wildland-urban interface, according to the County's Community Wildfire Protection Plan, August 10, 2005.

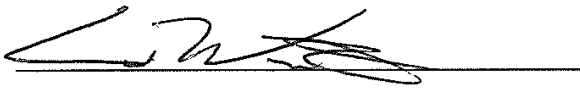
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The current proposal for a Boardman to Hemingway transmission line does not adequately address the issue of landslides, basically by stating it will be mitigated somehow when the time comes to build. The proposal offers no analysis of wildfire risk, which is an unacceptable omission. All of the routes proposed are unsafe and create an unacceptable risk to the citizens of La Grande.

The Council should DENY the request for a site certificate.

Sincerely,



Name: Chris Wunz

Address: 1704 Cedar St
La Grande, OR. 97850

August 12, 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

Page 62 (T-57) ASC refers to “extensive work in the siting study of the Morgan Lake Alternative.” I do not know if it was extensive because it is entirely inaccurate:

Page 145 (T-4-46) Morgan Lake Park is described as 204 acres, containing one lake, which is developed with primitive campsites and fishing docks.

Morgan Lake Park actually contains two lakes. Morgan Lake covers 70 acres; the other, Twin Lake, [also known as Little Morgan Lake] is in plain sight, within 300' of Morgan Lake; it covers 27 acres.

Twin Lake is undeveloped, a wild life and bird sanctuary, home to nesting bald eagles. It is designated as protected wetlands. In their application, Idaho Power conveniently omits any references to Twin Lake.

Page 156, (T-4-6) ASC purports to be a map of Morgan Lake Park. According to the map legend, the purple cross hatch amoeba-shaped area is Morgan Lake Park. That's wrong. The purple cross hatch is Morgan Lake. The actual boundaries of the 204 acre park are not indicated. Obviously, it's difficult to believe “extensive work on this siting study” ever occurred.

The applicant also used aerial photography to identify and avoid, where practical, irrigation pivots, houses, barns, private runways, other structures (e.g., wind turbines), and land use features. The corridors were adjusted using topographic maps to avoid or minimize distance across very steep slopes and other physical features less desirable for transmission line construction and operation. The corridors were again checked against the constraint and opportunity geographic information system (GIS) database to avoid, where possible, exclusion areas and areas of high permitting difficulty such as potential Oregon Department of Wildlife (ODFW) Category 1 habitats. The applicant then grouped the alternative corridors into 14 regions and evaluated on the basis of permitting difficulty, construction difficulty and mitigation costs. Using the constraint database, which incorporated the eight siting factors, the applicant reviewed the alternatives to determine the most reasonable corridor within each region. (DPO p. 11)

It is distressing to think that this is only one of many errors in Idaho Power's ASC. If the IPC surveying engineering staffs are unable to detect a 27 acre lake within a 204 acre park, it's disquieting to imagine the difficulties in identifying and analyzing less obvious and life-threatening situations like fault zones, slide areas and other potential dangers to public safety

If this slipshod effort is typical of IPC's careful attention to engineering a route, it may also explain IPC's egregious error in choosing to site the B2H on their preferred Mill Creek or alternative Morgan Lake route rather than on the carefully studied and analyzed BLM Environmentally Preferred route.

Following the DEIS, Idaho Power made a hasty and ill-advised effort to avoid litigation threatened by individuals whose remote properties and summer cabins would have been impacted by the line. If Idaho Power had chosen to follow the BLM Environmentally Preferred route, miles to the west of La Grande, rather than in the immediate view of 13,000 La Grande residents, there might have been ten people at the public meetings in La Grande, rather than the hundreds who have consistently appeared to protest various serious problems associated with the routes proposed for the B2H. The haste of this effort is evident in the abundant errors of omission and misinformation typical of the B2H ASC and DPO which will be addressed in a separate comment.



Signature

Name: Chris Wunz

Address: 1704 Cedar St
La Grande, OR 97850

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

COMMENT REGARDING THE BOARDMAN TO HEMINGWAY TRANSMISSION LINE DRAFT PROPOSED ORDER

The application is incomplete as Section X must include information regarding all receptors within ½ mile of site and include all noise sources required to be included in establishing the noise level generated directly or indirectly by the development. Idaho Power has not provided information adequate to determine if they are able to meet the noise standard, even with site certificate conditions.

IDAHO POWER FAILED TO COMPLY WITH OAR 345-021-0010(1)(x) which states that Exhibit X must include information about noise generated by construction and operation of the Project within ½ mile of the site boundary. The site boundary means "the perimeter of the site of a proposed energy facility, it's related or supporting facilities, all temporary laydown and staging areas and all corridors and micrositing corridors proposed by the applicant" (OAR 345-001-0010(55)).

1. The applicant lists the areas which are included in the site boundary in Exhibit F, Page F-2, however, they failed to include noise modeling or include all the receptors within the ½ mile area beyond the entire site perimeter.
2. The applicant failed to do noise modeling for all noise sensitive property as they did not include churches, schools, libraries, or hospitals as is required by the definition in OAR 340-035-0015(38).
3. The applicant also failed to include the noise identified in OAR 340-035-0035(1)(b)(B)(ii) as not being exempt from the ambient statistical noise level indirectly caused by or attributable to that source including all its related activities. This section states, "Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement." The application is not complete prior to the applicant finishing Exhibit X to include all sources required by this rule as

well as all receptors within ½ mile of the entire site boundary. No decisions can be made absent an accurate accounting of the predicted noise impacts which has not occurred.

No Proposed Order can be issued until the developer has shown that they meet the requirements at the time a site certificate is issued. OAR 345-015-0190(5) allows the Department to find the application is complete when the applicant has submitted information adequate for the Council to make findings or impose conditions on all applicable Council standards. While not all information required by OAR 345-021-0000 and 0010 must be submitted, there must be information adequate to show they meet the requirements or will meet them by implementing the conditions contained in the site certificate. The draft site certificate does not assure that the noise standard will not be exceeded, and the developer has not provided noise modeling or included modeling for all required sources of noise to establish the ambient statistical noise level of the development for all NSR's. Missing information includes: 1. Identification of all noise sensitive receptors within ½ mile of the entire site boundary; 2. Identification and notice to the owners of all noise sensitive properties; and 3. Modeling which includes Items (5)(b) - (f), (j), and (k) which cannot be excluded from the ambient noise measurement.

Sincerely,



Signature

Printed Name: Chris Wunz

Mailing Address: 1707 Cedar St
La Grande OR 97850

12 August 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

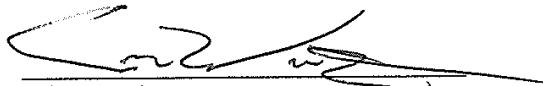
As I understand it, the applicant did not complete noise modeling on multiple noise sensitive properties within ½ mile of the development as required by OAR 340-035-0015(38). In fact, the closest noise modeling was performed at Hilgard, the junction of I-84 and 244, about 8 miles air miles away, with a train track near by. Applicant could scarcely have chosen a site less representative of the absolute silence typical of the Morgan Lake setting.

Page 145 (T-4-46) Baseline condition: "... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users..." Solitude, of course, suggests an absence of distraction from external stimuli including noise. Campers often comment on the tranquility of the park where a 5 mph speed limit is enforced to limit noise, and no shooting or motorized craft are allowed on the lake. Even when the campground is full, it's possible to picnic or hike beside the lake in absolute silence.

Noise Sensitive Property is "property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Obviously the noise corona of popping, humming transmission lines will interfere with the silence campers have every right to expect in a natural setting.

This transmission line is planned to be sited within 500' west of the park boundary, which would place it easily within less than 1/5 of a mile of overnight camp sites.

The applicant's ASC should be denied until all required and adequate noise modeling has been performed.



(Signature)

Name: Chris Wunz

Address 1704 Cedar St
La Grande, OR 97850

August 5, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

APPLICANT FAILED TO INCLUDE ALL REQUIRED SOURCES OF NOISE IN THEIR MODELING OF NOISE IMPACTS OF DEVELOPMENT

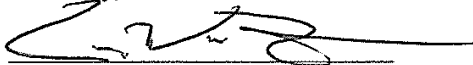
Idaho Power did not include any of the items listed in OAR 340-035-0035(l)(b)(B)(ii), which are only exempt from the noise measurement when the development occurs on a previously used site. When establishing ambient noise level for a new development on a site not previously used, it states: "Sources exempt from the requirements of section (l) of this rule, which are identified in subsections (5)(b) - (f), (j), and (k) of this rule, shall not be excluded from this ambient measurement."

The applicant's noise modeling only includes the noise generated from the transmission line itself. Noise modeling must be corrected to include (b) Warning Devices, (c) sounds created by road vehicles, (d) Sounds from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576 ; (e) bells, chimes, or carillons; (f) aircraft subject to pre-emptive federal regulations and (k) sounds created by the operation of road vehicle auxiliary equipment.

The application is incomplete. Without having the information regarding these additional noise sources, the department and the siting council lack the information regarding how many noise sensitive properties are impacted and by how much.

A proposed order cannot be issued until the developer submits all the information regarding the noise impacts of this development. This information must be available to decide if the standard is met or if it can be met with additional site conditions.

Sincerely,



Signature

Printed Name: Chris Wunz

Mailing Address: 1704 Cedar St

La Grande, OR 97850

August 2, 2019

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301
email: B2H.DPOComments@Oregon.gov

THE APPLICANT SIGNIFICANTLY UNDERSTATES THE IMPACTS TO EMPLOYMENT AND FOREST LANDS AS A RESULT OF THE PROPOSED B2H TRANSMISSION LINE

Exhibit K, Attachment K-2, Pages 19 and 20, Section 7.0

The applicant claims that removal of forestland by clearing of trees for a period of over 50 years will have little economic impact to forest sector jobs in Umatilla and Union County. They value the loss of 245.6 acres of forestland in Umatilla County at \$488.60 per acre. However, they value the removal of 530.1 acres lost to the transmission line in Union County at \$182.98 per acre. The applicant provides no justification or documentation to support the difference in value per acre between Umatilla and Union Counties.

Some forest facts related to this section:

According to US Forest Service Tech. Rept. PNW-GTR-578 Rev. 2004 entitled "Forests of Eastern Oregon: an Overview", Eastern Oregon Forests produce an average of 20 cubic feet per acre of timber each year. That would mean that an acre of land would produce approximately 240 board feet of lumber per year per acre during the life of the transmission line. According to Scott Hartell, Planning Director, Union County, forest land in Union County is classified as either 20 cubic feet per acre per year, or 50 cubic feet per acre per year, so the value amounts could be significantly higher. The "Forest Facts Oregon's Forests: Some Facts and Figures" published in 2009 by the Oregon Department of Forestry states that economists estimate that for every billion board feet that is harvested in Oregon 11 forest sector jobs are created or retained.

Idaho Power's stated timber values are unrealistically low according to individuals owning forest land in both counties. No one would be using land for trees which precludes other uses if the economic benefits were as the developer is stating.

The applicant's identification of the acres of forest land impacted is incorrect due not only to the failure to use soil types to identify forest lands, but also, the fact that they are requesting a 300 foot right of way and they need to include the value of any additional trees they will be removing in the 100 foot area on each side of the right of way.

The applicant claims that the value of the land in the right of way will not be significantly reduced due to the owner's opportunity to use the land for agricultural or range land after the transmission line is constructed. This is completely unfounded. The lineal nature of a transmission line precludes any productive use of land taken for the transmission line. The right of way is too narrow to make it available for production of crops, and the costs associated with purchasing equipment for agricultural operations would be prohibitive.

It would be unusual for a forest operator to already own equipment for a crop operation. In order to use the right of way as grazing land, it would have to be fenced. According to "Estimated Livestock Fencing Costs for the Small-Farm Owner" by Derek L. Barber, the average cost of materials for ¼ mile (1,320 ft.)

of field fence is \$1,108.53 plus the cost of building it. The Iowa State University Extension identified 2011 costs for constructing ¼ mile of fencing to be \$1,947.75 installed. Enclosing a square acre requires 820 feet of fence. In other words, the cost of fencing an acre of lost forest land would exceed the value the applicant claims the land would add to the local economy per acre for the 50 years the transmission line is predicted to be in place.

The applicant also claims that the transmission line right of way through forest lands will not cause a substantial change in accepted forest practices or cause a significant increase in the cost of accepted forest practices on lands to be directly impacted by the Project or on surrounding lands. Removing trees from land currently being used to grow them certainly will create a substantial change in accepted forest practices. It also will substantially increase the costs of growing and harvesting trees on the surrounding lands. Soil compacted by heavy equipment used to access the line will discourage regrowth.

The transmission line will make it impossible to use aerial equipment to harvest trees on steep hillsides adjacent to the line; it will increase costs of harvest due to the need to avoid equipment contact with the transmission lines, avoid trees falling on the transmission lines, require new access and egress from the forested lands that avoid having log trucks and equipment moving below the transmission line, It will decrease the harvest along the transmission line due to tree loss along the corridor from wind and weather conditions impacting weakened root infrastructure once the transmission corridor is cleared.

Removing forested land along the transmission line will result in nearly a total loss of the economic value of the land removed from production of trees, and will impact the landowners and county economy not only by the loss of the production of trees and taxes, fees, employment and other benefits coming from that activity, but there will be related losses to the productivity of adjacent land, increased costs of harvesting along the transmission line, introduction of noxious weeds, increased risk of wildfire, potential increase in the number of trespassers, interference with wildlife activities including displacement of wildlife to what may be less desirable habitat, opening the area up to increased predation on the multiple non-raptor species utilizing the forested areas, decreased value of land if it is sold, long-term reduction in assessed value of the land, etc. The conclusions stated by the applicant in section 8.0 are false, absolutely without merit.

In addition, the applicant has failed to provide documentation to support their conclusions. The only reference the applicant cites that relates at all to this issue is the publication from the Oregon Forest Resources Institute.

In summary:

The applicant has failed to document that they will comply with Land Use Goal 4 OAR 660-006-000 through OAR 660-006-0010; There is no documentation provided that would indicate they are in compliance with OAR 345-022-0030 and they have not documented, nor are they able to meet the requirement contained in OAR 345-022-0030(4) to allow an exception.

Therefore, the Council should DENY the application for site certificate.



Signature

Chris Wurtz

Printed Name

Mailing Address:

1704 Cedar St
La Grande, OR 97850

TARDAEWETHER Kellen * ODOE

From: chrysalis <chrysalis@eoni.com>
Sent: Sunday, August 18, 2019 9:44 AM
To: B2H DPOComments * ODOE
Cc: info@stopb2h.org
Subject: FW: comments Idaho Powers B2H project
Attachments: B2H commentMAW.docx

Please see attached

Ann Wyatt
1090 Lund Lane
Baker City, OR 97814
Aw5809@charter.net

August 17, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

As avid fisherwoman in my younger days I am very concerned about the lack of acknowledgement of the presence of a Federal and State-listed, Threatened species.

The application has failed to identify and address the effects of the proposed action on, not only the listed species, but the Category-1, and Federal designated Critical Habitat. The Federal Columbia River Power System (FCRPS) Biological Opinion, requires BPA, a partner in this application, to promote conservation and recovery of Federally-listed, under the Endangered Species Act, salmon and steelhead in the interior Columbia Basin.

The Draft Proposed Order (DPO), p. 304, lines 20-26, fails to list Bull Trout, a listed State-Sensitive Threatened Species. Similarly, the DPO only gives brief identification of federally listed Mid-Columbia River and Snake River steelhead, and Snake River spring/summer and fall Chinook salmon. OAR-345-021-0010 (1)(p) requires identification of all fish and wildlife at the proposed location, and identification of habitat classification categories, as set forth in OAR-635-415-0025, in order to comply with OAR-345-022-0060, requiring identification of habitat categories and required mitigation.

Compliance with the federal Endangered Species Act (ESA) requires identification and address of the effects of the proposed action through ESA section 7(a) (2) consultation with the NMFS (anadromous fish species) or USFWS (resident fish species). The ESA consultation process requires that the action agency (in this case BLM with USFS input for their lands), identify and speak to the effects of the action, both on the 'animal' AND on the designated critical habitat. The DPO does none of this, hence fails this requirement.

The DPO, p. 304, line 32, through p. 307, line 21, acknowledges that there will be impact, but is unable to quantify it. Since any impact is prohibited for Cat-1 Habitats, the impact is not lawful! Hence, the applicant has failed to meet the requirements for issuance of a Site Certificate contained in OAR-345-022-0080, and the Idaho Power's B2H proposed action's permit, being not in compliance with state nor federal protected species laws, **should be denied, with prejudice!**

Margaret Ann Wyatt

1090 Lund Lane, Baker city, Or 97814
aw5809@charter.net

TARDAEWETHER Kellen * ODOE

From: chrysalis <chrysalis@eoni.com>
Sent: Saturday, August 17, 2019 11:03 AM
To: B2H DPOComments * ODOE
Subject: comments Idaho Powers B2H project
Attachments: B2H comment.docx

Please see attached

Jill Wyatt
905 Park St
Baker City, OR
97814
chrysalis@eoni.com

August 17, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301

Via EMAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project
9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council:

I request that my letter protesting issuance of an Oregon Site Certificate for the currently proposed Boardman-to-Hemingway Transmission Project (B2H Project) be entered into the permanent written record. I also request response to, and resolution of, the issues I raise.

I am a volunteer at the Oregon Trail Interpretive Center (OTIC) and enjoy hiking the trails at least twice a week. I am very concerned about the lack of consideration of the affects this transmission line will have on OTIC.

B2H crosses the Oregon Trail at least 8 times. EFSC has done a reasonable job of protecting the Trail during construction and operation, if the proposed requirements are followed, **except at OTIC.**

EFSC should refuse to approve the Draft Project Order for the following reasons:

1. Does not comply with Noise Standards as no measurements were done at the Oregon Trail viewpoint or walking trails endpoint near milepost 146. Perhaps not a "Noise Sensitive Property," in the context of residential sleeping areas; however, certainly for tourists and visitors to OTIC and its hiking trails, noise will be disturbing. Map 23 in Attachment X-1 does not even show the Oregon Trail.
2. Within OAR 345-022-0040 Protected Areas and ODEQ standards 340-035-0000-0100, this area should have been monitored and modeled as a Noise Sensitive Property and was not.
3. Does not comply with Scenic Values from the Blue Mountains Parkway and OTIC. The OR 86 encourages drivers to STOP and read interpretive signs, so viewer perception and resource change cause significant decrease of scenic values. IPC says no significant impact.
4. The DPO does not comply with Exhibit L Protected Areas. The BLM ACEC at Flagstaff Hill has not considered undergrounding for the protection of the Oregon Trail.
5. The DPO does not meet the standards required for Exhibit T Recreational Facilities, OAR 345-022-0100, especially at the Flagstaff Hill interpretive center, because of:
 - a. It is a BLM ACEC area managed for public tourism
 - b. It is the single most visited tourist facility in Baker County
 - c. The quality of the facility is outstanding
 - d. There is no other place where the Oregon Trail can be seen and interpreted.

Once the Trail is gone it cannot be reconstructed or mitigated back to life. The only easily accessible public facility in Oregon is OTIC near Baker City. The B2H must be buried to preserve this important site.

Considering the reasons above and the unacceptable damage to this our national treasure, the Council Must Deny the site certificate for the Boardman to Hemingway Transmission project.

Jill Wyatt

Jill Wyatt 905 Park St, Baker City OR 97814; chrysalis@eoni.com

Utility seeks bankruptcy protection over California fires

By Janie Har and Cathy
Bussewitz
The Associated Press

SAN FRANCISCO — The nation's largest utility said Monday it is filing for Chapter 11 bankruptcy because it faces at least \$30 billion in potential damages from lawsuits over the catastrophic wildfires in California in 2017 and 2018 that killed scores of people and destroyed thousands of homes.

The move by Pacific Gas & Electric Corp., expected by the end of the month, would be the biggest bankruptcy by a utility in U.S. history, legal experts said.

It would allow PG&E to hold off creditors and continue providing electricity and natural gas without interruption to its 16 million customers in Northern and central California while it tries to put its finances in order.

The filing would not make the lawsuits disappear, but would result in all wildfire claims being consolidated into a single proceeding before a bankruptcy judge, not a jury. That could

shield the company from excessive jury verdicts and buy time by putting a hold on the claims.

Chapter 11 reorganization represents "the only viable option to address the company's responsibilities to its stakeholders," Richard Kelly, chairman of PG&E's board of directors, said in a statement.

"The Chapter 11 process allows us to work with these many constituents in one court-supervised forum to comprehensively address our potential liabilities and to implement appropriate changes."

State officials are investigating whether the utility's equipment sparked the deadliest, most destructive wildfire in California history, a November Northern California blaze that killed at least 86 people and burned down 15,000 homes.

State investigators have also blamed PG&E power lines for some fires in October 2017. Authorities are also looking into the cause of a blaze that destroyed thousands of homes and killed 22 people in Santa Rosa last year.

California law requires utilities to pay damages for wildfires if their equipment caused the blazes — even if the utilities weren't negligent through, say, inadequate maintenance.

PG&E, which is the nation's largest utility by revenue and is based in San Francisco, said it is giving the required 15 days' notice it plans to file for bankruptcy protection.

It said it will continue working with regulators and stakeholders to consider how it can safely provide energy "in an environment that continues to be challenged by climate change."

The announcement follows the resignation of chief executive Geisha Williams a day earlier. She leaves with a \$2.5 million severance payout, a spokesman told the Mercury News of San Jose.

In a Monday filing with the Securities and Exchange Commission, the company said the liabilities it faces from 2017 and 2018 wildfires could exceed \$30 billion, not including punitive

damages, fines and penalties.

The largest bankruptcy filing on record by a utility was Energy Future Holdings Corp. in 2014, which had \$49.7 billion in liabilities in today's dollars, according to an analysis by Kevin Kelly, director of publications at S&P Global.

Veteran New York bankruptcy lawyer H. Jeffrey Schwartz said PG&E's bankruptcy should prove to be the biggest yet, since it had about \$50 billion in liabilities at the end of 2017. That does not include claims from 2018 wildfires.

He said the utility has no other way of getting out from under the mountain of legal claims.

"The liability is too great. It's too many claims, the aggregate amount is too great, and it looks at first blush to be indefensible because PG&E knew of this risk and didn't clear the line areas as it should have," Schwartz said.

He said he expects shareholders to bear the brunt of the restructuring. Bankruptcy court has no say over the rates utility

See PG&E / Page 28

PG&E

Continued from Page 1B
customers pay, those are decided by state regulators and politicians.

As for the lawsuits, PG&E will negotiate with the plaintiffs and its other creditors a reorganization plan based on how much the utility is able to pay, said Hugh Wynne of Sovereign Research, an investment research firm.

"You avoid a situation where some jury in California thinks PG&E is responsible for this fire, so we should hit them up for all these damages and let them sort out how they pay for it," Wynne said.

A bankruptcy also would allow PG&E to raise cash by selling assets — such as its gas business and hydropower plants — more easily, he said.

PG&E spent millions in an 11th-hour lobbying effort

legislative session in August in a failed attempt to change the law to reduce its liability in wildfires.

Before last year's disastrous fire in Northern California's Butte County, PG&E's stock stood at \$47.80. But in early Monday trading it tumbled \$8.48 to \$9.11, its lowest level in more than 16 years. Wall Street last week slashed PG&E's credit rating to junk status.

PG&E also filed for Chapter 11 in 2001 amid rising electricity prices during California's energy crisis.

California's new governor, Democrat Gavin Newsom, told reporters that "safety, reliability and affordability" are his top concerns, alongside protecting wildfire victims and ratepayers, in confronting the potential bankruptcy. He sought to assure the public that this potential bankruptcy won't result in

He said addressing the pending bankruptcy, and potentially avoiding it, is a top priority for his new administration, but he hasn't settled on what actions to take. He said the state has "no choice" but to work collaboratively with the utility even though it has not been a "trusted player" in the past.

The Natural Resources Defense Council warned that bankruptcy could threaten billions in funding for PG&E's clean energy initiatives, which are key to California's environmental goals. PG&E is the state's largest investor in energy efficiency and electric vehicle infrastructure, said the NRDC's Ralph Cavanagh.

"California needs healthy utilities with access to capital to be able to meet its environmental goals and policies. It's essential," said Travis Miller, a strategist at Morningstar

5/24/2019

BAKER CITY HERALD — 5A

STATE BRIEFING

Governor signs bill requiring annual report on wildfire protection efforts

SALEM — Gov. Kate Brown on Wednesday signed a bill to require an annual report to the Legislature on efforts to protect communities near forest lands from wildfires.

House Bill 2222 orders the Oregon Department of Forestry to tell lawmakers about implementation and enforcement of property notifications and certifications required under the Oregon Forestland-Urban Interface Fire Protection Act.

The bill was inspired, in part, by the wildfire last year in Paradise, Calif. that killed 85 people and destroyed thousands of buildings. Bend was one of the communities mentioned in testimony on HB 2222 that could be susceptible to similar fires.

The bill's co-sponsors included Rep. Jack Zika, R-Redmond, Rep. Cheri Helt, R-Bend, and Rep. Daniel Bonham, R-The Dalles.

— *WesCom News Service*

Dairy owners, others object to proposed power transmission line near Tillamook

SALEM — A proposed electrical transmission line in northwestern Oregon has run into opposition from landowners in its path.

The Tillamook Public Utility District says the 8.6-mile line between Tillamook and Oceanside will improve the reliability of the electrical grid. Currently, a single distribution line serves about 3,000 properties in the Oceanside area, which is three times more prone to outages than other areas on the grid, said Todd Simmons, the district's general manager.

"When that line goes out, everybody's out of power until we make that repair," Simmons told the Capital Press newspaper. "We're vulnerable with that one line."

The Oregon Farm Bureau and Oregon Dairy Farmers Association are among those concerned about the line that would cross farmland and forestland.

Dairy farmer Kurt Mizze said the line is problematic for several reasons, including "stray voltage," which occurs when electricity essentially leaks into the ground. The phenomenon is known to reduce milk production among dairy cows.

The transmission line would also prevent aerial pesticide spraying over certain fields and its construction would disrupt grazing and silage harvesting, Mizze said.

"They've offered us almost nothing as far as compensation for a pretty big impact," he said.

Landowners are also worried that exposure to electromagnetic emissions could sicken themselves and their livestock, said Cameron La Follette, executive director of the Oregon Coast Alliance conservation group.

The sides are expected to clash throughout 2018 as the utility district tries to obtain key permits: a conditional-use permit from Tillamook County, a fill-removal permit from the Department of State Lands and eminent domain authority from the Oregon Public Utility Commission.

La Follette and other opponents argue the proposed line isn't justified by electricity demand, and might be intended as a connection to future offshore energy projects.

A decade ago, the district agreed to find possible connection points for a wind-energy project to deliver electricity to its grid. That agreement has since expired and the utility district said it has no current plans to connect to such offshore projects.

— Compiled from The Associated Press

Groups sue over sage grouse

By Keith Ridler
Associated Press

BOISE — Four conservation groups have asked a judge to block a Trump administration plan allowing drilling, mining and other activities in seven Western states they say will harm sage grouse.

Western Watersheds Project and other groups asked for the injunction in U.S. District Court in Idaho late last week for Idaho, Wyoming, Utah, Colorado, Nevada, California and Oregon.

The groups in March sued Interior Secretary David Bernhardt, the U.S. Bureau of Land Management and the U.S. Forest Service over changes to land-management plans involving sage grouse.

The March action supplemented a 2016 lawsuit that said a 2015 federal plan put forward by the President Barack Obama inadequately protected sage grouse. The groups say the plan put forward by President Donald Trump weakens protections further.

"Defendants falsely assert that the 2019 BLM plan amendments build upon the 2015 plans, but in truth they rescind or weaken numerous 2015 plan measures," the request for the injunction states.

The U.S. Department of Justice, which defends federal agencies in lawsuits, acknowledged on Monday receiving an emailed inquiry from The Associated Press about the injunction request but didn't respond further.

Millions of sage grouse, a chicken-sized bird that relies on sagebrush, once roamed the West, but development, livestock grazing and wildfires have reduced the bird's population to fewer than 500,000. Most of the bird's habitat — sagebrush steppe — is on land administered by the BLM.

4/24/19

Bolavcity Herald
-1/3/2018

By Jerry Painter
 Idaho Falls, Idaho Post-Register

IDAHO FALLS, Idaho — Something catastrophically wrong happened in 2018 to monarch butterflies.

Idaho wildlife biologist Ross Winton spent years working with monarch butterflies. With the help of volunteers, he would carefully put a tiny tag the size of a paper hole punch on about 30 to 50 of the iconic insects each summer in the Magic Valley. Then during the summer of 2018 he could only find two to tag. "I saw two monarchs all season," Winton said of 2018. "Most of the folks I've talked to in the Boise area were seeing very similar results. ... It was a little disconcerting to be seeing that kind of a decline in one year."

Last week the Xerces Society for Invertebrate Conservation issued a report finding that the population of monarch butterflies overwintering in California had fallen to the lowest level ever recorded. The Western Monarch Thinning Count found only 28,489 butterflies, an 84 percent fall from the previous year and a 98.4 percent decline from numbers counted in the 1980s. Overwintering butterflies in central and southern California numbered about 4.5 million in the 1980s. The monarch population in the state's United States, which

migrates to Mexico, has declined by more than 80 percent in the last 20 years, but has not suffered the same fall in numbers this year, the Xerces Society says. "To picture what this means for monarchs, imagine that the population of Los Angeles had shrunk to that of the town of Monterey," said

Winton expert with the Xerces Society. (Monterey, California, has about 29,000 residents, while Los Angeles has about 4 million.)

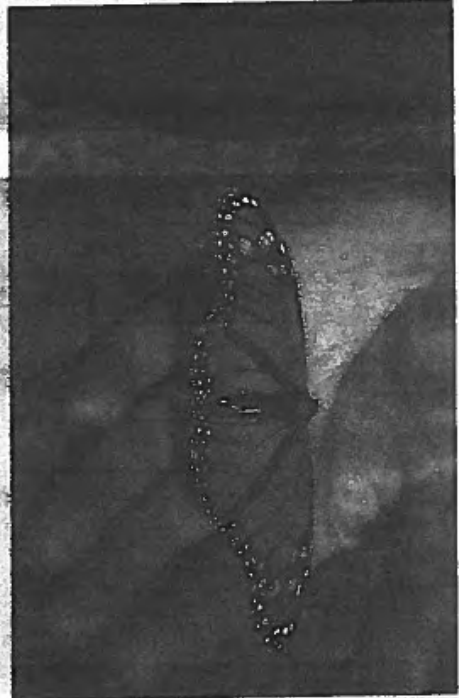
Monarch butterfly experts say much of the blame for the species' demise can be aimed at habitat destruction, particularly in overwintering areas of California. Each year, the butterflies head south to winter mostly in either California or central Mexico. While most end up in Mexico, particularly those that spend their summers east of the Rocky Mountains, many also overwinter in habitat near Santa Cruz, California.

"Our best guess is that most of our Idaho monarchs are going to central and Southern California," Winton said. "The connections we've had that we've documented for sure most of them have been from central California. ... They fly to winter in a lot of the tall trees along the coast of California."

But what's happening in California, as far as monarchs are concerned, is alarming.

"A lot of the concern is focusing in on California," said Beth Waterbury retired wildlife biologist for Idaho Fish and Game in Salmon. Waterbury helped head up a monarch study in Idaho, collecting, tagging and documenting the species especially in eastern Idaho. "Habitat loss of habitat or degrada-

tion of habitat on those overwinter sites (is key)," she said. "When those butterflies start dispersing in early spring they're looking for milkweed and nectar resources not too distant from those overwinter sites. The focus right now is looking at availability of habitat in the California central valley or in the coastal foot-



The two dark spots at the base of the monarch butterfly's wings indicates that this one is a male.

apparently is lacking. That is looking to be the real break in the migratory chain this past year."

Winton agrees. "In California and Mexico a lot of habitat has been lost where they tend to overwinter," he said. "A lot of those big trees are either getting too old and not getting replaced and blowing over or they are getting removed, with any expansions, things like that, literally comes down to habitat."

Waterbury said other contributing factors include wildfires, pesticides and herbicides. "Monarchs don't do well or reproduce when it gets up to 80 degrees or hotter," she said. "With the population vanishing,

the Xerces Society has issued a call to arms in hopes of saving the species. "It's easy to give up when faced with news like this," Palko said. "But doing nothing is not an option." The Xerces Society for Invertebrate Conservation is calling on Californians to plant early blooming

ranchers asked to help monarchs

PORTLAND — Oregon agricultural producers can voluntarily help the monarch butterfly on their farms and ranches through a variety of conservation practices offered by the U.S. Department of Agriculture (USDA). The assistance comes at a critical time as recent reports show the western population of the monarch butterfly is at an all-time low. Planting or protecting and increasing the size of native milkweed stands is critically important to rebuild the western monarch population. Federal officials also recommend Oregon producers establish plants that bloom in late summer and early fall, as monarchs leave the region to return to overwintering sites along the California coast. These fall-blooming species include rabbitbrush, golden rod, asters, and sunflowers.

The U.S. Natural Resources Conservation Service (NRCS) helps producers cover part of the costs for adopting these practices through the Environmental Quality Incentives Program and other Farm Bill-funded programs. NRCS accepts applications for conservation programs on a rolling basis. Producers interested in assistance are encouraged to contact their local USDA service center.



Electric and Magnetic Fields (EMF) Affect Milk Production and Behavior of Cows; Results Using Shielded Neutral Isolation Transformer



By Donald Hillman, Ph.D., Charles L. Goeke, M.S., and Richard Moser, EE

12th International Conference on Production Diseases in Farm Animals, Michigan State University

Published by: Shocking News, 750 Berkshire Lane, East Lansing, MI 48823 – donag1@aol.com

July 2004

SUMMARY

In 2002 we reported that behavior, health, and milk production of cows were impaired by transients and by the 3rd, 5th, 7th, and triplen harmonic electrical currents from utility power lines. Kaune et al., concurred in that 180 Hz currents and the 3rd, 5th, and 7th harmonics in the living areas of homes were associated with cancer deaths of former residents in Denver, CO. Subsequently, our investigations revealed that a cellular telephone signal generator located at the base of an antenna tower, was charging the neutral-ground with 10+ V and the 3rd, 5th, 7th and other harmonics were on the neutral conductors and water lines of homes, schools, and workplaces in the area, causing harmonic distortion of the power supply. Primary neutral voltage and 3rd, 5th, 7th and other harmonics on dairy farms were reduced to near zero when a shielded neutral isolation transformer was installed between the utility and the dairy. Animal behavior improved immediately, and milk production which had been depressed for 3 years, gradually returned to normal within 18 months after installation of the shielded transformer. Shielding prevents transients and harmonics on the utility primary from induction onto the user neutral and likewise prevents user harmonics and transients from getting onto the utility electrical line. Changes in concentrations of several blood and cerebrospinal fluid components, energy and fat metabolism, and reduced milk have been reported for cows exposed to EMF from overhead powerlines in Canada. Consequences are related to the time and intensity of exposure to EMF.

INTRODUCTION

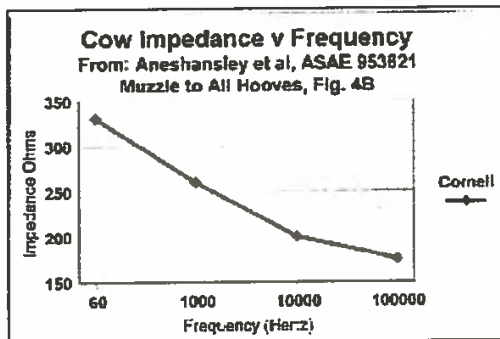
Farm investigations revealed that transient and harmonic voltages and currents were related to animal behavior, health, and milk production of dairy cows on 12 farms. Details of methods and materials were reported previously (Hillman 2003) and results are in the DVD presentation that accompanies this article.

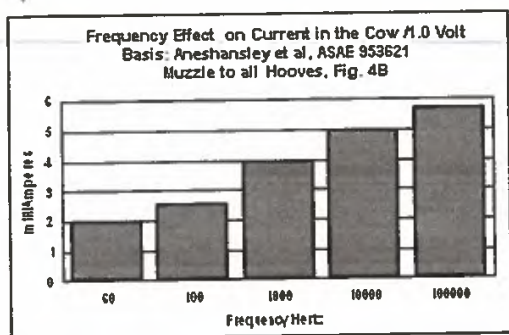
Briefly, the farm studies revealed that:

- # Transients and harmonics were prevalent on rural electric power lines and were commonly called "noise" or "dirty" electricity in the electrical industry.
- # Neutral-to-ground distorted non-sinusoidal transients averaged 280 ± 60.2 V on 3 farms for 165 days, and 79.9 V on five farms for 385 of 515 days as recorded by Fluke[®] EventRecorder VR-101.
- # The concentration of transients and harmonic impulses varied greatly from farm to farm, day to day, and time of day.
- # Milk per cow/d decreased as the number of transient events, hot-to-neutral and neutral-to-ground, transients (oscillations, spikes on the power supply) increased daily.
- # Milk was negatively correlated with phase-shift degree angle

- of transients.
- # Step-potential oscilloscope voltage readings from the floor of milking stalls averaged 0.0628 V ($62.8 \text{ mV} \pm 39.8 \text{ mV}$) and ranged from 0 to 0.1516 V (151.6 mV) on five farms for 515 days.
- # Cow movement (steps/min) increased as the voltage differential (minimum - maximum) increased from 0.9 to 6.0 millivolts during the same minute and as the voltage standard deviation increased.
- # Milk per cow/d decreased as the number of 3rd, 5th, 7th, 21st, 28th, and 42nd, harmonics increased/d. Harmonics were correlated with the number of transients per day.
- # Milk decreased as the sum of triplen harmonics (3rd, 9th, 15th, 21st, 33rd, and 39th) increased/d ($P < 0.003$).
- # Cow impedance decreased as frequency increased.
- # Current in the cow increased as frequency increased.
- # Public Utility Commission (PUC, PSC) standards and use of 500-ohm resistors in test circuits adopted in Wisconsin and some other states underestimate effects on cow behavior, health, and milk production of non-sinusoidal, inferior-quality power on rural power lines.
- # IEEE 519, 1992 recommended 5% Total Harmonic Distortion (THD%) on the utility side of the meter, and 5% Total Distortion Demand (TDD%) on the end-user side of the meter, limits that were set for protection of electrical and electronic equipment must be applied for protection of livestock and humans as well.
- # The Grounded-Y distribution/transmission system uses the earth as a return conductor for neutral current resulting in earth currents that could be avoided by hard-wiring the neutral back to the substation.

Relationships between frequency of voltages and current passing through the cow were reported by Aneshansley et al. (1990, 1995) and are illustrated below. Voltage at harmonic frequencies increases amperage two to three times compared to sinusoidal 60 Hz voltage because of the reduced impedance of the cow at higher frequencies.





Sources of Inferior Quality Electrical Power

Wiring Faults: Causes of uncontrolled electrical voltage and current, commonly called “stray voltage” often include improper grounding, loose or corroded connections, poor condition of insulation on wires, wiring faults on motors and equipment, unbalanced loads on primary or secondary circuits, and tree branches brushing electrical lines. These faults may occur on-farm, on a neighbor’s farm, or on utility lines. Experts claim that faulty wiring accounts for some 80% of stray voltage problems on farms. However, if the electrical system in a building is sound, i.e., no faults and meets code, the only source of AC current for producing uncontrolled voltage is the neutral (grounded) conductor via the bonding with the grounds. Bonding allows current to flow to metal water pipes, lightning protection, and branch circuit equipment ground wires according to Ludington et al. (1987). The cow is almost always in the current path in series and in parallel with other resistances as the current seeks a return path to the substation of a grounded -Y, or to the transformer of a Delta system.

Power Quality Problems: The other 20% of electrical problems on dairy farms have not been described publicly, although a large volume of information concerning “dirty” electricity vs “clean” appears in scientific journals, and the standards for hospitals and electronics manufacturers are higher than for other users. “Power quality problems” are simply pollution of the power supply as surely as contaminated milk is considered polluted milk, but milk producers are shut-off from the market by law. No such regulation has been applied to utilities.

USDA-ARS Publication 696, (1991) *Effects of Voltage or Current on Farm Animals: How to Detect and Remedy Problems*, contains no information about the presence or effects of power quality on dairy cows, nor other species.

Barry Kennedy in his book, *Power Quality Primer* (2000), gives vivid descriptions of the effects of modern electrical and electronic control devices on the quality of electricity on power lines, and effects of power quality on operating equipment. A paucity of published reliable research has prevented valid conclusions regarding cause:effect relationships of electricity and animal performance from appearing in the agricultural literature. Secondly, facts and the testimony of knowledgeable witnesses in court testimony, when settled without completion of a trial is sealed (sequestered) by the Court, thus denying the public of knowing the cause or outcome of such decisions. Nevertheless, very few court decisions have been favorable to utilities.

Reasonable standards of power quality and responsibilities of both parties should help to provide efficient justice for both parties, and reduce the burden on the overloaded court system.

Power quality is defined by electrical engineers in terms of compliance of the power supply with nominal voltage and current. Deregulation has not improved the quality of electric power.

A transient voltage (transient or spike) is a temporary, unwanted voltage in an electric circuit. Transient voltages may range from a few volts to several thousand volts and last from a few microseconds to a few milliseconds. Oscillatory transient voltages are commonly caused by switching OFF high inductive loads and by switching large utility power factor correction capacitors for balancing loads on a power line. Impulse transients are commonly caused by lightning strikes and are distinguishable from oscillatory transients by the shape of the waveform distortion and by the number of oscillations unless allowed to resonate in the circuit by capacitors. Lightning arresters mounted on top of poles and substations are used by utilities to dampen impulse transients. Transients averaged 10 oscillations per transient event recorded by Fluke Event Recorder VR101 in these studies.

Harmonics are the major source of sine waveform distortion. The increased use of nonlinear equipment have caused harmonics to be more common. EPRI, Electric Power Research Institute, financed by utilities estimated that one-half of all electricity used in the United States would pass through electronic equipment by the year 2000. Because of the increased adverse effects of harmonics, the IEEE (Institute of Electrical and Electronic Engineers) adopted a standard for harmonics in 1992. The standard is referred to as IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems (IEEE 519-1992 ©1993) according to Kennedy (2000).

The IEEE standards were devised to prevent harmonic damage to transformers, motors, and electronic circuits. Cows, other livestock, and humans ought to be added to the damage list.

Harmonic currents are usually caused by nonlinear loads like adjustable speed drives, solid-state heating controls, electronic ballasts for fluorescent lighting, switched-mode power supplies in computers, printers, static UPS (uninterruptible power supply) systems, electronic and medical test equipment (Magnetic Radiation Imaging), rectifiers, filters, and electronic office machines. Nonlinear loads cause harmonic currents to change from a sinusoidal current to a non-sinusoidal current by drawing short bursts of current each cycle or interrupting the cycle. This causes the sinusoidal current waveform to become distorted. The total distorted wave shape is cumulative. The resulting non-sinusoidal wave shape is a combination of the fundamental 60-Hz sine wave and the various harmonics.

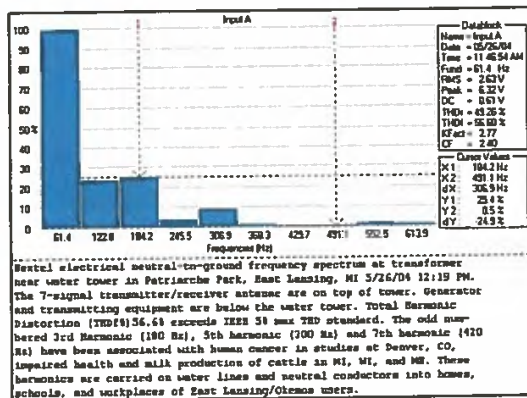
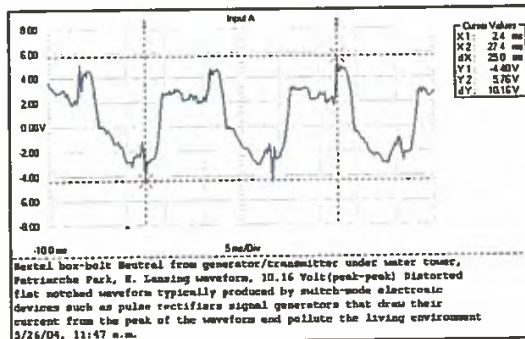
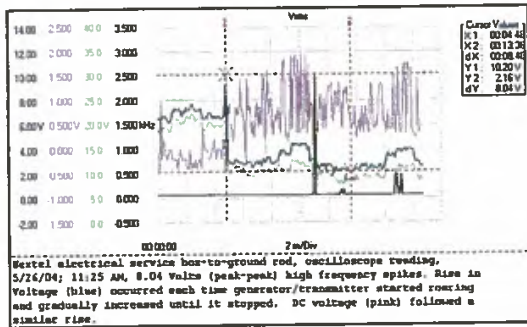
The switched-mode process results in a pulsed square wave which distorts the sine wave and produces harmonics (Kennedy 2000).

Further, single-phase nonlinear loads that draw current only during the peak of the voltage waveform, combine in a 3-phase circuit and produce triplen harmonics (multiples of the third order harmonics, like 3rd, 9th, 15th, etc). Triplen harmonics do not cancel but are additive and return exclusively on the

neutral conductor. The resulting magnitude of the neutral current may increase to 173 percent of the rms phase current. Thus the neutral current may exceed the capacity of the neutral conductor. Triplen cause overheating of the primary neutral conductor and may cause fires since there is no fuse or circuit breaker in the neutral circuit. Harmonics also cause the WATT meter to turn faster, thus inflating the electric bill.

A Source of Environmental Pollution was identified in East Lansing, MI. Flukeview prints of oscilloscope readings, waveform and harmonics are presented below.

A service-box neutral-ground of a cellular telephone generator/base-station with six antennae on the tower registered 10.16 V ac on the oscilloscope as in the Flukeview print-out. Nextel had taken a big bite out of the peak of the waveform and the frequency spectrum had 56% Total Harmonic Distortion with 2nd, 3rd, 5th, and 7th harmonics. They were also carried into electrical outlets and waterlines in homes and schools in the area.



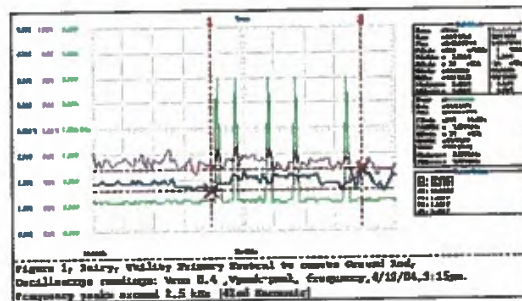
Cows on a dairy farm in mid-Michigan were dancing (stepping, lifting feet, shifting body, and tail-switching) to avoid the pain of electrical shock. Oscilloscope Flukeview prints showed 8 to 12 V and harmonic distortion with 3rd, 5th, 7th, and 9th harmonics on the utility PN-to-ground. The secondary neutral carried 1.43 V tested by utility meters. The floor registered 300 to 400 mV, and leads from divider pipes to the floor of the operators' pit in the milking parlor carried 480 mV. The farmer observed that cows were not disturbed when the primary neutral-to-ground wire had been disconnected.

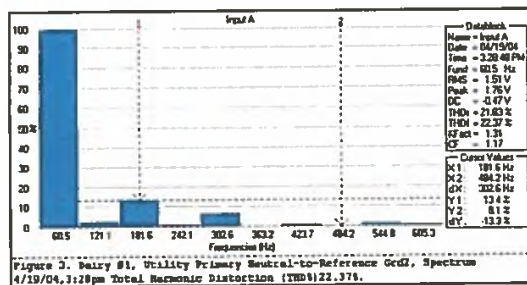
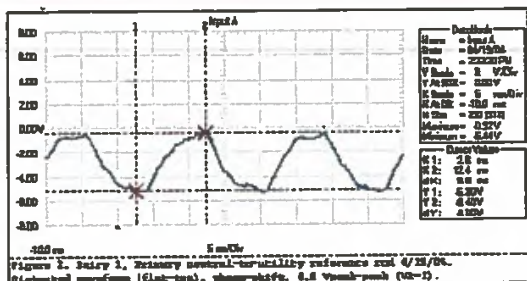
A neighbor had experienced the problem of cows dancing, stepping, tail-switching, and kicking off milkers (see the video), resulting in incomplete milking, declining milk production, and impaired health performance when 12 Vs were on the primary neutral and 1 V at cow contact. Utility experts claimed the voltage was too low to be "problematic." The neighbor had the power company move their service pole with transformer and down-ground about 200 feet from the milking parlor to the edge of the property. The dairy was served by 480-V single-phase service to the dairy, and an isolation transformer was installed by the dairyman. Cow behavior and milk production improved immediately and progressed to 29,200 lbs. per cow/year by 2004. However, when they tried to install a variable speed drive milk pump, the problem returned and the pump was removed. The transformer was not shielded to prevent harmonics and high frequency transients from passing from the primary to the secondary winding of the transformer.

A Virginia dairyman had the problem of cows dancing and milk production had decreased to nearly one-half over a three-year period. The utility measured voltage for 6 days and reported about 2/3 of the PN-G reading were between 2.4 and 3.0 V, while the remainder ranged from 3.6 to 4.8 V. Experts could find no cause for the poor performance of the herd. The primary neutral was bonded to cow contact metal pipes and reinforcements in the floor of the milking parlor to form an equal-potential environment in the dairy. An electrical engineer found the primary-neutral averaged 0.96 V and 1.0 V, (maximum 2.08 V) equivalent to 2 to 5 mA, assuming 500 ohms cow resistance, for periods of 16 days and 19 days.

Oscilloscope Flukeview readings at the Virginia Dairy Farm revealed 2.5 kHz spikes (green) accompanied by a 400 mV rise (blue line), and about 5.5 V (peak to peak) (red lines). The peak of the waveform is chewed off and resembles the Nextel waveform.

The Frequency spectrum shows the neutral is loaded with 3rd, 5th, and 7th harmonics, indicating inferior quality power, and the herd was a victim of power supply pollution.





Transformer Electric Company, Roanoke, VA, built a shielded neutral isolation transformer (SNIT) and connected it between the utility and the dairy, with the center tap serving as the ground for the dairy.

After installing the SNIT: Voltage was reduced to 0.002 V (0.004 mA). Cows stopped dancing, and milk production gradually recovered to its highest previous level after about 18-months. In the interim, many good cows and replacements had been lost from the operation.



New Discoveries from on-farm research include:

- # Farm electricity is not always clean--Powerlines are polluted with transients and harmonics.
- # Cow resistance goes down as frequency goes up.
- # EMF < 1 Volt at cow contact may damage cows.
- # Cow behavior is affected at frequencies < 1000 Hz.
- # Cows need not be touching metal for harmonics.
- # Milk decreases as transients and harmonics increase.
- # Shielded neutral isolation transformer reduces harmonic voltage and current through the cow.
- # Behavior, health, and milk production improved when the primary neutral was isolated in problem herds.

Related University EMF Research

Burchard et al. at McGill University, Montreal, Quebec, Canada, have been studying effects of EMF on dairy cows for several years. Cows were exposed to 10 kV/m electric fields and 30 μ Tesla magnetic fields, for 28-day periods in reversal trials. Intensities are equivalent to standing under a 735 kV electrical transmission line. They reported in *Bioelectromagnetics* (2003).

- # Milk production decreased 5% from exposed cows compared

to controls

- # Fat-corrected milk decreased 14% compared to controls
- # Milk fat decreased 16% compared to controls
- # Dry matter intake increased 5% compared to controls.

Physiological effects from Burchard et al. include:

- # Melatonin, a hormone produced in the Pineal gland in the brain, decreased in cows exposed to EMF.
- # Melatonin has strong oncostatic immunological, and antioxidant properties in the blood. It normally follows the pattern of light:dark nocturnal exposure.
- # Progesterone increased in lactating pregnant cows.
- # Length of estrus cycle increased 3 days.
- # Insulin-like growth factor (IGF-1) increased in blood.
- # Growth hormone was modified during part of the nocturnal cycle.
- # Macro and trace element changes in blood – Calcium, magnesium, iron, and copper were affected by EMF exposure.
- # Cerebrospinal fluid (CSF) changes in concentrations of Ca, P, Mg, Mn and Na occurred.
- # Quinolinic acid increased in CSF, tryptophan tended to increase in CSF.
- # CSF changes were consistent with weakening of blood-brain barrier.

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Resource Management Plan Protest Critical Item Checklist

The following items *must* be included to constitute a valid protest
whether using this optional format, or a narrative letter.

(43 CFR 1610.5-2)

Before including your address, phone number, e-mail address, or other personal identifying information in your protest, be advised that your entire protest—including your personal identifying information—may be made publicly available at any time. While you can ask us in your protest to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so. All submissions from organizations and businesses, and from individuals identifying themselves as representatives or officials of organizations and businesses, will be available for public inspection in their entirety.

Resource Management Plan (RMP) or Amendment (RMFA) being protested:

B2H BLM EIS

Name: DAVID and KAREN YEAKLEY
Address: 42687 Hudson Rd., Baker City, OR 97814
Phone Number: (541) 523-6900

Your interest in filing this protest (how will you be adversely affected by the approval or amendment of this plan?): As former Mayor and Baker Co. Chamber of Commerce Manager, the line would harm view shed of BLM managed OR. Trail Interpretive Center. This center is educational, historic and tourism development.

Issue or issues being protested: Appendix K - 1274 a-f, page K9-500-501 mitigation OR money will not replace land and wildlife. Once it's gone, it's gone. Sage Grouse wasn't listed by US Fish and Wildlife due to state of Oregon + Baker Co. exercising measures to protect the Sage Grouse.

Statement of the part or parts of the plan being protested:

Chapter: 3

Section:

Page: 3-235-240

(or) Map:

Oregon has designated utility corridor thru central OR. Not being considered. There is new + improved transmission of HVA/C High Voltage lines not being pursued. This would be underground + energy efficient.

Attach copies of all documents addressing the issue(s) that were submitted during the planning process by the protesting party, OR an indication of the date the issue(s) were discussed for the record.

Date(s): Feb 25, 2015 attached comments

A concise statement explaining why the State Director's decisions is believed to be wrong: This line is not needed and harms Oregon land, viewsheds, wildlife and pollinators (bees, bumble bees). We are destroying history for future generations (OR. Trail). I am very concerned for our health and that of cattle and ag crops grown near this line.

Signed: Dec. 19, 2016

Karen Yeakley
David Yeakley

Feb. 25, 2015

B2H Project
P O Box 655
Vale, Or. 97918

Re: Additional comments on the DEIS

We have participated in the public meetings, written public comment and participated in Idaho Power's CAP process.

We agree with NEPA Coordinator Todd Whitesides of the BLM as it relates to the DEIS. BLM is not accurately disclosing the impacts of the B2H Project. The data used is not current nor does it represent 365 day, 24 hour, 7 days input from residents along the proposed routes.

The Sage Grouse we believe will be listed as endangered by the USFWS if we proceed with the development of the B2H line. Prior to the new ODOT maintenance shed off Exit 302 and Hwy 86, there used to be Sage Grouse along with other wildlife I have already referenced. This does not include migrating birds, like the Trumpeter Swans I saw on Monday, Feb. 23, 2015. Sage Grouse move short distances to lower elevations for winter and are permanent residents. They forage on the ground. They mainly eat sagebrush, but also insects and other plants. Residential building and energy development have caused the Greater Sage Grouse population to decline from 16 million 100 years ago to between 200,000 and 500,000 today. This species is in decline due to loss of habitat.

New data would be for the Monarch butterfly. What would the electric line do to this butterfly becoming extinct? Their range expands and contracts dependent upon the season. The range differs between breeding areas, migration routes and winter roosts. While breeding, its habitat can be found in agricultural fields, pasture land, gardens, trees, and roadsides.

As we have wetlands in the area of the airport, we have numerous birds that live here and migrate through this area. We are very concerned about what the development of this line would do to water flow, irrigation, and lagoons.

We watch airplanes and helicopters daily and are concerned about flight patterns and approaches to our airport with this line. I have viewed the spray plane flying under the transmission lines as presented on the video but still seems highly dangerous to the pilot, plane, and any area involved in a crash site.

We are very concerned about health issues that the line could cause. What about folks with pacemakers; implants and possible side effects? Can we be guaranteed that this line will not cause cancer to us or wildlife?

We believe BLM should place great value on the natural beauty and historical significance of the lands it is charged with protecting and maintaining. The Oregon Trail Interpretive Center, it's surrounding area and view shed are prime examples of these things. The thought of tall towers and transmission lines stretching across the land below the Interpretive Center, across the actual wagon ruts made by the brave families that settled Oregon is distressing to say the least. It is possible the lines may cross the Oregon Trail in many places as it traverses the high desert between the Idaho border and Baker Valley. These are points that deserve the utmost consideration by BLM.

Does the profit realized by Idaho Power and the handful of landowners that sell right away land for the project out weigh the damage done to the farmland, wildlife habitat, the beauty of the land or the economic health of the communities through which the transmission line will pass through or near? Has this project been well thought out and been given the time for study and consideration for alternative plans? We feel much more study and public input needs to be done before any plan is finalized.

Concerned citizens,

David Yeakley

Karen Yeakley
42687 Hudson Road
Baker City, Or. 97814



Oregon Department of Energy and the Energy Facility Siting Council

Public Hearing on the Draft Proposed Order
for the Boardman to Hemingway Transmission Line
June 18-20 and June 26-27, 2019, 4:30-8 p.m.
Public Written or Oral Testimony Registration

Name (mandatory) KAREN YEAKLEY

Mailing Address (mandatory) 42627 HUDSON RD
BAKER CITY, OR. 97814

Phone Number (optional) 541 523-6900 Email Address (optional) _____

Today's Date: 6/19/19

Do you wish to make oral public testimony at this Hearing: Yes No

Written comments can also be submitted today. Yes

All written comments must be received by the deadline, July 23, 2019, 5 p.m. PDT to:

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street NE
Salem, OR 97301
Fax: 503-378-6457
Email: B2H.DPOComments@oregon.gov

Note: by submitting written or oral testimony, you will receive a notice from the Oregon Department of Energy at a future date of the opportunity to request party status in a contested case hearing on the proposed facility.

Written Testimony
(Please print legibly – Use the back for additional space if needed. Additional written comments may be attached to this card.)

Handouts at meeting today

Energy Siting Council and Idaho Power - June 19, 2019

My name is Karen Yeakley. I am a former Mayor of Baker City and former Baker County Chamber of Commerce Manager, and Past President of the Chamber.

Idaho Power is a profit making business. The Board of Directors have a responsibility and fiduciary duty to protect their investment and provide share holders with a return. This has been 12 years, and if I was on Idaho Power Board, I would be asking if this was the best investment. There is new technology, and the data used is not current nor represents residents input along the proposed route. I have a different focus. I want the best for Baker County and the State of Oregon and I want to leave here better than before I got here.

In your siting standards of protecting against adverse environmental impacts, this project due to construction will have significant adverse impacts. Construction decreases farm land that affects our food source, the wildlife, pollinators, and cattle grazing.

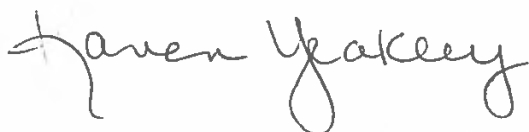
Oregon Administrative rules and council standards have numerous references to mitigation. Mitigation will not help dead eagles, owls, blue heron, ducks, geese, hawks, dead trumpeter swans, and dead sage grouse. It will not protect the Oregon Trail ruts at the Interpretive Center. I watch bus loads of students in May headed up to the center to learn of our history from across the state. Use of compensatory mitigation is not okay.

We should learn from the California fires that killed 85 people and destroyed thousands of buildings. PG & E utility company seeks bankruptcy protection over California fires. Governor Kate Brown signed house bill 2222 requiring annual report on wildfire protection efforts, The bill was inspired in part by the wildfire last year in Paradise, California.

I have enclosed an article on electric and magnetic fields affecting milk production and behavior of cows. If the transmission lines can cause that affect on cows, then what is the long term affect. Why would we want to risk public health with side affects of the transmission lines.

I have included several news clippings, and our testimony during the NEPA process for your review.

Thank you for your time.



Feb. 25, 2015

B2H Project
P O Box 655
Vale, Or. 97918

Re: Additional comments on the DEIS

We have participated in the public meetings, written public comment and participated in Idaho Power's CAP process.

We agree with NEPA Coordinator Todd Whitesides of the BLM as it relates to the DEIS. BLM is not accurately disclosing the impacts of the B2H Project. The data used is not current nor does it represent 365 day, 24 hour, 7 days input from residents along the proposed routes.

The Sage Grouse we believe will be listed as endangered by the USFWS if we proceed with the development of the B2H line. Prior to the new ODOT maintenance shed off Exit 302 and Hwy 86, there used to be Sage Grouse along with other wildlife I have already referenced. This does not include migrating birds, like the Trumpeter Swans I saw on Monday, Feb. 23, 2015. Sage Grouse move short distances to lower elevations for winter and are permanent residents. They forage on the ground. They mainly eat sagebrush, but also insects and other plants. Residential building and energy development have caused the Greater Sage Grouse population to decline from 16 million 100 years ago to between 200,000 and 500,000 today. This species is in decline due to loss of habitat.

New data would be for the Monarch butterfly. What would the electric line do to this butterfly becoming extinct? Their range expands and contracts dependent upon the season. The range differs between breeding areas, migration routes and winter roosts. While breeding, its habitat can be found in agricultural fields, pasture land, gardens, trees, and roadsides.

As we have wetlands in the area of the airport, we have numerous birds that live here and migrate through this area. We are very concerned about what the development of this line would do to water flow, irrigation, and lagoons.

We watch airplanes and helicopters daily and are concerned about flight patterns and approaches to our airport with this line. I have viewed the spray plane flying under the transmission lines as presented on the video but still seems highly dangerous to the pilot, plane, and any area involved in a crash site.

We are very concerned about health issues that the line could cause. What about folks with pacemakers; implants and possible side effects? Can we be guaranteed that this line will not cause cancer to us or wildlife?

We believe BLM should place great value on the natural beauty and historical significance of the lands it is charged with protecting and maintaining. The Oregon Trail Interpretive Center, it's surrounding area and view shed are prime examples of these things. The thought of tall towers and transmission lines stretching across the land below the Interpretive Center, across the actual wagon ruts made by the brave families that settled Oregon is distressing to say the least. It is possible the lines may cross the Oregon Trail in many places as it traverses the high desert between the Idaho border and Baker Valley. These are points that deserve the utmost consideration by BLM.

Does the profit realized by Idaho Power and the handful of landowners that sell right away land for the project out weigh the damage done to the farmland, wildlife habitat, the beauty of the land or the economic health of the communities through which the transmission line will pass through or near? Has this project been well thought out and been given the time for study and consideration for alternative plans? We feel much more study and public input needs to be done before any plan is finalized.

Concerned citizens,

David Yeakley

Karen Yeakley
42687 Hudson Road
Baker City, Or. 97814

Nov. 4, 2008 Boardman to Hemingway Transmission Line Project

I acknowledge that Idaho Power Company has been a good neighbor and appreciate this opportunity for public discussion. I question the need that this proposed project would do to the detriment of the residents and land that it would compromise.

I am a Baker county native and former Mayor. My grandmother was born in Durkee, Oregon. Always I was taught to respect the land that grew our food and that we help one another and give back more than we take.

Baker county industries have been agriculture, mining and timber. With the decline of timber, several community leaders decided to create a new industry. Tourism was born for Baker county and the birth of the Oregon Trail Interpretive Center. Many Bakerites have given land, time, money and countless hours in preserving our quality of life and supporting the uniqueness of the county.

Our theme has been to be the Northwest Premier Rural Living experience.

Farmland is a critical resource base for our major industry which generates over \$5.5 billion in annual sales and employs more than 100,000 Oregonians. Exclusive farm use zoning relies on basic zoning principles to preserve farmland for agricultural use and to keep uses incompatible with commercial farming out of agricultural areas.

I do not want to have the invasion of wildlife breeding and nesting areas and destruction of our wetlands. I live in the proposed corridor between I-84 and the Oregon Trail Interpretive center. I have hawks that come back year after year and raise their young. We have loons (blue heron), eagles, killdeer, owls, ducks, geese, sparrows, finches, quail, red fox, raccoon, skunk, deer, and I am sure other wildlife I have not noticed. Domestic animals are raised in the proposed corridors. Cattle, horses, goats and hogs to name a few. Field crops such as hay are necessary for these animals not to mention the grazing areas in Baker county. *I have heard "to place the corridor out by Keating", or out at Virtue Flat.* Do we believe that any development would not compromise the land, sage brush, and wildlife that live there?

Baker county is rich in historic and archeological findings. Mining in the area of the proposed corridors needs to be researched prior to any development. Baker City was incorporated in 1874 so it stands to reason that historical findings exist.

I do not want to have our view shed ruined. We also have the airport close by and don't need the worry of collisions.

I have heard of no benefit to Baker county and other counties that this proposal would pass through. The current economic climate of Wall Street shows what can happen when we want more instead of living within our means. Does our electric co-op receive any rate discounts from Idaho Power for this proposed project? If not, why not? Why should Baker County give up land and our quality of life for this project? \$100,000 to \$200,000

does not even compensate for what not only we would sacrifice but that of future generations. I continue to remain in wonderment of who will grow our food. Where will the farming and land needed be? Grocery stores do not produce milk.

Please, please, research and discuss this further before just going through the hoops. I do offer any help or discussion I can give.

Thank you.

Karen Yeakley,
42687 Hudson Rd.
Baker City, Or. 97814

Utility seeks bankruptcy protection over California fires

By Janie Har and Cathy
Sussewitz
The Associated Press

SAN FRANCISCO — The nation's largest utility said Monday it is filing for Chapter 11 bankruptcy because it faces at least \$30 billion in potential damages from lawsuits over the catastrophic wildfires in California in 2017 and 2018 that killed scores of people and destroyed thousands of homes.

The move by Pacific Gas & Electric Corp., expected by the end of the month, would be the biggest bankruptcy by a utility in U.S. history, legal experts said.

It would allow PG&E to hold off creditors and continue providing electricity and natural gas without interruption to its 16 million customers in Northern and central California while it tries to put its finances in order.

The filing would not make the lawsuits disappear, but would result in all wildfire claims being consolidated into a single proceeding before a bankruptcy judge, not a jury. That could

shield the company from excessive jury verdicts and buy time by putting a hold on the claims.

Chapter 11 reorganization represents "the only viable option to address the company's responsibilities to its stakeholders," Richard Kelly, chairman of PG&E's board of directors, said in a statement.

"The Chapter 11 process allows us to work with these many constituents in one court-supervised forum to comprehensively address our potential liabilities and to implement appropriate changes."

State officials are investigating whether the utility's equipment sparked the deadliest, most destructive wildfire in California history, a November Northern California blaze that killed at least 86 people and burned down 15,000 homes.

State investigators have also blamed PG&E power lines for some fires in October 2017. Authorities are also looking into the cause of a blaze that destroyed thousands of homes and killed 22 people in Santa Rosa last year.

California law requires utilities to pay damages for wildfires if their equipment caused the blazes — even if the utilities weren't negligent through, say, inadequate maintenance.

PG&E, which is the nation's largest utility by revenue and is based in San Francisco, said it is giving the required 15 days' notice it plans to file for bankruptcy protection.

It said it will continue working with regulators and stakeholders to consider how it can safely provide energy "in an environment that continues to be challenged by climate change."

The announcement follows the resignation of chief executive Geisha Williams a day earlier. She leaves with a \$2.5 million severance payout, a spokesman told the Mercury News of San Jose.

In a Monday filing with the Securities and Exchange Commission, the company said the liabilities it faces from 2017 and 2018 wildfires could exceed \$30 billion, not including punitive

damages, fines and penalties.

The largest bankruptcy filing on record by a utility was Energy Future Holdings Corp. in 2014, which had \$49.7 billion in liabilities in today's dollars, according to an analysis by Kevin Kelly, director of publications at S&P Global.

Veteran New York bankruptcy lawyer H. Jeffrey Schwartz said PG&E's bankruptcy should prove to be the biggest yet, since it had about \$50 billion in liabilities at the end of 2017. That does not include claims from 2018 wildfires.

He said the utility has no other way of getting out from under the mountain of legal claims.

"The liability is too great. It's too many claims, the aggregate amount is too great, and it looks at first blush to be indefensible because PG&E knew of this risk and didn't clear the line areas as it should have," Schwartz said.

He said he expects shareholders to bear the brunt of the restructuring. Bankruptcy court has no say over the rates utility

See PG&E / Page 2B

PG&E

Continued from Page 1B
customers pay; those are decided by state regulators and politicians.

As for the lawsuits, PG&E will negotiate with the plaintiffs and its other creditors a reorganization plan based on how much the utility is able to pay, said Hugh Wynne of Sovereign Research, an investment research firm.

"You avoid a situation where some jury in California thinks PG&E is responsible for this fire, so we should hit them up for all these damages and let them sort out how they pay for it," Wynne said.

A bankruptcy also would allow PG&E to raise cash by selling assets — such as its gas business and hydropower plants — more easily, he said.

PG&E spent millions in an 11th-hour lobbying effort

legislative session in August in a failed attempt to change the law to reduce its liability in wildfires.

Before last year's disastrous fire in Northern California's Butte County, PG&E's stock stood at \$47.80. But in early Monday trading it tumbled \$8.48 to \$9.11, its lowest level in more than 6 years. Wall Street last week slashed PG&E's credit rating to junk status.

PG&E also filed for Chapter 11 in 2001 amid rising electricity prices during California's energy crisis.

California's new governor, Democrat Gavin Newsom, told reporters that "safety, reliability and affordability" are his top concerns, alongside protecting wildfire victims and ratepayers, in confronting the potential bankruptcy. He sought to assure the public that this potential bankruptcy won't result in

He said addressing the pending bankruptcy, and potentially avoiding it, is a top priority for his new administration, but he hasn't settled on what actions to take. He said the state has "no choice" but to work collaboratively with the utility even though it has not been a "trusted player" in the past.

The Natural Resources Defense Council warned that bankruptcy could threaten billions in funding for PG&E's clean energy initiatives, which are key to California's environmental goals. PG&E is the state's largest investor in energy efficiency and electric vehicle infrastructure, said the NRDC's Ralph Cavanagh.

"California needs healthy utilities with access to capital to be able to meet its environmental goals and policies. It's essential," said Travis Miller, a strategist at Morningstar

5/24/2019

BAKER CITY HERALD — 5A

STATE BRIEFING

Governor signs bill requiring annual report on wildfire protection efforts

SALEM — Gov. Kate Brown on Wednesday signed a bill to require an annual report to the Legislature on efforts to protect communities near forest lands from wildfires.

House Bill 2222 orders the Oregon Department of Forestry to tell lawmakers about implementation and enforcement of property notifications and certifications required under the Oregon Forestland-Urban Interface Fire Protection Act.

The bill was inspired, in part, by the wildfire last year in Paradise, Calif. that killed 85 people and destroyed thousands of buildings. Bend was one of the communities mentioned in testimony on HB 2222 that could be susceptible to similar fires.

The bill's co-sponsors included Rep. Jack Zika, R-Redmond, Rep. Cheri Helt, R-Bend, and Rep. Daniel Bonham, R-The Dalles.

— *WesCom News Service*

Dairy owners, others object to proposed power transmission line near Tillamook

SALEM — A proposed electrical transmission line in northwestern Oregon has run into opposition from landowners in its path.

The Tillamook Public Utility District says the 8.6-mile line between Tillamook and Oceanside will improve the reliability of the electrical grid. Currently, a single distribution line serves about 3,000 properties in the Oceanside area, which is three times more prone to outages than other areas on the grid, said Todd Simmons, the district's general manager.

"When that line goes out, everybody's out of power until we make that repair," Simmons told the Capital Press newspaper. "We're vulnerable with that one line."

The Oregon Farm Bureau and Oregon Dairy Farmers Association are among those concerned about the line that would cross farmland and forestland.

Dairy farmer Kurt Mizee said the line is problematic for several reasons, including "stray voltage," which occurs when electricity essentially leaks into the ground. The phenomenon is known to reduce milk production among dairy cows.

The transmission line would also prevent aerial pesticide spraying over certain fields and its construction would disrupt grazing and silage harvesting, Mizee said.

"They've offered us almost nothing as far as compensation for a pretty big impact," he said.

Landowners are also worried that exposure to electromagnetic emissions could sicken themselves and their livestock, said Cameron La Follette, executive director of the Oregon Coast Alliance conservation group.

The sides are expected to clash throughout 2018 as the utility district tries to obtain key permits: a conditional-use permit from Tillamook County, a fill-removal permit from the Department of State Lands and eminent domain authority from the Oregon Public Utility Commission.

La Follette and other opponents argue the proposed line isn't justified by electricity demand, and might be intended as a connection to future offshore energy projects.

A decade ago, the district agreed to find possible connection points for a wind-energy project to deliver electricity to its grid. That agreement has since expired and the utility district said it has no current plans to connect to such offshore projects.

— Compiled from The Associated Press

Groups sue over sage grouse

By Keith Ridler
Associated Press

BOISE — Four conservation groups have asked a judge to block a Trump administration plan allowing drilling, mining and other activities in seven Western states they say will harm sage grouse.

Western Watersheds Project and other groups asked for the injunction in U.S. District Court in Idaho late last week for Idaho, Wyoming, Utah, Colorado, Nevada, California and Oregon.

The groups in March sued Interior Secretary David Bernhardt, the U.S. Bureau of Land Management and the U.S. Forest Service over changes to land-management plans involving sage grouse.

The March action supplemented a 2016 lawsuit that said a 2015 federal plan put forward by the President Barack Obama inadequately protected sage grouse. The groups say the plan put forward by President Donald Trump weakens protections further.

"Defendants falsely assert that the 2019 BLM plan amendments build upon the 2015 plans, but in truth they rescind or weaken numerous 2015 plan measures," the request for the injunction states.

The U.S. Department of Justice, which defends federal agencies in lawsuits, acknowledged on Monday receiving an emailed inquiry from The Associated Press about the injunction request but didn't respond further.

Millions of sage grouse, a chicken-sized bird that relies on sagebrush, once roamed the West, but development, livestock grazing and wildfires have reduced the bird's population to fewer than 500,000. Most of the bird's habitat — sagebrush steppe — is on land administered by the BLM.

4/24/19

Boke City Herald

11/3/2018

By Jerry Painter
(Idaho Falls, Idaho) Post Register

IDAHO FALLS, Idaho — Something catastrophically wrong happened in 2018 to monarch butterflies.

Idaho wildlife biologist Ross

Winton spent years working with monarch butterflies. With the help of volunteers, he would carefully put a tiny tag the size of a paper hole punch on about 30 to 50 of the iconic insects each summer in the Magic Valley. Then during the summer of 2018 he could only find two to tag. "I saw two monarchs all season," Winton said of 2018. "Most of the folks I've talked to in the Boise area were seeing very similar results. ... It was a little disconcerting to be seeing that kind of a decline in one year."

Last week the Xerces Society for Invertebrate Conservation issued a report finding that the population of monarch butterflies overwintering in California had fallen to the lowest level ever recorded.

The Western Monarch Thinning

Count found only 28,429 butterflies, an 84 percent fall from the previous year and a 89.4 percent decline from numbers counted in the 1980s. Overwintering butterflies in central and Southern California numbered about 4.5 million in the 1980s. The monarch population in the western United States, which

tion expert with the Xerces Society (Monterey, California, has about 29,000 residents, while Los Angeles has about 4 million.)

Monarch butterfly experts say much of the blame for the species' demise can be aimed at habitat destruction, particularly in overwintering areas of California. Each year, the butterflies head south to winter mostly in either California or central Mexico. While most end up in Mexico, particularly those that spend their summers east of the Rocky Mountains, many also overwinter in habitat near Santa Cruz, California.

"Our best guess is that most of our Idaho monarchs are going to central and Southern California," Winton said. "The connections we've had that we've documented fit more of them have been from central California. ... They like to winter in a lot of the tall trees along the coast of California."

But what's happening in California as far as monarchs are concerned is alarming. "A lot of the concern is focusing in on California," said Beth Waterbury, Fish and Game in Salmon. Waterbury helped head up a monarch study in Idaho, collecting tagging and documenting the species especially in eastern Idaho.

"Habitat loss or degradation of habitat on those overwinter sites (is key)," she said. "When those butterflies start dispersing in early spring they're looking for milkweed and nectar resources not too distant from those overwinter sites. The focus right now is looking at availability of habitat in the California central valley or in the coastal foot-



The two dark spots at the base of the monarch butterfly's wings indicate that this one is a male.

Teri Colby / Chicago Tribune/TNS

apparently is lacking. That is looking to be the real break in the migratory chain this past year."

"In California and Mexico a lot of habitat has been lost where they tend to overwinter," he said. "A lot of those big trees are either getting too old and not getting replanted and blowing over or they are getting removed with city expansions, things like that. It really comes down to habitat."

Waterbury said other contributing factors include wildfires, pesticides and herbicides. "Monarchs don't do well or reproduce when it gets up to 80 degrees or hotter," she said. "Wildfire population vanishing,

ing monarchs on their paths to other states.

Waterbury said one thing working against the cause is a name.

"This is my name for milkweed, it should be called monarch manna because it's so important," she said. "There are those public attitudes because of the name having the name weed in it. So many people do not know that it is the only plant that monarchs will lay their eggs on."

Some might wonder what all the fuss is over an insect? "We want to conserve all of our biodiversity just on its own sake," Waterbury said. "There is a role that monarchs play that is very important to humans and that is as a pol-

the Xerces Society has issued a call to arms in hopes of saving the species.

"It's easy to give up when faced with news like this," Fallon said.

"But doing nothing is not an option." The Xerces Society for Invertebrate Conservation is calling on Californians to plant early blooming

Ranchers asked to help monarchs

PORTLAND — Oregon

agricultural producers can voluntarily help the monarch butterfly on their farms and ranches through a variety of conservation practices offered by the U.S. Department of Agriculture (USDA). The assistance comes at a critical time as report reports show the western population of the monarch butterfly is at an all-time low.

Planting or protecting and mowing the size of native milkweed stands is critically important to rebuild the western monarch population. Federal officials also recommend Oregon producers establish plants that bloom in late summer and early fall, as monarchs leave the region to return to overwintering sites along the California coast.

These fall-blooming species include rabbitbrush, goldenrod, asters, and sunflowers. The U.S. Natural Resources Conservation Service (NRCS) helps producers cover part of the costs for adopting these practices through their Environmental Quality Incentives Program and other Farm Bill-funded programs. NRCS accepts applications for these conservation programs on a first-come, first-served basis. Producers interested in assistance are encouraged to contact their local USDA service center.

monarchs, imagine that the population of Los Angeles had shrunk to that of the town of Monterey," said



Electric and Magnetic Fields (EMF) Affect Milk Production and Behavior of Cows; Results Using Shielded Neutral Isolation Transformer



By Donald Hillman, Ph.D., Charles L. Goeke, M.S., and Richard Moser, EE

12th International Conference on Production Diseases in Farm Animals, Michigan State University

Published by: Shocking News, 750 Berkshire Lane, East Lansing, MI 48823 – donag1@aol.com

July 2004

SUMMARY

In 2002 we reported that behavior, health, and milk production of cows were impaired by transients and by the 3rd, 5th, 7th, and triplen harmonic electrical currents from utility power lines. Kaune et al., concurred in that 180 Hz currents and the 3rd, 5th, and 7th harmonics in the living areas of homes were associated with cancer deaths of former residents in Denver, CO. Subsequently, our investigations revealed that a cellular telephone signal generator located at the base of an antenna tower, was charging the neutral-ground with 10+ V and the 3rd, 5th, 7th and other harmonics were on the neutral conductors and water lines of homes, schools, and workplaces in the area, causing harmonic distortion of the power supply. Primary neutral voltage and 3rd, 5th, 7th and other harmonics on dairy farms were reduced to near zero when a shielded neutral isolation transformer was installed between the utility and the dairy. Animal behavior improved immediately, and milk production which had been depressed for 3 years, gradually returned to normal within 18 months after installation of the shielded transformer. Shielding prevents transients and harmonics on the utility primary from induction onto the user neutral and likewise prevents user harmonics and transients from getting onto the utility electrical line. Changes in concentrations of several blood and cerebrospinal fluid components, energy and fat metabolism, and reduced milk have been reported for cows exposed to EMF from overhead powerlines in Canada. Consequences are related to the time and intensity of exposure to EMF.

INTRODUCTION

Farm investigations revealed that transient and harmonic voltages and currents were related to animal behavior, health, and milk production of dairy cows on 12 farms. Details of methods and materials were reported previously (Hillman 2003) and results are in the DVD presentation that accompanies this article.

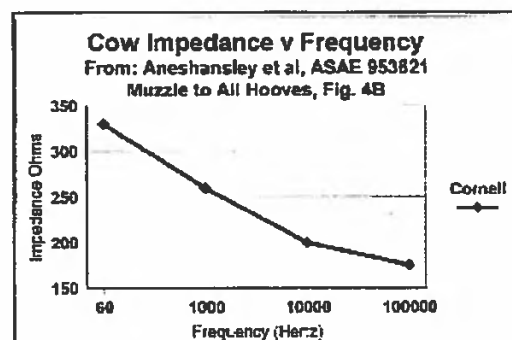
Briefly, the farm studies revealed that:

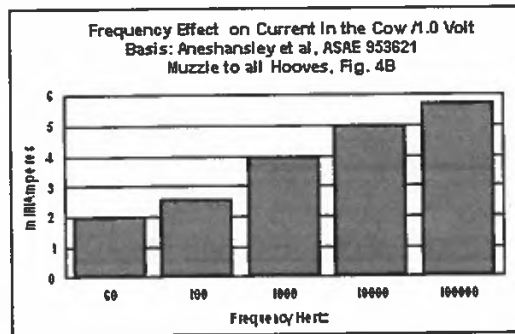
- # Transients and harmonics were prevalent on rural electric power lines and were commonly called "noise" or "dirty" electricity in the electrical industry.
- # Neutral-to-ground distorted non-sinusoidal transients averaged 280 ± 60.2 V on 3 farms for 165 days, and 79.9 V on five farms for 385 of 515 days as recorded by Fluke® EventRecorder VR-101.
- # The concentration of transients and harmonic impulses varied greatly from farm to farm, day to day, and time of day.
- # Milk per cow/d decreased as the number of transient events, hot-to-neutral and neutral-to-ground, transients (oscillations, spikes on the power supply) increased daily.
- # Milk was negatively correlated with phase-shift degree angle

of transients.

- # Step-potential oscilloscope voltage readings from the floor of milking stalls averaged 0.0628 V ($62.8 \text{ mV} \pm 39.8 \text{ mV}$) and ranged from 0 to 0.1516 V (151.6 mV) on five farms for 515 days.
- # Cow movement (steps/min) increased as the voltage differential (minimum - maximum) increased from 0.9 to 6.0 millivolts during the same minute and as the voltage standard deviation increased.
- # Milk per cow/d decreased as the number of 3rd, 5th, 7th, 21st, 28th, and 42nd, harmonics increased/d. Harmonics were correlated with the number of transients per day.
- # Milk decreased as the sum of triplen harmonics (3rd, 9th, 15th, 21st, 33rd, and 39th) increased/d ($P < 0.003$).
- # Cow impedance decreased as frequency increased.
- # Current in the cow increased as frequency increased.
- # Public Utility Commission (PUC, PSC) standards and use of 500-ohm resistors in test circuits adopted in Wisconsin and some other states underestimate effects on cow behavior, health, and milk production of non-sinusoidal, inferior-quality power on rural power lines.
- # IEEE 519, 1992 recommended 5% Total Harmonic Distortion (THD%) on the utility side of the meter, and 5% Total Distortion Demand (TDD%) on the end-user side of the meter, limits that were set for protection of electrical and electronic equipment must be applied for protection of livestock and humans as well.
- # The Grounded-Y distribution/transmission system uses the earth as a return conductor for neutral current resulting in earth currents that could be avoided by hard-wiring the neutral back to the substation.

Relationships between frequency of voltages and current passing through the cow were reported by Aneshansley et al. (1990, 1995) and are illustrated below. Voltage at harmonic frequencies increases amperage two to three times compared to sinusoidal 60 Hz voltage because of the reduced impedance of the cow at higher frequencies.





Sources of Inferior Quality Electrical Power

Wiring Faults: Causes of uncontrolled electrical voltage and current, commonly called “stray voltage” often include improper grounding, loose or corroded connections, poor condition of insulation on wires, wiring faults on motors and equipment, unbalanced loads on primary or secondary circuits, and tree branches brushing electrical lines. These faults may occur on-farm, on a neighbor’s farm, or on utility lines. Experts claim that faulty wiring accounts for some 80% of stray voltage problems on farms. However, if the electrical system in a building is sound, i.e., no faults and meets code, the only source of AC current for producing uncontrolled voltage is the neutral (grounded) conductor via the bonding with the grounds. Bonding allows current to flow to metal water pipes, lightning protection, and branch circuit equipment ground wires according to Ludington et al. (1987). The cow is almost always in the current path in series and in parallel with other resistances as the current seeks a return path to the substation of a grounded -Y, or to the transformer of a Delta system.

Power Quality Problems: The other 20% of electrical problems on dairy farms have not been described publicly, although a large volume of information concerning “dirty” electricity vs “clean” appears in scientific journals, and the standards for hospitals and electronics manufacturers are higher than for other users. “Power quality problems” are simply pollution of the power supply as surely as contaminated milk is considered polluted milk, but milk producers are shut-off from the market by law. No such regulation has been applied to utilities.

USDA-ARS Publication 696, (1991) Effects of Voltage or Current on Farm Animals: How to Detect and Remedy Problems, contains no information about the presence or effects of power quality on dairy cows, nor other species.

Barry Kennedy in his book, Power Quality Primer (2000), gives vivid descriptions of the effects of modern electrical and electronic control devices on the quality of electricity on power lines, and effects of power quality on operating equipment. A paucity of published reliable research has prevented valid conclusions regarding cause:effect relationships of electricity and animal performance from appearing in the agricultural literature. Secondly, facts and the testimony of knowledgeable witnesses in court testimony, when settled without completion of a trial is sealed (sequestered) by the Court, thus denying the public of knowing the cause or outcome of such decisions. Nevertheless, very few court decisions have been favorable to utilities.

Reasonable standards of power quality and responsibilities of both parties should help to provide efficient justice for both parties, and reduce the burden on the overloaded court system.

Power quality is defined by electrical engineers in terms of compliance of the power supply with nominal voltage and current. Deregulation has not improved the quality of electric power.

A transient voltage (transient or spike) is a temporary, unwanted voltage in an electric circuit. Transient voltages may range from a few volts to several thousand volts and last from a few microseconds to a few milliseconds. Oscillatory transient voltages are commonly caused by switching OFF high inductive loads and by switching large utility power factor correction capacitors for balancing loads on a power line. Impulse transients are commonly caused by lightning strikes and are distinguishable from oscillatory transients by the shape of the waveform distortion and by the number of oscillations unless allowed to resonate in the circuit by capacitors. Lightning arresters mounted on top of poles and substations are used by utilities to dampen impulse transients. Transients averaged 10 oscillations per transient event recorded by Fluke Event Recorder VR101 in these studies.

Harmonics are the major source of sine waveform distortion. The increased use of nonlinear equipment have caused harmonics to be more common. EPRI, Electric Power Research Institute, financed by utilities estimated that one-half of all electricity used in the United States would pass through electronic equipment by the year 2000. Because of the increased adverse effects of harmonics, the IEEE (Institute of Electrical and Electronic Engineers) adopted a standard for harmonics in 1992. The standard is referred to as IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems (IEEE 519-1992 ©1993) according to Kennedy (2000).

The IEEE standards were devised to prevent harmonic damage to transformers, motors, and electronic circuits. Cows, other livestock, and humans ought to be added to the damage list.

Harmonic currents are usually caused by nonlinear loads like adjustable speed drives, solid-state heating controls, electronic ballasts for fluorescent lighting, switched-mode power supplies in computers, printers, static UPS (uninterruptible power supply) systems, electronic and medical test equipment (Magnetic Radiation Imaging), rectifiers, filters, and electronic office machines. Nonlinear loads cause harmonic currents to change from a sinusoidal current to a non-sinusoidal current by drawing short bursts of current each cycle or interrupting the cycle. This causes the sinusoidal current waveform to become distorted. The total distorted wave shape is cumulative. The resulting non-sinusoidal wave shape is a combination of the fundamental 60-Hz sine wave and the various harmonics.

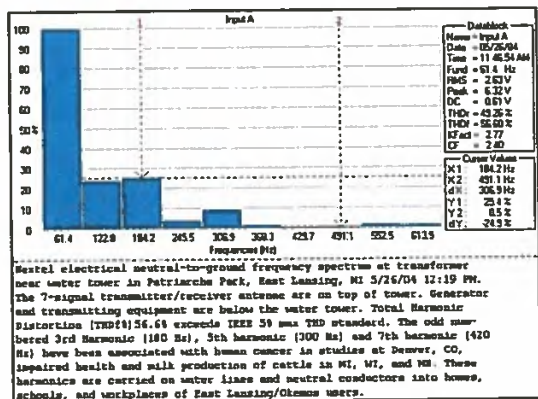
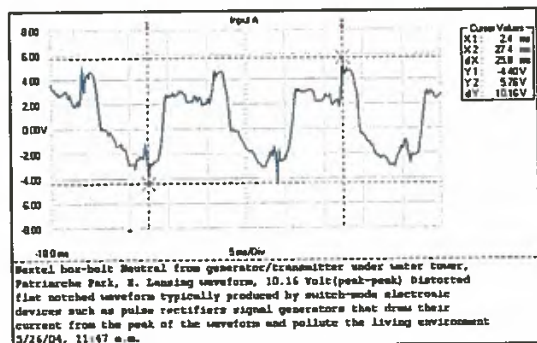
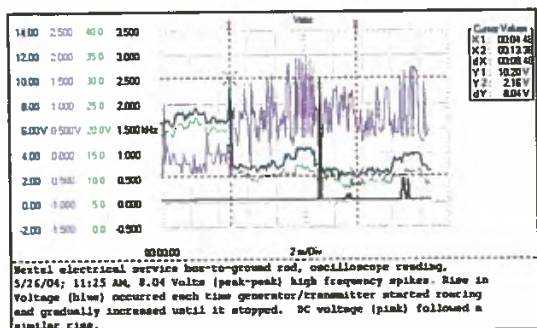
The switched-mode process results in a pulsed square wave which distorts the sine wave and produces harmonics (Kennedy 2000).

Further, single-phase nonlinear loads that draw current only during the peak of the voltage waveform, combine in a 3-phase circuit and produce triplen harmonics (multiples of the third order harmonics, like 3rd, 9th, 15th, etc). Triplen harmonics do not cancel but are additive and return exclusively on the

neutral conductor. The resulting magnitude of the neutral current may increase to 173 percent of the rms phase current. Thus the neutral current may exceed the capacity of the neutral conductor. Triplens cause overheating of the primary neutral conductor and may cause fires since there is no fuse or circuit breaker in the neutral circuit. Harmonics also cause the WATT meter to turn faster, thus inflating the electric bill.

A Source of Environmental Pollution was identified in East Lansing, MI. Flukeview prints of oscilloscope readings, waveform and harmonics are presented below.

A service-box neutral-ground of a cellular telephone generator/base-station with six antennae on the tower registered 10.16 V ac on the oscilloscope as in the Flukeview print-out. Nextel had taken a big bite out of the peak of the waveform and the frequency spectrum had 56% Total Harmonic Distortion with 2nd, 3rd, 5th, and 7th harmonics. They were also carried into electrical outlets and waterlines in homes and schools in the area.



Cows on a dairy farm in mid-Michigan were dancing (stepping, lifting feet, shifting body, and tail-switching) to avoid the pain of electrical shock. Oscilloscope Flukeview prints showed 8 to 12 V and harmonic distortion with 3rd, 5th, 7th, and 9th harmonics on the utility PN-to-ground. The secondary neutral carried 1.43 V tested by utility meters. The floor registered 300 to 400 mV, and leads from divider pipes to the floor of the operators' pit in the milking parlor carried 480 mV. The farmer observed that cows were not disturbed when the primary neutral-to-ground wire had been disconnected.

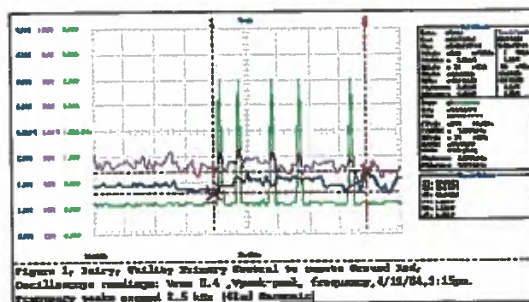
A neighbor had experienced the problem of cows dancing, stepping, tail-switching, and kicking off milkers (see the video), resulting in incomplete milking, declining milk production, and impaired health performance when 12 Vs were on the primary neutral and 1 V at cow contact. Utility experts claimed the voltage was too low to be "problematic." The neighbor had the power company move their service pole with transformer and down-ground about 200 feet from the milking parlor to the edge of the property. The dairy was served by 480-V single-phase service to the dairy, and an isolation transformer was installed by the dairyman. Cow behavior and milk production improved immediately and progressed to 29,200 lbs. per cow/year by 2004. However, when they tried to install a variable speed drive milk pump, the problem returned and the pump was removed. The transformer was not shielded to prevent harmonics and high frequency transients from passing from the primary to the secondary winding of the transformer.

A Virginia dairyman had the problem of cows dancing and milk production had decreased to nearly one-half over a three-year period. The utility measured voltage for 6 days and reported about 2/3 of the PN-G reading were between 2.4 and 3.0 V, while the remainder ranged from 3.6 to 4.8 V. Experts could find no cause for the poor performance of the herd. The primary neutral was bonded to cow contact metal pipes and reinforcements in the floor of the milking parlor to form an equal-potential environment in the dairy. An electrical engineer found the primary-neutral averaged 0.96 V and 1.0 V, (maximum 2.08 V) equivalent to 2 to 5 mA, assuming 500 ohms cow resistance, for periods of 16 days and 19 days.

Oscilloscope Flukeview readings at the Virginia Dairy Farm revealed 2.5 kHz spikes (green) accompanied by a 400 mV rise (blue line), and about 5.5 V (peak to peak) (red lines).

The peak of the waveform is chewed off and resembles the Nextel waveform.

The Frequency spectrum shows the neutral is loaded with 3rd, 5th, and 7th harmonics, indicating inferior quality power, and the herd was a victim of power supply pollution.



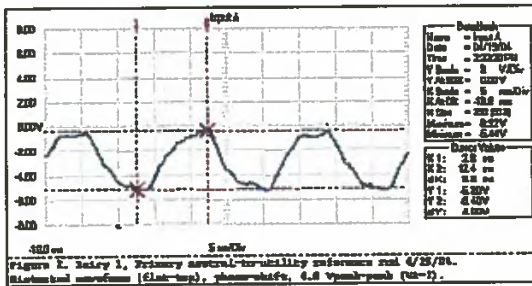


Figure 2. Dairy #1. Primary electrical for milking reference grid 4/28/04. Blotom ball measurement (Clamp-top), phase-shifted, 6.8 500mV-pk (10-1).

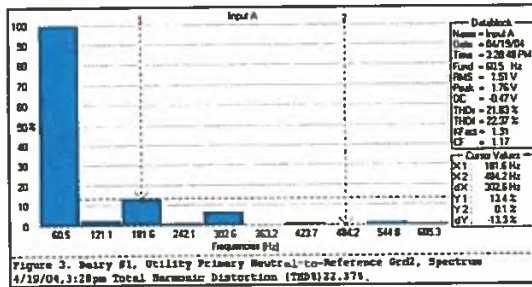


Figure 3. Dairy #1. Utility Primary Neutral-to-Reference Grid, Spectrum 4/28/04, 3:28pm Total Harmonic Distortion (THD)21.37%.

Transformer Electric Company, Roanoke, VA, built a shielded neutral isolation transformer (SNIT) and connected it between the utility and the dairy, with the center tap serving as the ground for the dairy.

After installing the SNIT: Voltage was reduced to 0.002 V (0.004 mA). Cows stopped dancing, and milk production gradually recovered to its highest previous level after about 18-months. In the interim, many good cows and replacements had been lost from the operation.



New Discoveries from on-farm research include:

- # Farm electricity is not always clean--Powerlines are polluted with transients and harmonics.
- # Cow resistance goes down as frequency goes up.
- # EMF < 1 Volt at cow contact may damage cows.
- # Cow behavior is affected at frequencies < 1000 Hz.
- # Cows need not be touching metal for harmonics.
- # Milk decreases as transients and harmonics increase.
- # Shielded neutral isolation transformer reduces harmonic voltage and current through the cow.
- # Behavior, health, and milk production improved when the primary neutral was isolated in problem herds.

Related University EMF Research

Burchard et al. at McGill University, Montreal, Quebec, Canada, have been studying effects of EMF on dairy cows for several years. Cows were exposed to 10 kV/m electric fields and 30 μTesla magnetic fields, for 28-day periods in reversal trials. Intensities are equivalent to standing under a 735 kV electrical transmission line. They reported in *Bioelectromagnetics* (2003).
 # Milk production decreased 5% from exposed cows compared

to controls

- # Fat-corrected milk decreased 14% compared to controls
- # Milk fat decreased 16% compared to controls
- # Dry matter intake increased 5% compared to controls.

Physiological effects from Burchard et al. include:

- # Melatonin, a hormone produced in the Pineal gland in the brain, decreased in cows exposed to EMF.
- # Melatonin has strong oncostatic immunological, and antioxidant properties in the blood. It normally follows the pattern of light:dark nocturnal exposure.
- # Progesterone increased in lactating pregnant cows.
- # Length of estrus cycle increased 3 days.
- # Insulin-like growth factor (IGF-1) increased in blood.
- # Growth hormone was modified during part of the nocturnal cycle.
- # Macro and trace element changes in blood – Calcium, magnesium, iron, and copper were affected by EMF exposure.
- # Cerebrospinal fluid (CSF) changes in concentrations of Ca, P, Mg, Mn and Na occurred.
- # Quinolinic acid increased in CSF, tryptophan tended to increase in CSF.
- # CSF changes were consistent with weakening of blood-brain barrier.

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Resource Management Plan Protest Critical Item Checklist

The following items *must* be included to constitute a valid protest
whether using this optional format, or a narrative letter.
(43 CFR 1610.5-2)

Before including your address, phone number, e-mail address, or other personal identifying information in your protest, be advised that your entire protest—including your personal identifying information—may be made publicly available at any time. While you can ask us in your protest to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so. All submissions from organizations and businesses, and from individuals identifying themselves as representatives or officials of organizations and businesses, will be available for public inspection in their entirety.

Resource Management Plan (RMP) or Amendment (RMPA) being protested:
B2H BLM EIS

Name: David and Karen Yeakley
Address: 42687 Hudson Rd., Baker City, OR 97814
Phone Number: (541) 523-6900

Your interest in filing this protest (how will you be adversely affected by the approval or amendment of this plan?): As former Mayor and Baker Co. Chamber of Commerce Manager, the line would harm view shed of BLM managed OR Trail Interpretive Center. This center is educational, historic and tourism development.

Issue or issues being protested: Appendix K - 1274 a-f, page K9-500-501 mitigation or money will not replace land and wildlife. Once it's gone, it's gone. Sage Grouse wasn't listed by US Fish and Wildlife due to State of Oregon + Baker Co. exercising measures to protect the Sage Grouse.

Statement of the part or parts of the plan being protested:
Oregon has designated utility corridor thru central OR. Not being considered. There is new + improved transmission of HVAC. High voltage lines not being pursued. This would be underground + energy efficient.

Chapter: 3
Section:
Page: 3-235-240
(or) Map:

Attach copies of all documents addressing the issue(s) that were submitted during the planning process by the protesting party, OR an indication of the date the issue(s) were discussed for the record.

Date(s): Feb 25, 2015 Attached Comments

A concise statement explaining why the State Director's decisions is believed to be wrong: This line is not needed and harms Oregon land, viewsheds, wildlife and pollinators (Bees, Butterflies). We are destroying history for future generations (OR Trail). I am very concerned for our health and that of cattle and ag crops grown near this line.

Signed: Dec. 19, 2016

Karen Yeakley
David Yeakley

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1 (a) Idaho Power is a large, powerful
2 corporation bullying its way through a small rural
3 community just because it can. Regard their contractual
4 agreement to provide fish ladders on the dams they built
5 on the Snake, but then reneged on their obligation once
6 the dams were up and running. They cannot be trusted.
7 There are no repercussions in place if they won't and
8 don't follow up on their promises and again, we, the
9 local citizens, have to live with the damages.

10 (b) Morals and decency have been thrown out
11 the window. Money and greed are trying to replace them.
12 If approved, Idaho Power is guaranteed an \$80 million
13 profit for itself and their partners' shareholders.
14 What does Baker get?

15 (c) This process needs to ask bigger
16 questions. B2H is the subject to a vetting system that
17 can't and never has said no to other similar projects, a
18 vetting system that is allowing this boondoggle to get
19 its rubber stamp. This process needs a non-partial
20 forum for fairness, a council made up of people not
21 picked or reinstated by a governor who was backed by
22 PacifiCorp, Idaho Power's silent partner in B2H.

23 (d) While these hearings are supposed to bring
24 out the flaws in the proposed plan, they also help Idaho
25 Power plug their leaking dike. These are problems Idaho

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1 Power should have already foreseen if they had planned
2 better.

3 (e) I have fought this B2H proposal since near
4 the beginning. It was a bad idea then and it's an even
5 worse idea now.

6 (f) All we, the public, would like in this
7 process is impartiality and that we have not been given.
8 Thank you.
9 HEARING OFFICER WEBSTER: Thank you.
10 After we hear from Ms. Yeakley, we'll hear
11 from Irene Gilbert.
12 MS. KAREN YEAKLEY: I made copies for the
13 Council and the Department of Energy.
14 HEARING OFFICER WEBSTER: Start with your name
15 and address.
16 MS. KAREN YEAKLEY: Yes.
17 HEARING OFFICER WEBSTER: Thank you.
18 MS. KAREN YEAKLEY: For the record, my name is
19 Karen Yeakley. I'm a former mayor of Baker City and the
20 former manager of the Baker County Chamber of Commerce,
21 and former president of the Chamber.
22 Let's be clear, Idaho Power is a profit-making
23 business. They are in business to make money. The
24 board of directors have a fiduciary responsibility to
25 protect the investment and provide shareholders with a

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1 return on their investment. This has been 12 years, and
2 if I was on the Idaho Power board, I would be asking if
3 this was the best investment. I'd be jumping up and
4 down wondering, why can't we get this done? If it was
5 that necessary 12 years ago, it should be even more
6 necessary today. There is new technology, and the data
7 used is not current nor represents residents' input
8 along the proposed route.
9 I'm old school, I was raised differently. I
10 was taught to give more here while I was here before I
11 leave. I've never seen too many people leave with their
12 wagon full of their goodies off to heaven. So that's
13 why I volunteer and do things. And I appreciate your
14 time in volunteering, too. It's not an easy job.
15 Believe me, I understand that.
16 In your siting standards of protecting against
17 adverse environmental impacts, this project, due to
18 construction, will have significant adverse impacts.
19 Construction decreases farmland that affects our food
20 source, the wildlife, pollinators like bees and
21 butterflies, and cattle grazing.
22 Oregon Administrative Rules and Council
23 standards have numerous references to mitigation.
24 Mitigation will not help dead eagles, dead owls, dead
25 blue heron, dead ducks, dead geese, dead hawks, dead

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1 trumpeter swans, and dead sage-grouse that we've so hard
2 and diligently tried to protect.
3 It will not protect the Oregon Trail ruts at
4 the Interpretive Center. I watch from my house busloads
5 of students in May headed up to the center to learn of
6 our history from across the state. Use of compensatory
7 mitigation is not okay; dead is dead. It will not come
8 back. The land will not come back. You cannot mitigate
9 that, and you cannot buy off property and values and the
10 way of life in Baker County.
11 We should learn from the California fires that
12 killed 85 people and destroyed thousands of buildings.
13 PG&E utility company seeks bankruptcy protection over
14 California fires. Governor Kate signed House Bill 2222
15 requiring annual report on wildfire protection efforts.
16 The bill was inspired in part by the wildfire last year
17 in Paradise, California. Frankly, I would hate to have
18 been on that board knowing that my transmission lines
19 caused that fire and all the damage it did to places in
20 California.
21 I've enclosed an article on electric and
22 magnetic fields affecting milk production and behavior
23 of cows. If the transmission lines can cause that
24 effect on cows, then what is the long-term effect? Why
25 would we want to risk public health with the side

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1 effects of the transmission lines? We don't want the
2 transmission lines here any more than we need the oil
3 drilling on the Oregon Coast.
4 I have included several news clippings and our
5 testimony during the NEPA process for your review.
6 I thank you for your time.
7 Do you have any questions of me? Thank you.
8 HEARING OFFICER WEBSTER: Thank you.
9 Following Ms. Gilbert, we'll hear from JoAnn
10 Marlette.
11 MS. IRENE GILBERT: Hi. Irene Gilbert, here
12 representing myself, Friends of the Grande Ronde Valley,
13 and I'm a member of the Stop B2H group. So thank you
14 for allowing me to speak again. I spoke yesterday on
15 noise. And actually, if anyone in the audience wants
16 copies of my comments, I have them with me.
17 Today I kind of wanted to introduce with a few
18 sort of responses to Commissioner Bennett's comment, and
19 he talked about the need for mitigation. I would be
20 concerned, or I am concerned in this county with the
21 fact that this line is taking some of the very limited
22 allotment of basically damage to sage-grouse habitat.
23 And when you talk about mitigation, I start thinking,
24 what could they use with that land? Could they build a
25 manufacturing site? Would they build homes and utilize

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1 it? In this county, they can't build a garage once they
2 run out of that allotment of sage-grouse habitat that
3 they can damage.
4 So I'm really concerned about, No. 1, the lack
5 of mitigation; No. 2, the way mitigation is dealt with.
6 I know with habitat impacts there is no mitigation
7 provided whatsoever for all the farm damage. So of
8 course, developers like to place their developments on
9 high-value farmland. When they do provide mitigation,
10 it's only for the basis of structures. So when you're
11 talking about a transmission line, what they consider
12 permanent is a basis of those big metal structures, and
13 they make the folks reseed what they have torn up as far
14 as the habitat around there.
15 I don't think that was ever the intent of the
16 rules, but that's the way it's being interpreted. You
17 end up with thousands and thousands of acres of damage
18 in a 60-acre mitigation site. I'm making that up but it
19 really is that radical. It's unbelievable.
20 Anyway, I want to talk about mitigation. I
21 was reading the developer's material and they said, Oh,
22 we're going to mitigate for these damages, and we'll
23 provide land that's going to be protected permanently.
24 Well, that marsh is a federal mitigation site for the
25 Bonneville Power dam for the damages, and that's

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1 supposed to be protected forever. There is supposed to
2 be absolutely no damage to that federal site. Or the
3 F&W gets paid every year to make sure there's absolutely
4 no impacts to that site.
5 Well, this is going to impact that site. It's
6 going to impact the animals that go back and forth
7 daily. And so I'm not sure that when they say permanent
8 protection that Idaho Power really means permanent
9 protection.
10 I'm concerned because moving this line, I know
11 Idaho Power has worked with people and said, Oh, they're
12 so mad about this, we'll see if we can do a little
13 micrositing. Well, first off, their area that they can
14 microsite is 500 feet across. So without an amendment
15 there's not going to be a lot of micrositing going on.
16 And I'm concerned that if it's not in the site
17 certificate, it isn't a guarantee and they can back out
18 on anything they say and it will be after the period of
19 time has lapsed when anyone can ask for a contested
20 case.
21 I'm also concerned because when you move the
22 line, you're just changing the damage to somebody else.
23 You're changing the damage to making it apply to other
24 animals, other people. The answer is, this is not a
25 line that's needed, and it shouldn't be placed, and it's

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1 causing a whole lot of damage in this state without
2 benefits to us.
3 So anyway, now I'll get on to what I mainly
4 was going to talk about, which was weeds. And I've been
5 kind of taking these sections one at a time, which is
6 challenging because when you talk about weeds, you have
7 to check about, well, eight or nine different areas in
8 the application. I don't think that ODOE did a real
9 good job of trying to put things in a capsule form where
10 people can find information.
11 But the invasive weeds, there's a state law
12 that says that the owner or the user of property has to
13 assure that no invasive -- that invasive weeds do not go
14 to seed. Now, Idaho Power has suggested that they will
15 do annual monitoring for the first 5 years unless Oregon
16 Department of Energy tells them they can get out of this
17 earlier. But it's once a year. And I went through some
18 of the invasive species of weeds that are along this
19 transmission line, and they come to -- they bloom and go
20 to seed at different times. So I can absolutely assure
21 you there's nowhere on this line where a once-a-year
22 approach to dealing with invasive weeds is going to keep
23 them from going to seed.
24 Idaho Power thinks that they should only be
25 responsible for their right of way. Well, if they're

July 12, 2019 Additional Comments for B2H Project for the Energy Facility Siting Council

I testified at the Baker June 19, 2019 hearing of the Energy Facility Siting Council and no more than got home and found in our newspaper (included): 15 acre fire near Brownlee Dam caused by bird touching a power line. Again, it is not if but when will the B2H Transmission line cause a fire like in California. Banks are mandated to have contingency and reserve funds. Why not Idaho Power. Oregon should not have to pay for fire, homes, and wildlife damage. Let us not put our fire fighters in danger. Council Standard 345-022-0050 on retirement and financial assistance should apply and enough to cover the damages and restoration of homes, and land.



Council Standard 345-022-0000 general standards cannot support overall public benefit vs adverse affects. Public testimony opposes the B2H project and gives testimony as to why.

Council Standard 345-022-0022 Soil Protection. B2H will impact agriculture land, ruts of the Oregon Trail, and mitigation will not change land features.

Council Standard 345-022-0030 Land Use. Baker County commission and now Union County have gone on record declining this project. In Baker county, the land affected is agriculture based (EFU zones) and Sage Grouse protected.

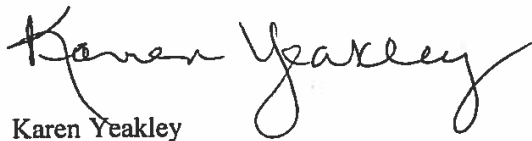
Council Standard 345-022-0040 Protected areas. There are other alternative routes or sites to be studied that may not be unsuitable. Former Gov. Tom McCall created utility corridor thru middle of Oregon. New technology exists that would help in protecting protected areas (Siemens Company online site).

Council Standard 345-022-0060 Fish and wildlife habitat. This project will affect the sage grouse. Birds do fly and do not just stay in one designated area. The routes identified are still too close to sage grouse habitat.

Council Standard 345-022-0070 Threatened and Endangered species. This project threatens sage grouse, eagles, blue herons, owls, and monarch butterflies.

Council Standard 345-022-0080 Scenic resources. The transmission lines block clear views of the Oregon Trail Interpretive Center and covered wagon look as well as the mountains behind the Center.

Thank you for your time.

A handwritten signature in cursive script that reads "Karen Yeakley". The signature is written in black ink and is positioned above the typed name and address.

Karen Yeakley
42687 Hudson Rd.
Baker City, Oregon 97814

Note: hard copy with newspaper clipping coming in the mail.

TARDAEWETHER Kellen * ODOE

From: dyeakley@charter.net
Sent: Friday, July 12, 2019 11:01 AM
To: B2H DPOComments * ODOE
Subject: Additional Comments on B2H for Energy Siting Council
Attachments: More B2H comments July 11, 2019.doc

I will send hard copy in the mail with newspaper clipping.

Thank you.

Karen Yeakley
Baker City, Or

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Baker City, Oregon 97814

Note: hard copy with newspaper clipping coming in the mail.

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:53 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposed Order 5/23/2019
Attachments: Scan 2019-8-15 17.38.19.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter signed by me and 54 other residents of La Grande expressing our concerns regarding the B2H Project and we request that EFSC deny the Site Certificate.

I have also sent a bound copy of this material by the US Postal Service.

Sincerely,

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, OR. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the usage of the "Local Streets" ¹ specifically the Modelaire-Hawthorne Loop) ², hereafter referred to as the "loop", of La Grande to access the site entrance. This residential "loop" was constructed without sidewalks for a new development around the early 1960s.

According to OAR 345-022-0110, Public Services (pg. 5. April 2017) "The applicant...must address all permanent and temporary impacts of the facility on housing, traffic, safety, police and fire protection, health care and schools." ³

My impression from reviewing the application Page 17 ⁴ is that the applicant has not fully examined the final portion of the intended route nor does it fully recognize or address the need for traffic mitigation. This "loop" is the only access to/from thirty-six houses to the rest of the city. The area to the north of the "loop" is occupied by the Grande Ronde Hospital and Medical Clinic. Two blocks to the east is located the local high school and a grade school. ²

In June of 2016, the Grande Ronde Hospital petitioned the City to have a conditional use for a parking lot expansion project next to Hawthorne. The Conditional Use Permit was approved subject to the Condition of Approval that "No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is developed to residential standards and is not designed to support commercial traffic." ⁵

The La Grande Director of Public Works, Kyle Carpenter, provided information regarding the widths for the streets in question. The two streets range from 33 feet to 37 feet in width with no sidewalks. I personally measured the area where the unpaved stem of Hawthorne leaves the "loop" to go up the hill. At the junction it measures 32 feet curb cut to curb cut and narrows to 18-21 feet in width as it goes around the corner up the hill. 6 The Public Works Director also provided pictures of the mapping system showing the existing utilities located in the "loop". 7-8. It should also be noted that from the entrance to the "loop" at Sunset Drive to the entrance of the site the road has a 16% grade.

Attachment U2 9 from the application shows an "Aerial Lift Crane to be Used During Construction" and the Transportation and Traffic Plan on page 19 10 lists a number of other vehicles anticipated to be used. Article 6.6 — Public Street Standards for the City of La Grande Section 6.6.002 states that "Collector Streets are designed to withstand normal trucks of an HS20 loading. Larger trucks are to utilize Arterial Streets where at all possible." 11 The majority of vehicles listed on page 19 exceed that limit and would be using a Local Street in addition to Arterial and Collector Streets. According to the Public Works Director the two streets in the "loop" were designed as Local Streets for residential use, able to accept the pressures of HS20 for the purpose of an occasional need such as a weekly garbage truck or an emergency vehicle but for no more than 5% of the time. The paving construction of these over 50 year old streets in the "loop" was not designed for repetitive use by vehicles heavier than a normal car. These streets in the "loop" have not been repaved, only patched when necessary, since they were first constructed.

The application does not address the "loop" specifically, but 3.1.2 (pg. 19) 10 and Table 6 (pg.17) 12 of the Transportation and Traffic Plan indicate there would be numerous vehicles using this route. Not knowing exactly just which vehicles would be on the "loop" daily but making a conservative estimate of 50 round trips (100 single) it would be a constant parade with one truck every 7.2 minutes. This is unacceptable for numerous reasons including constant excessive noise.

Not only would weight of the vehicles be a problem but the narrowness of the "loop" streets and the ninety degree blind curves that would have to be executed would be either impossible or extremely dangerous considering the turning radius for many of these large vehicles. The

already dangerous situation for a number of driveways that exit onto these "loop" streets at blind curves would be exacerbated. 13-14

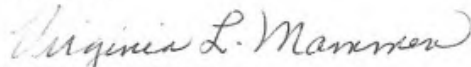
When considering only the traffic and safety issues listed above, the use of the "loop" as a part of the route for Idaho Power seems to be not only dangerous for the residents but unconscionable and irresponsible for Idaho Power to use such streets that are currently primarily for the neighborhood for walking (children to school, all ages for physical training), driving, or biking. I fear there are standards that are either not being considered or they are intentionally being ignored. There should be some common sense, courtesy and respect for the impact this project would impose on any neighborhood.

Finally, La Grande Ordinance Number 3077, which adopted Oregon State Traffic Laws by reference, states in Section 17 page 8 "It shall be unlawful for any person, firm or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes." Neither Modelaire/Hawthorne Loop nor Sunset Drive are posted as truck routes. 15-16

A site review and traffic plan must be completed prior to the cite certificate being issued and not 90 days prior to construction as stated.

For the above reasons I oppose the usage of the proposed route for the construction of the B2H transmission line.

Sincerely,



Virginia L. Mammen
405 Balsa
La Grande, Oregon. 97850

gmammen@eoni.com

Exhibit 1

City of La Grande Ordinance Number 3242,
 Series 2018
 Page 236 of 312

**TABLE 1
 STREET STANDARDS**

Functional Classification	ADT Volume	Speed (mph)	# of Travel Lanes	Travel Lane Width	Turn Lane or Median Width	Bike Lanes	Min. Bike Lane Width	On-Street parking
Downtown Arterial	10,000	20	2-3	11'	11'			both sides
Arterial	10,000	40-55	2-5	12'	4-14'	optional ⁴	5'	none
Major Collector	2,000 - 10,000	25-45	2-3	11'	12'	required	5'	one or both sides
Minor Collector	1,000 - 2,000	25-35	2	11'	none	Optional ⁵	5'	one or both sides
Local Street	0 - 1,000	15-25	2	10'	none	none	none	one or both sides

Functional Classification	Sidewalks	Min. Sidewalk Width	Planting Strip Width ¹	Total Paved Width ²	Total ROW Width ³	Private Access Spacing
Downtown Arterial	required	12'	3'6" ⁶	49'	80'	200'
Arterial	required	5'	8'	36'-72'	80'-102'	200' - 400'
Major Collector	required	5'	8'	52'-60'	62'-90'	150' - 300'
Minor Collector	required	5'	8'	30'-48'	60'-78'	75' - 150'
Local Street	required	5'	8'	28'-36'	40'-66'	Each Lot

¹A portion of the required planting strip width may be used instead as additional sidewalk width or reduced right of way, as appropriate.

²The minimum of the paved width was calculated with the following assumptions:

- Arterials: Two (2) travel lanes, four foot (4') median divider, no center turn lane, no bike lanes.
- Major Collectors: Two (2) travel lanes, two (2) bike lanes, no center turn lane, parking on one (1) side.
- Minor Collectors: Two (2) travel lanes, parking on one (1) side of street, no bike lanes.
- Local Streets: Two (2) travel lanes, parking on one (1) side of street.

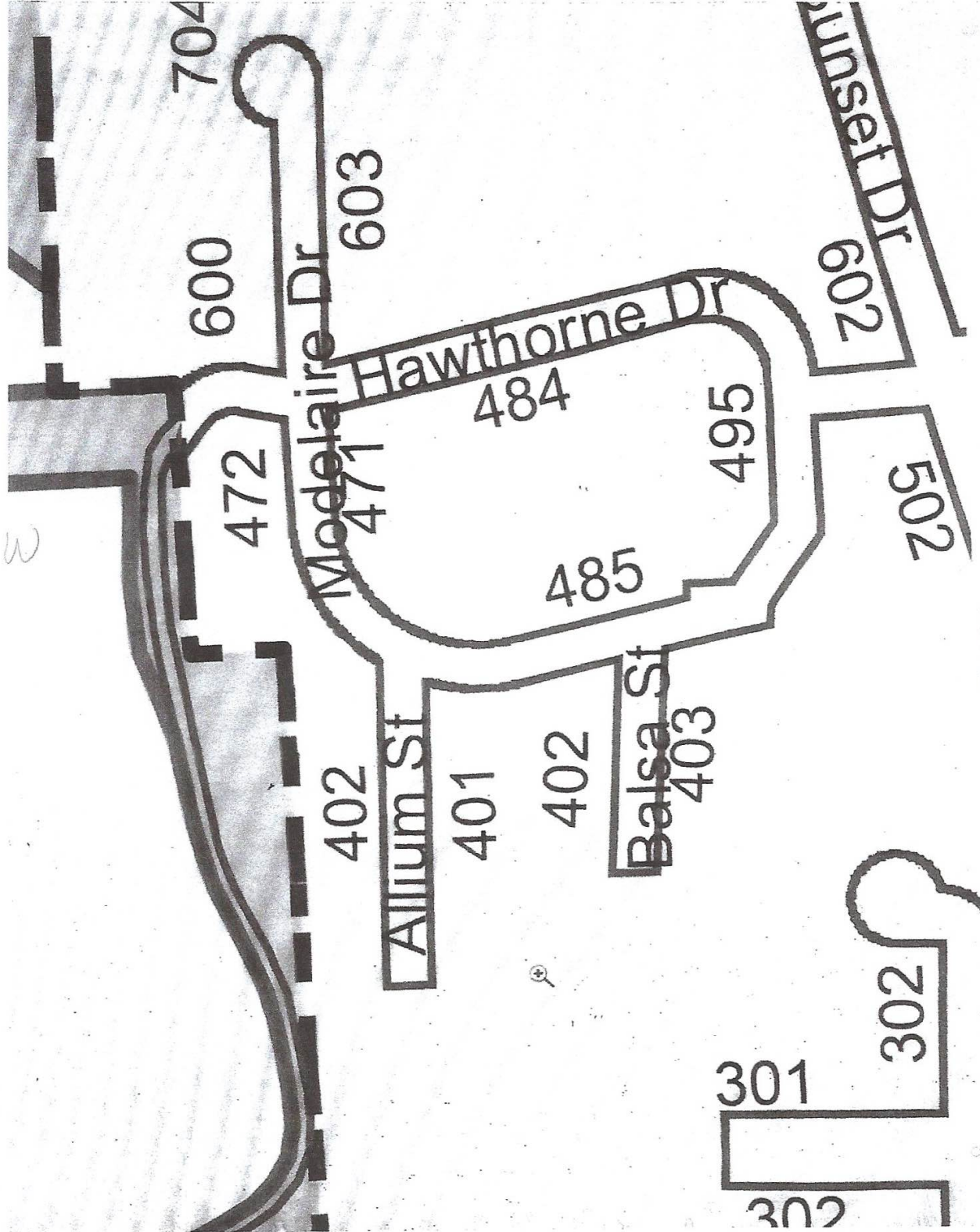
The maximum paved width for each street was calculated assuming the inclusion of all required and optional facilities. Minimum paved widths for each street are as required in Section 6.2.005 of this Code.

³These right-of-way width ranges are for new streets.

⁴Bike lanes should be provided on Arterials unless more desirable parallel facilities are designated and designed to accommodate bicycles.

⁵ Bike lanes should be provided on Minor Collectors where traffic volumes or other factors warrant. Otherwise, Minor Collectors should be designed and designated as shared roadway facilities with wide outside travel lanes of 14' on important bike routes.

Exhibit 2



5

Exhibit 3

Public Services

ORAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

ORAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

ORAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (ORAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (ORAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

ORAR 345-024-0010 and 345-024-0015

This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety. Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

ORAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



Exhibit 4

Idaho Power Responses to Comments and Requests for Additional Information on the B2H ApASC
 from the City of La Grande
 Compiled by ODOE. RAI's from the City of La Grande and Responses from IPC

U	U-Public Services include utilities such as road systems, water, sanitation services, power, and other amenities necessary for the construction.	Ordinance #2912, Series 1997 gives the City jurisdiction and control on all City street rights-of-way and Ordinance #3077, Series 2009, establishes the process and requirements for permits and licenses for uses of the streets that are not normal uses and may result in damages.	The project construction has two major road systems through La Grande that are proposed for this project – Morgan Lake Road via Gekeler Lane, 'C' Avenue, Walnut Street, and on up Morgan Lake Road. Roads along these routes are used by the ambulance service for accessing the hospital, the public transit system on its normal daily route, citizens to access locations within and outside this area and also for the school busing system for transporting kids to the La Grande Middle School, La Grande High School and Central Elementary School. In addition to the vehicular modes of travel, those routes are heavily used by bicyclists and pedestrians. The other route that would be utilized is the same route with the exception of turning onto Sunset Drive and up Hawthorne Street to a private gravel road that heads up the area above Deal Canyon. Two other routes that are not addressed but that would be obvious access routes for construction would be South 12th Street and South 20th Street. As a general rule, City streets are built with ninety degree angles, which may restrict some	To address the City's concerns regarding traffic and road use within the city's limits, Idaho Power has added the following proposed conditions to Exhibit K: <i>Land Use Condition 9: Prior to construction in Union County, the site certificate holder shall complete the following to address traffic impacts in the county:</i> <i>a. The site certificate holder shall finalize, and submit to the department for its approval, a final county-specific transportation and traffic plan. The protective measures described in the draft Transportation and Traffic Plan in ASC Exhibit U, Attachment U-2, shall be included and implemented as part of the final county-specific plan, unless otherwise approved by the department;</i> <i>b. The site certificate holder shall work with the Union County Road Department and the City of La Grande Public Works Department to identify concerns related to Project construction traffic; and</i> <i>c. The site certificate holder shall develop traffic control measures to mitigate the effects of Project construction traffic.</i> <i>Land Use Condition 26: During construction in Union County, the site certificate holder shall conduct all work in compliance with the Union County-specific</i>
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Exhibit 5

103

IV. CONCLUSIONS

104 Based on the Findings of Fact above, the Planning Commission concludes that the application meets the
105 requirements established in LDC Articles 8.5 and other applicable codes and Ordinances.

106

107

V. ORDER AND CONDITIONS OF APPROVAL

108 Based on the conclusions above, the Planning Commission approves the Conditional Use Permit as
109 requested, subject to the following Conditions of Approval:

- 110 1. No driveway access to GRH parking lot areas shall be permitted onto Hawthorn Drive as such street is
111 developed to a residential standards and is not designed to support commercial traffic.
- 112 2. Any existing driveway curb cuts along Hawthorn Drive bordering GRH's property, that are not used for
113 residential purposes, shall be removed and replaced with City standard improvements that exists
114 adjacent to such areas.
- 115 3. There is a storm sewer line extending through the project area that shall to be protected. Any
116 improvements that may affect the storm sewer line shall be reviewed and approved by the Public Works
117 Director.

118

119

VI. STANDARD CONDITIONS OF APPROVAL FOR LAND USE APPLICATIONS

- 120 1. **Revisions to a Valid Conditional Use Permit:** Any variations, alterations, or changes in a valid
121 Conditional Use Permit requested by the deed holder shall be considered in accordance with the
122 procedures of the Land Development Code as though a new Conditional Use Permit were being applied
123 for.
- 124 2. **Public Works Standards:** Where a development involves work within the public right-of-way, a Right-
125 of-Way Permit shall be obtained from the Public Works Department in advance of commencing with any
126 work in the right-of-way. All improvements within the public right-of-way shall be in conformance with the
127 most recent adopted City of La Grande "Engineering Standard Drawings and Specifications for
128 Construction Manual."
- 129 3. **Building Permits:** The City of La Grande Building Department shall be contacted early in the process
130 and in advance of development to coordinate and obtain required building, plumbing, electrical and/or
131 mechanical permits. All required permits shall be acquired in advance of construction.

132

133

VI. OTHER PERMITS AND RESTRICTIONS

134 The applicant and property owner is herein advised that the use of the property involved in this application
135 may require additional permits from the City of La Grande or other local, State or Federal Agencies.

136 The City of La Grande land use review, approval process and any decision issued does not take the place of,
137 or relieve the applicant of responsibility for acquiring such other permits, or satisfy any restrictions or
138 conditions thereon. The land use decision herein does not remove, alter, or impair in any way the covenants
139 or restrictions imposed on this property by deed or other instrument.

140 The land use approvals granted by this decision shall be effective only when the rights granted herein have
141 been exercised and commenced within one (1) year of the effective date of the decision. In case such right
142 has not been exercised and commenced or an extension obtained, the approvals granted by this decision
143 shall become null and void. A written request for an extension of time shall be filed with the Planning
144 Department at least thirty (30) days prior to the expiration date of the approval.

145

146

Exhibit 6

7/25/2019

Gmail - Modelaire Roadway Specifications



Virginia Mammen <4gmammen@gmail.com>

Modelaire Roadway Specifications

3 messages

Kyle Carpenter <KCarpenter@cityoflagrande.org>
To: "gmammen@eoni.com" <gmammen@eoni.com>

Fri, Jul 12, 2019 at 1:51 PM

I have attached a couple pictures of our mapping system that will give you a sense of where existing utilities are in Modelaire and Hawthorne. As for the widths of the roadways, I took measurements in multiple places, and found the following:

- Modelaire Drive (F Avenue) between Sunset Blvd and Hawthorne Drive is approximately 33 feet wide with a grade of about 5 Percent.
- Hawthorne Drive is approximately 32 feet wide at the bottom near the intersection of Modelaire/F Avenue and widens to about 34 feet where it intersects Modelaire at the top of the hill. The grade heading up hill is approximately 15.5 Percent.
- Modelaire Drive is generally 36 feet wide with some minor variability generally less than a foot (35' to 37'). On the southernmost segment of the roadway where the majority of the elevation gain is observed the grade is approximately 16 Percent.

Let me know if there are any other specifications of these roadways that you are interested in that I have missed. Have a great weekend and thanks for the treats, the guys were very appreciative.

Kyle Carpenter, PE

Public Works Director

City of La Grande

Public Works

Ph: (541) 962-1325

Fax: (541) 963-4844

2 attachments



Hawthorne.jpg
150K

Modelaire.jpg
120K

7/25/2019

0 (1397x451)

Exhibit 8



Exhibit 9

attachment U2

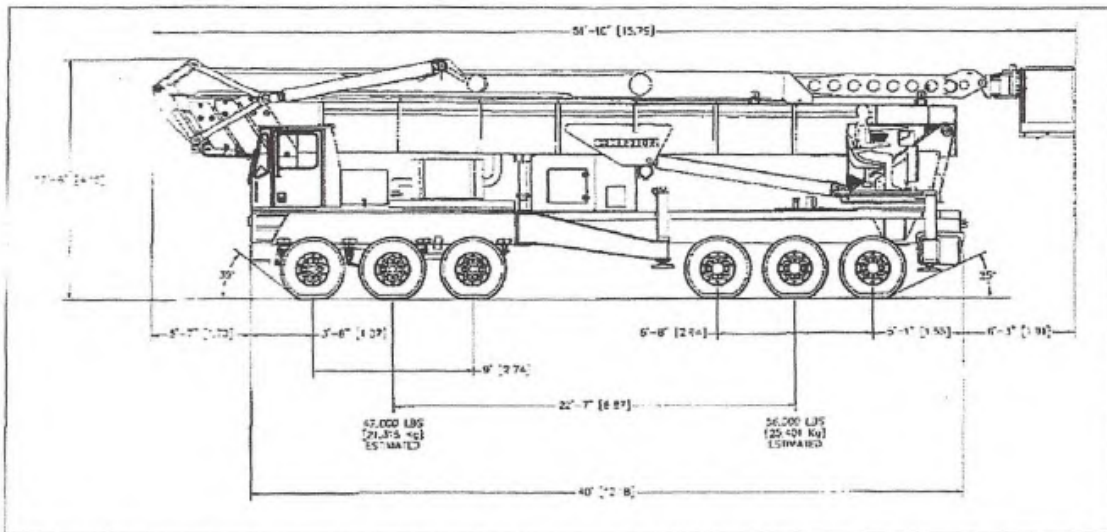


Figure 2. Example Aerial Lift Crane to be Used During Construction (Roadable Length 52 Feet; Width 8 Feet 6 Inches)

Exhibit 10

The following is a summary of anticipated equipment to be used for each transmission-line construction activity.

- Survey work: pickup trucks or ATVs.
- Timber removal: pickup trucks, feller bunchers, dump trucks, wood chippers.
- Road construction: pickup trucks, bulldozers, motor graders, and water trucks.
- Hole digging, installation of directly embedded structures, or foundation installation: pickup trucks, 2-ton trucks, digger derrick trucks, hole diggers, bulldozers, concrete trucks, water trucks, cranes, hydro cranes, wagon rock drills, dump trucks, and front-end loaders.
- Hauling lattice steel members, tubular poles, braces, and hardware to the structure sites: steel haul trucks, carry alls, cranes, and forklifts.
- Assembly and erection of structures: pickup trucks, 2-ton trucks, carry alls, cranes, and a heavy lift helicopter.
- Wire installation: pickups, wire reel trailers, diesel tractors, cranes, 5-ton boom trucks, splicing trucks, three drum pullers, single drum pullers, tensioner, sagging dozers, carry-alls, static wire reel trailers, bucket trucks, and a light duty helicopter.
- Final cleanup, reclamation, and restoration: pickup trucks, 2-ton trucks, bulldozers, motor graders, dump trucks, front-end loaders, hydro-seed truck, and water trucks.

The highest level of traffic will be when the wire stringing operations begin while several other operations are occurring at the same time, which will likely include ROW clearing, installing foundations, hauling steel, and assembling and erecting structures. For the station work, the highest level of traffic will be during site grading and foundation installation. For the communication station sites, the highest level of traffic will be during grading and site preparation.

Detailed estimates of trips generated by transporting Project construction equipment will be provided by the construction contractor prior to construction.

3.1.3 Traffic Related to Timber Removal

In forested areas, the Project will require removal of timber from the Project ROW and for construction and improvement of access roads. Specific timber harvest plans have not been finalized. Logs from timber clearing may be transported to nearby sawmills. Decisions regarding transportation routes for harvested timber will be made following completion of a timber harvest plan, and the number of log truck tips will be estimated when the timber harvest plan has been finalized. Logging slash will remain onsite if possible. For additional discussion regarding removal of timber in forested areas, see Exhibit K, Attachment K-2, ROW Clearing Assessment.

3.1.4 Impacts to V/C Ratios

Based on the estimated trip generation numbers in Tables 4 and 6, a maximum of approximately 1,294 daily one-way vehicle trips are expected within any one construction spread. To facilitate traffic and other analyses, the two construction spreads are divided into smaller sections based on similar construction windows and seasonal weather restrictions. Not all construction sections will have the same number of concurrent construction activities, depending on how the construction contractor sequences and executes the Project. Some sections will have fewer daily vehicle trips. For the purposes of the traffic analysis, the spreads are divided into five sections with multi-use areas that could have additive traffic impacts. The sections are assumed to have approximately equal levels of activity. The 1,294 daily one-way trips per spread divided over five sections of more concentrated traffic results in 259 daily one-

Exhibit 11

City of La Grande Ordinance Number 3242,
Series 2018
Page 252 of 312

ARTICLE 6.6 – PUBLIC STREET STANDARDS

SECTION 6.6.001 - PURPOSE

Upon the request of the La Grande City Council, a variety of street design standards have been reviewed and are now incorporated in the Land Development Code.

SECTION 6.6.002 - CLASS I IMPROVEMENT STANDARDS

This classification will cover those streets that are designed to meet the standards for an expected life of twenty (20) years or more. The attached drawings shall be the minimum standard for those streets in this classification. All streets designated as Federal Aid Urban Streets (F.A.U.) shall be constructed under these design standards. Streets in this designation shall be constructed with sidewalks when at all possible in an effort to increase pedestrian safety. Collector streets are designed to withstand normal trucks of an HS 20 loading. Larger trucks are to utilize Arterial streets where at all possible. This level of development shall be the ultimate goal for all streets within the City of La Grande.

Possible means of financing available for this Class shall be methods A, B, C, D, E, F, G, and H in Section 6.6.006.

A. Advantages

1. The construction life is extended to a period above other City standards.
2. The visible aesthetics in relationship to having curbs and a blacktop surface with landscaping or concrete driveways and a sidewalk is generally appealing to the public.
3. Easy maintenance for the Public Works Department for cleaning and minor repair.
4. Storm sewer drainage is confined within the bounds of the curbs during minor flooding periods.
5. Parking is restricted to a solid barrier, that being the curb; this restricts parking in the area on the back side of the curb and confines travel to the street surface.
6. Defined areas for possible cross walks, signs, power poles, and other utilities that are restricted to the outside areas behind the curbs.
7. It allows for a wide range of financing methods and is to City standards for a ten (10) year Bancroft bonding.
8. Provides a dust free surface.

B. Disadvantages

1. The extreme high level of cost that is incurred with this type of development.

SECTION 6.6.003 - CLASS II IMPROVEMENT LEVEL

Streets constructed in this classification shall be constructed to the same standards as Class I Streets with the exception of the form of drainage system. These streets shall meet the standards as shown on the attached drawing. This level of construction shall be only utilized in substitution for Class I Streets when it is determined by the City Council at the recommendation of the City Engineer or Engineering Superintendent, that an adequate drainage system cannot be installed for a Class I Street.

Exhibit 12

Transportation and Traffic Plan

Boardman to Hemingway Transmission Line Project

Table 6. Construction Vehicle Trips per Day per Construction Spread

Construction Crew Type	Construction Vehicles					
	Light Construction Vehicles			Heavy Construction Vehicles		
	Number of Pickups/ Mechanic Trucks (per day)	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)	Number of Other Vehicles	Number of One-way Trips on Public Roads (per day)	Total One-way Trips (per day)
Substation Construction	20	2	40	5	2	10
ROW Clearing	9	4	36	5	4	20
Roads/ Pad Grading	9	4	36	9	2	18
Foundations	9	2	18	5	8	40
Tower Lacing (assembly)	27	2	54	0	0	0
Tower Setting (erection)	20	2	40	0	0	0
Wire Stringing	9	4	36	9	4	36
Restoration	3	2	6	0	0	0
Blasting	5	4	20	0	0	0
Material Delivery	20	8	160	12	2	24
Mechanic and Equipment Mgmt.	5	6	30	0	0	0
Refueling	0	0	0	5	4	20
Dust Control	0	0	0	5	4	20
Construction Inspection	5	8	40	0	0	0
Concrete Testing	5	4	20	0	0	0
Environmental Compliance	9	6	54	0	0	0
Surveyors	5	3	30	0	0	0
Totals	—	—	620	—	—	188

Exhibit 13

7/24/2019

Roadway Design Manual: Minimum Designs for Truck and Bus Turns

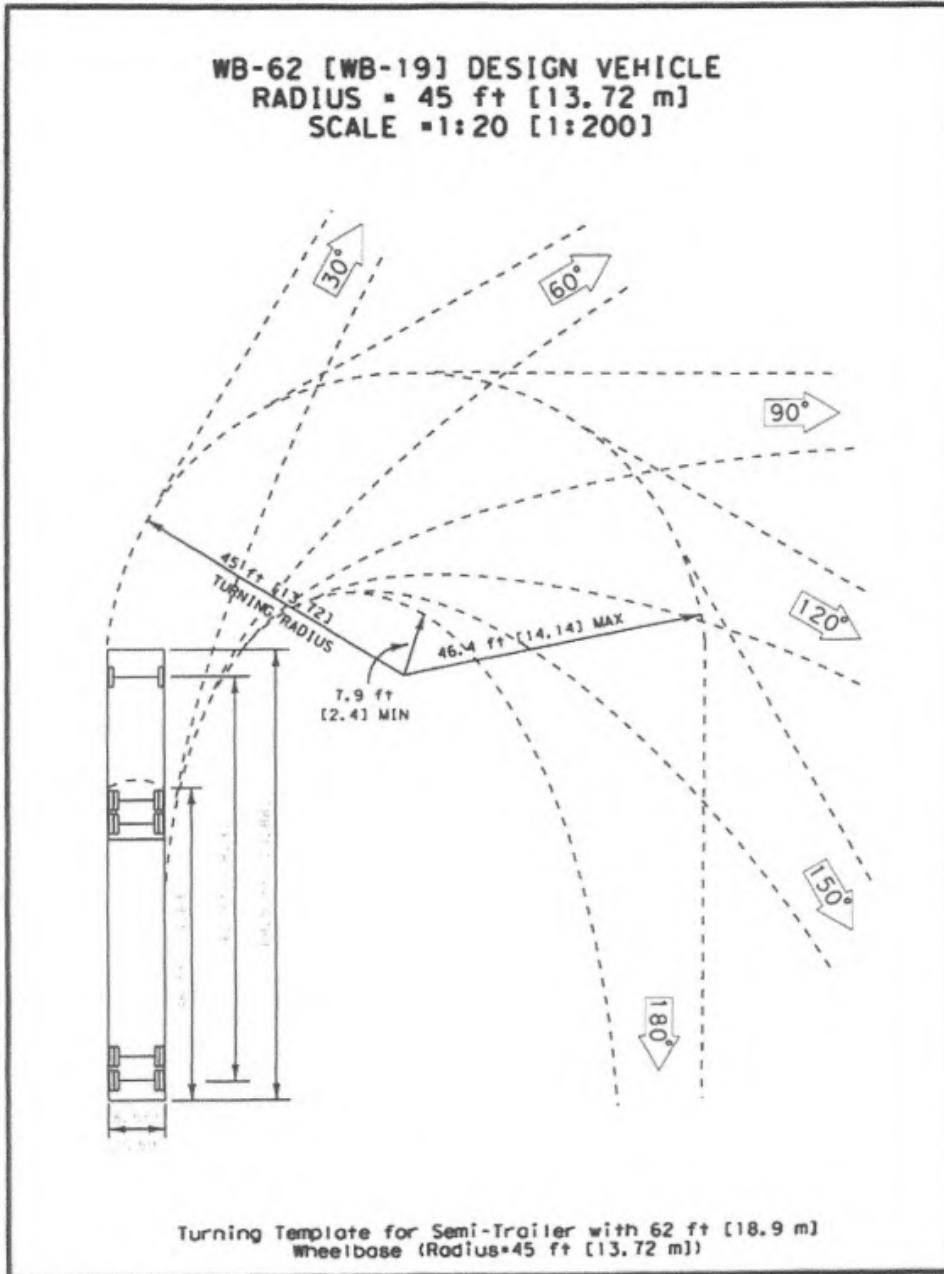


Figure 7-4. Turning Template for Semi-Trailer with 62 ft [18.9 m] Wheelbase, (not to scale). Click [here](#) to see a PDF of the image.

7/24/2019

7-1.png (596x805)

Exhibit 14

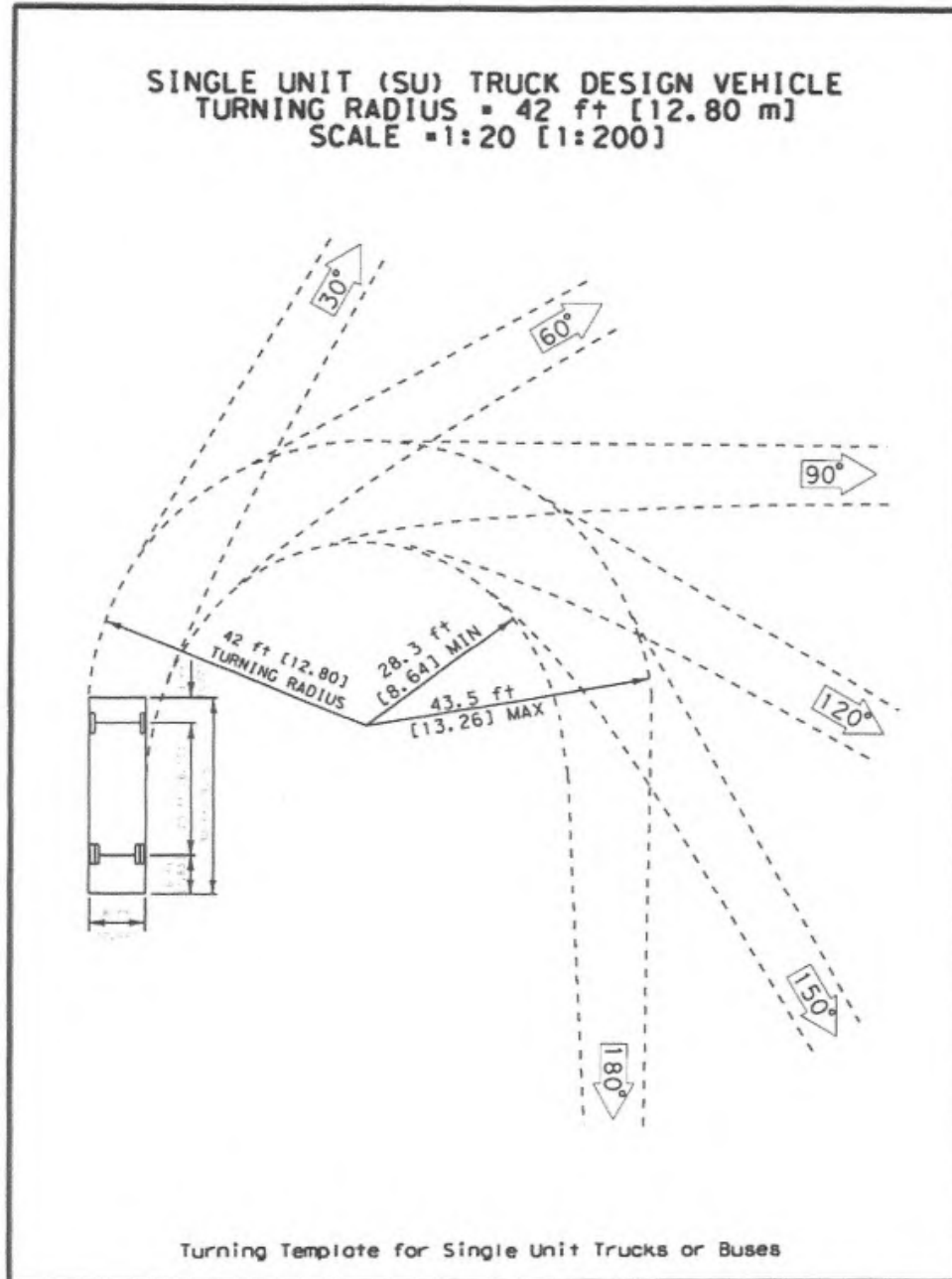


Exhibit 15

**CITY OF LA GRANDE
ORDINANCE NUMBER 3077
SERIES 2009**

**AN ORDINANCE CONTROLLING VEHICULAR AND PEDESTRIAN TRAFFIC, PARADES
AND PROCESSIONS AND ISSUANCE OF PERMITS; PROVIDING PENALTIES; AND
REPEALING ORDINANCE NUMBER 2845, SERIES 1993; ALL AMENDING ORDINANCES
AND ALL OTHER ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT HEREWITH;
AND DECLARING AN EFFECTIVE DATE**

THE CITY OF LA GRANDE ORDAINS AS FOLLOWS:

Section 1. This Ordinance may be cited as the City of La Grande Uniform Traffic Ordinance.

Section 2. APPLICABILITY OF STATE TRAFFIC LAWS.

Oregon Revised Statutes, Chapter 153, and the Oregon Vehicle Code, ORS Chapter 801 and 822, as now constituted, are adopted by reference. Violation of an adopted provision of those chapters is an offense against the City.

Section 3. DEFINITIONS

In addition to those definitions contained in the Oregon state Motor Vehicle Code, the following words or phrases, except where the context clearly indicates a different meaning, shall mean:

a. Alley

A street or highway primarily intended to provide access to the rear or side of lots or buildings in urban areas and not intended for through vehicular traffic.

b. Bicycle

A bicycle is a vehicle that:

1. Is designed to be operated on the ground on wheels;
2. has a seat or saddle for use of the rider;
3. is designed to travel with not more than three (3) wheels in contact with the ground;
4. is propelled exclusively by human power; and,
5. has every wheel more than fourteen inches (14") in diameter or two (2) tandem wheels, either of which is more than fourteen inches (14") in diameter.

c. Bicycle Lane

That part of the highway, adjacent to the roadway, designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

d. Bicycle Path

A public way, not part of a highway, which is designated by official signs or markings for use by persons riding bicycles, except as otherwise specifically provided by law.

e. Block

The part of one side of a street lying between the two (2) nearest cross streets.

f. Central Business District

Exhibit 16

ORDINANCE NUMBER 3077
SERIES 2009
Page (8)

a. City Regulation of Special Movement of Oversized Load

The applicant shall submit an application to the City Manager or designee, showing the terminal points of the purported movement; the proposed route; the nature of the movement requested, including the weight and dimensions of the vehicle, load, machine, building, or structure to be moved; the time, date and duration of the proposed movement.

b. Special Movement Permit

A permit shall be required to move any vehicle, structure, or load on, or to access a street when, after preparation for movement, the vehicle, structure or load exceeds fourteen feet (14') in height, requires the use of guy wires, or could result in the blockage of a street. An approved application may serve as a permit, and a copy of the approved application shall be provided to the applicant.

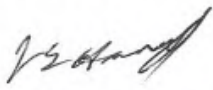
Section 17. TRUCK ROUTES

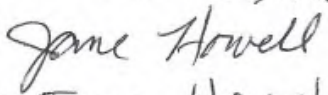
- a. It shall be unlawful for any person, firm, or corporation to use, drive or operate any vehicle or combination of vehicles with a gross weight of 26,000, pounds or more upon any street of the City of La Grande, Oregon, except upon posted truck routes.
- b. Any vehicle with a gross weight over 26,000, pounds specifically picking up deliveries or making deliveries to any business or residence located on a street that is not a truck route will be exempted if the vehicle is driven from the truck route to the destination in the shortest, most direct, and safest route.
- c. The use of Jacob brakes shall not be allowed within the city limits of La Grande, Oregon.
- d. Truck routes will be posted as follows:
 1. Walnut street north from the city limits to C Avenue;
 2. C Avenue east from Walnut Street to Gekeler Avenue;
 3. Gekeler Avenue east to the city limits;
 4. 12th street south from Gekeler Avenue to the city limits;
 5. 2nd Street south from the city limits to Adams Avenue;
 6. Monroe Avenue east from Spruce Street to Highway 82;
 7. Jackson Avenue east from Spruce Street, and
 8. Spruce Street south from the city limits to Monroe.

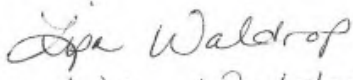
Section 18. IMPOUNDMENT AND DETENTION OF VEHICLES

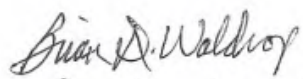
- a. Whenever a vehicle is placed in a manner or location that constitutes an obstruction to traffic or a hazard to public safety, a police officer or enforcement officer shall order the owner or operator of the vehicle to remove said vehicle. If the vehicle is unattended, the officer or enforcement officer may cause the vehicle to be towed and stored at the owner's expense. The owner shall be liable for the costs of towing and storing, notwithstanding that the vehicle was parked by another or that the vehicle was initially parked in a safe manner but subsequently became an obstruction or hazard.

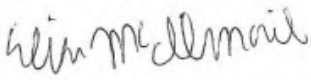
I have read the attached letter regarding the use of the Modelaire/Hawthorne Loop and it expresses my concerns and my request to abandon the plan to use this residential loop for the project. As one of the undersigned I strongly oppose our community being used as a primary access point to build this transmission line. Furthermore, I oppose the current proposed preferred route close to the city limits of La Grande because it impacts in various other ways the daily lives of many residents of our community.

SIGNATURE 
PRINTED NAME James E. Howell II
ADDRESS 482 Modelaire Dr
EMAIL j.howell2@frontier.com

SIGNATURE 
PRINTED NAME Jane Howell
ADDRESS 482 Modelaire DR
EMAIL d.janehowell@gmail.com

SIGNATURE 
PRINTED NAME Lisa Waldrop
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EMAIL ldjw62@gmail.com

SIGNATURE 
PRINTED NAME BRIAN D. WALDROP
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EMAIL bdwaldrop58@gmail.com

SIGNATURE 
PRINTED NAME EUSE McILMAIL
ADDRESS 476 MODELAIRES DR.
EMAIL mcilmail154@hotmail.com


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SIGNATURE

PRINTED NAME

ADDRESS

EMAIL



Jessie Huxell
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jessiehuxell@live.com

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL

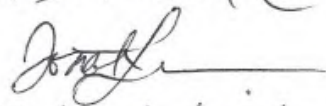

Chris Huxell
472 Modelaire Dr. LG, OR 97850
CHRIS Huxell @ EMAIL.COM

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL



Jonah Lindeman
702 Modelaire LaGrande
jlindeman@rpi.ag

SIGNATURE

PRINTED NAME

ADDRESS

EMAIL

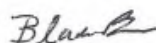

Marie Skinner
208 3rd LaGrande
marieskinner@hotmail.com

SIGNATURE


PRINTED NAME


ADDRESS


EMAIL



Blake Bars
1101 G Ave La Grande
blakebars@gmail.com

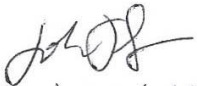
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SIGNATURE 
PRINTED NAME D. Dale Mammox
ADDRESS 405 Balsa, La Grande, Or
EMAIL d mammox @ conl. com


SIGNATURE 
PRINTED NAME Jim Kreider
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La Grande, OR 97850
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SIGNATURE 
PRINTED NAME Judie Arritola
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EMAIL jtol@charter.net


SIGNATURE 
PRINTED NAME Pasco Arritola
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EMAIL Pstola@CHARTER.NET


SIGNATURE 
PRINTED NAME JOHN BALUTE
ADDRESS 484 HAWTHORNE LG, OR 97850
EMAIL


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SIGNATURE 
PRINTED NAME Andrea Galzow
ADDRESS 486 Hawthorne DR, LA Grande
EMAIL foreverfamily33@aol.com

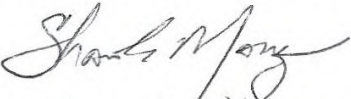
SIGNATURE 
PRINTED NAME Frances E. Lillard
ADDRESS 471 madelaire Dr. L.G.
EMAIL

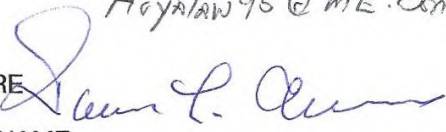
SIGNATURE 
PRINTED NAME Brent H. Smith
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EMAIL smith brent@gmail.com


SIGNATURE 
PRINTED NAME M. Jeannette Smith
ADDRESS 410 Allium Street
EMAIL jeannetterampton@gmail.com

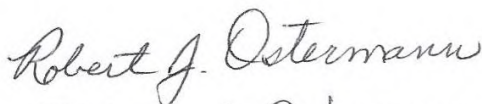
SIGNATURE 
PRINTED NAME KIMBERLEY HEITSTUMAN
ADDRESS 2409 CENTURY LP, LA GRANDE, OR 97850
EMAIL kimheitstuman@hotmail.com


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SIGNATURE: 
PRINTED NAME Shawn K. Mangum
ADDRESS 2909 E. M. Ave,
EMAIL Hoyakaw95@ME.com


SIGNATURE 
PRINTED NAME
ADDRESS Dennis L. AUER 541-9637720
410 Balsa Street LaGrande, Oregon 97858
EMAIL N/A

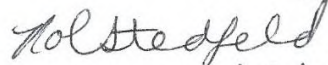
SIGNATURE 
PRINTED NAME Linda Snyder
ADDRESS 491 Modelaire
EMAIL


SIGNATURE 
PRINTED NAME Robert J. Ostermann
ADDRESS 495 Modelaire Dr. LaGrande, OR 97850
EMAIL

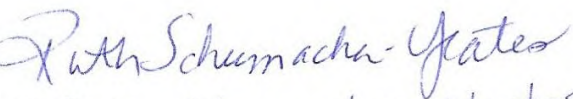
SIGNATURE 
PRINTED NAME Robin J. Ostermann
ADDRESS 495 Modelaire Dr LaGrande, OR 97850
EMAIL

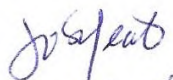
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SIGNATURE 
PRINTED NAME Jonathan D. White
ADDRESS 485 Modelaire Dr
EMAIL jondwhite418@gmail.com


SIGNATURE 
PRINTED NAME Robin Stedfeld
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EMAIL rstedfeld@yahoo.com

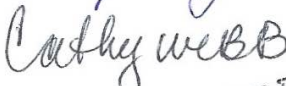
SIGNATURE 
PRINTED NAME Rita Allen
ADDRESS 410 Balsa St. La Grande Or.
EMAIL

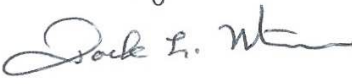
SIGNATURE 
PRINTED NAME Ruth Schumacher Yeates
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EMAIL ruthschumacheryeates@gmail.com



SIGNATURE 
PRINTED NAME JOHN YEATES
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EMAIL jyeates52@gmail.com


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SIGNATURE 
PRINTED NAME LOIS BARRY
ADDRESS P.O. Box 566, La Grande, OR 97850
EMAIL loisbarry31@gmail.com

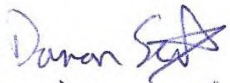
SIGNATURE 
PRINTED NAME CATHY WEBB
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EMAIL thunkski@gmail.com


SIGNATURE 
PRINTED NAME Jack L. Martin
ADDRESS 1412 Gilcrest Dr. LaGrande
EMAIL Buff Martin 27 @GMail .com

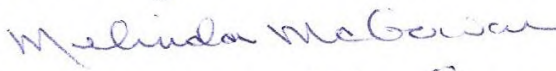
SIGNATURE 
PRINTED NAME GERALDINE BRASETH-PALMER
ADDRESS 1602 Goldencrest Drive LA GRANDE, Ore 97850
EMAIL 


SIGNATURE 
PRINTED NAME Jean BAPH
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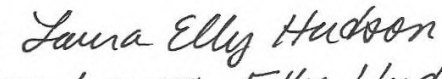
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SIGNATURE 
PRINTED NAME Damon Sexton
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SIGNATURE 
PRINTED NAME Cory Sexton
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SIGNATURE 
PRINTED NAME Melinda McGowan
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SIGNATURE 
PRINTED NAME Keith D. Hudson
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EMAIL Keithdhudson@gmail.com

SIGNATURE 
PRINTED NAME Laura Elly Hudson
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EMAIL ellyhudson@gmail.com

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SIGNATURE *Gary D. Pierson*
PRINTED NAME Gary D. Pierson
ADDRESS 489 Modelaire Drive, La Grande OR 97850
EMAIL -

SIGNATURE *Lynn Wheeler Duncan*
PRINTED NAME LYNN WHEELER DUNCAN
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EMAIL rlvw1910@gmail.com

SIGNATURE *Anne G. Cavinto*
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SIGNATURE *Joe Horst*
PRINTED NAME JOE HORST
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SIGNATURE *Angela Sherer*
PRINTED NAME ANGELA Sherer
ADDRESS 91 - W. Hawthorne Dr. LaGrande, OR 97850
EMAIL asherer@frontier.com.

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SIGNATURE *Robert J. Sherer*
PRINTED NAME Robert J. Sherer
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EMAIL asherer@frontier.com

SIGNATURE *Heather M. Null*
PRINTED NAME Heather M. Null
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EMAIL hnull@comi.com

SIGNATURE *Bert R. Frewing*
PRINTED NAME Bert R. Frewing
ADDRESS 709 South 12th Street LaGrande, OR 97850
EMAIL jeanfrewing@gmail.com

SIGNATURE *Lindsay McCullough*
PRINTED NAME Lindsay McCullough
ADDRESS 406 Balsa St., La Grande, OR 97850
EMAIL lindz_mm91@hotmail.com

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

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SIGNATURE *Merle E. Comfort*
PRINTED NAME MERLE E. COMFORT
ADDRESS 2009 SCORPIO DRIVE LA GRANDE OR 97850
EMAIL MERLECOMFORT@GMAIL.COM

SIGNATURE *Robin L. Maille*
PRINTED NAME Robin Maille
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EMAIL r.maille@icloud.com

SIGNATURE *Bruce C Kevan*
PRINTED NAME *Bruce C*
ADDRESS 1511 W Ave LG
EMAIL bruce.kevan@lagrandesd.org

SIGNATURE *Carol S. Summers*
PRINTED NAME CAROL S. SUMMERS
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EMAIL carolsummers1935@gmail.com

SIGNATURE *Caroline Kaye Juniper*
PRINTED NAME Caroline Kaye Juniper
ADDRESS 406 NTH St. LaGrande - OR 97850
EMAIL

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SIGNATURE *Gerald D. Juniper*
PRINTED NAME *Gerald Darwin Juniper*
ADDRESS *406 4th St. LaGrande OR. 97850*
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

SIGNATURE
PRINTED NAME
ADDRESS
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SIGNATURE
PRINTED NAME
ADDRESS
EMAIL

TARDAEWETHER Kellen * ODOE

From: Dale Mammen <dmammen@eoni.com>
Sent: Thursday, August 15, 2019 5:28 PM
To: B2H DPOComments * ODOE
Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway
Transmission Project 9/28/2018; Draft Proposal Order 5/23/2019
Attachments: Scan 2019-8-15 17.14.06.pdf

To: Chairman Beyeler and Members of the Council

Find attached a letter sign by me and 46 other residents of La Grande expressing our concerns regarding the B2H Project and requesting that EFSC Deny the Site Certificate.

I have also sent a bound copy of this material by US Postal Service.

Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

August 10, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E.
Salem, Oregon. 97301

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018:Draft Proposed Order.

Dear Chair Beyeler and Members of the Council:

My comment is about the predicted noise levels resulting from construction and operation of the proposed Boardman to Hemingway Transmission Line Project. I would like to address the noise coming from the blasting and rock breaking specifically above the area at the top of Modelaire Drive 1 both to the north and the south of that area and also the construction traffic noise that that will impact the west hills and the area below.

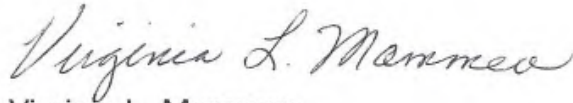
In Exhibit X page X-9 3.3.1.1 2 blasting and rock breaking is mentioned saying that "Modern blasting techniques include the electronically controlled ignition of multiple small explosive charges in an area of rock that are delayed fractions of second, resulting in a total event that is generally less than a second. Impulse (instantaneous) noise from blasts could reach up to 140dBA at the blast location or over 90 dBA within 500 feet." This sounds oh so "don't worry about it, it will be OK just over in a split second." Living in this area off Modelaire Drive, I don't find this at all comforting. And the fact that this will be overseen by properly licensed personnel and all of the necessary authorizations doesn't help anything either.

The area in question, which for such inordinate construction is extremely close to many residents, has been my home for over 50 years and during

related medical problems and exhibit various reactions to loud noises.¹⁰ These children also live in the neighborhoods to be affected by the noise so they would be impacted coming and going to school, at home and also while at school. To impose the constant possibility of loud noises is cruel, disrespectful and totally unacceptable.¹¹

For a project like this involving blasting and heavy machinery noise so close to homes, schools, and medical facilities impacting hundreds of peoples' daily lives, the day to day agitation, wondering what is coming next, fear and being on constant alert are not just addressed by some type of mitigation but must be addressed by a route that is much less impactful to peoples' safety, sanity, and health.

Sincerely,

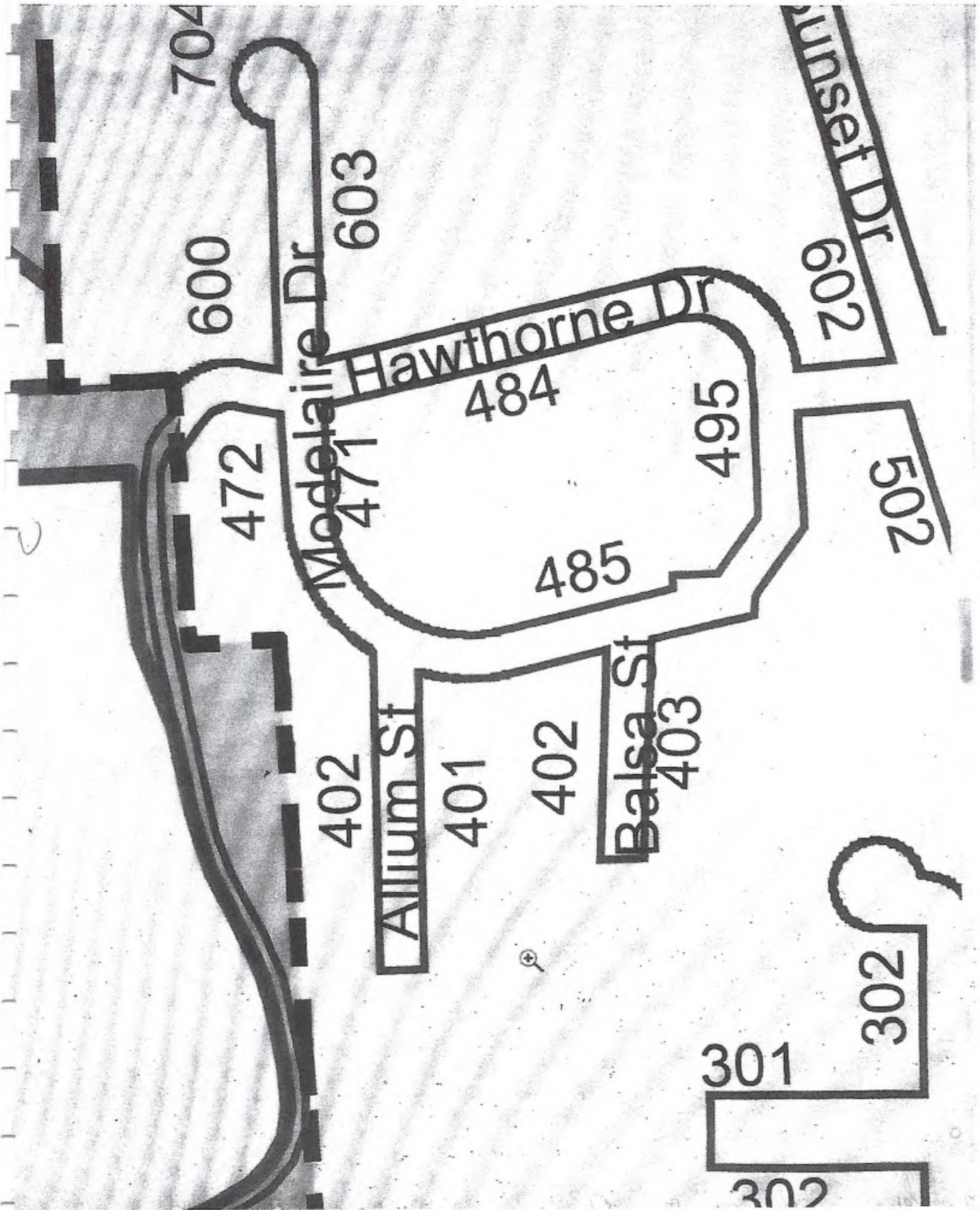


Virginia L. Mammen
405 Balsa
La Grande, Oregon 97850

gmammen@eoni.com

Exhibit 1

N



2

11

5

Exhibit 2

Boardman to Hemingway Transmission Line Project

Exhibit X

1 **3.3 Predicted Noise Levels**

2 OAR 345-021-0010(1)(x)(A): Predicted noise levels resulting from construction and operation
3 of the proposed facility.

4 **3.3.1 Construction Noise**

5 **3.3.1.1 Predicted Construction Noise Levels**

6 Project construction will occur sequentially, moving along the length of the Project route, or in
7 other areas such as near access roads, structure sites, conductor pulling sites, and staging and
8 maintenance areas. Overhead transmission line construction is typically completed in the
9 following stages, but various construction activities may overlap, with multiple construction
10 crews operating simultaneously:

- 11 • Site access and preparation
- 12 • Installation of structure foundations
- 13 • Erecting of support structures
- 14 • Stringing of conductors, shield wire, and fiber-optic ground wire

15 The following subsections discuss certain construction activities that will periodically generate
16 audible noise, including blasting and rock breaking, implosive devices used during conductor
17 stringing, helicopter operations, and vehicle traffic.

18 **Blasting and Rock Breaking**

19 Blasting is a short-duration event as compared to rock removal methods, such as using track rig
20 drills, rock breakers, jackhammers, rotary percussion drills, core barrels, or rotary rock drills.
21 Modern blasting techniques include the electronically controlled ignition of multiple small-
22 explosive charges in an area of rock that are delayed fractions of second, resulting in a total
23 event duration that is generally less than a second. Impulse (instantaneous) noise from blasts
24 could reach up to 140 dBA at the blast location or over 90 dBA within 500 feet.

25 Lattice tower foundations for the Project typically will be installed using drilled shafts or piers;
26 however, if hard rock is encountered within the planned drilling depth, blasting may be required
27 to loosen or fracture the rock to reach the required depth to install the structure foundations.
28 Final blasting locations will not be identified until an investigative geotechnical survey of the
29 analysis area is conducted during the detailed design.

30 The contracted blasting specialist will prepare a blasting plan that demonstrate compliance with
31 applicable state and local blasting regulations, including the use of properly licensed personnel
32 and the acquisition of necessary authorizations. The Framework Blasting Plan is set forth in
33 Exhibit G, Attachment G-5.

34 **Implosive Devices**

35 An implosive conductor splice consists of a split-second detonation with sound and flash.
36 Implosive splicing activities are anticipated to be limited to daytime hours. A blasting plan will be
37 developed by an individual certified and licensed to perform the work. The plan will
38 communicate all safety and technical requirements including, but not limited to, delineation of
39 the controlled access zone and distance away from residences.

Exhibit 3

Public Services

OAR 345-022-0110

This standard ensures that the proposed facility will not affect the ability of service providers in local communities to provide public services, such as fire protection or education. The applicant must assess the proposed facility's need for water and for disposal of wastewater, storm water and solid waste. The applicant must also evaluate the expected population increases in local communities resulting from construction and operation of the facility; and must address all permanent and temporary impacts of the facility on housing, traffic safety, police and fire protection, health care and schools. The Council must determine whether the applicant has identified potential adverse impacts to service providers and proposed adequate mitigation to ensure that there will be no significant adverse effect on the ability of a service provider to provide services. In considering the impacts, the Council solicits comments from affected local governments, fire or police departments, school districts and health care agencies.

Waste Minimization

OAR 345-022-0120

This standard requires the Council to evaluate the applicant's proposal to minimize solid waste and wastewater generated by construction and operation of the proposed facility. The standard requires recycling of wastes, if feasible, or proper waste disposal if recycling is not feasible.

The applicant must evaluate the types of waste products that would be produced during construction and operation of the proposed facility and estimate the amounts or volume of waste products. The applicant must propose appropriate methods to handle the waste through collection, storage and disposal. Compliance with the standard assures that the applicant will reduce the amount of waste generated and dispose of waste in a responsible manner.

Need for a Facility

OAR 345-023-0005

This standard requires the applicant for non-generating energy facilities (such as electric transmission lines) to demonstrate the need for the proposed facility. The Council's rules allow an applicant to demonstrate need for a non-generating facility through one of several methods, including the "Least-Cost Plan Rule" (OAR 345-023-0020) or the "System Reliability Rule for Electric Transmission Lines" (OAR 345-023-0030). Under the Least-Cost Plan Rule, the applicant meets this standard if the proposed transmission line was included in an Integrated Resource Plan that has been acknowledged by the Oregon Public Utilities Commission (OPUC). More information about the OPUC and the Integrated Resource Plan acknowledgement process can be found at www.puc.state.or.us.

Specific Standards for Wind Facilities

OAR 345-024-0010 and 345-024-0015

- This standard requires the Council to evaluate applications for wind energy facilities to ensure that applicants can design, construct and operate the facility so that that the public is not endangered by moving turbine blades or electrical equipment, and that the applicant can design, construct and operate wind turbines to prevent structural failure that could endanger public safety.
- Siting standards for wind facilities also require the applicant to reduce cumulative adverse environmental effects in the vicinity by using existing roads, if possible, placing collection lines underground, designing the facility to avoid impacts to vulnerable wildlife in the area (especially birds and bats), and designing the facility to minimize adverse visual features, including using the minimum amount of lighting necessary to meet the requirements of the Federal Aviation Administration for protecting aircraft.

Specific Standards for Transmission Lines

OAR 345-024-0090

This standard requires that the Council evaluate transmission lines under Council jurisdiction to ensure they are designed, constructed and operated to limit the strength of electromagnetic fields in areas where those lines are accessible to the public.



8/5/2019

Oregon Secretary of State Administrative Rules

Exhibit 4a

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Chapter 340

Division 35

NOISE CONTROL REGULATIONS

340-035-0035

Noise Control Regulations for Industry and Commerce

(1) Standards and Regulations:

(a) Existing Noise Sources. No person owning or controlling an existing industrial or commercial noise source shall cause or permit the operation of that noise source if the statistical noise levels generated by that source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 7, except as otherwise provided in these rules. [Table not included. See ED. NOTE.]

(b) New Noise Sources:

(A) New Sources Located on Previously Used Sites. No person owning or controlling a new industrial or commercial noise source located on a previously used industrial or commercial site shall cause or permit the operation of that noise source if the statistical noise levels generated by that new source and measured at an appropriate measurement point, specified in subsection (3)(b) of this rule, exceed the levels specified in Table 8, except as otherwise provided in these rules. For noise levels generated by a wind energy facility including wind turbines of any size and any associated equipment or machinery, subparagraph (1)(b)(B)(iii) applies. [Table not included. See ED. NOTE.]

(B) New Sources Located on Previously Unused Site:

(i) No person owning or controlling a new industrial or commercial noise source located on a previously unused industrial or commercial site shall cause or permit the operation of that noise source if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels, L10 or L50, by more than 10 dBA in any one hour, or exceed the levels specified in Table 8, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule, except as specified in subparagraph (1)(b)(B)(iii).

(ii) The ambient statistical noise level of a new industrial or commercial noise source on a previously unused industrial or commercial site shall include all noises generated or indirectly caused by or attributable to that source including all of its related activities. Sources exempted from the requirements of section (1) of this rule, which are identified in subsections (5)(b)-(f), (j), and (k) of this rule, shall not be excluded from this ambient measurement.

(iii) For noise levels generated or caused by a wind energy facility:

(I) The increase in ambient statistical noise levels is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level. The person owning the wind energy facility may conduct measurements to determine the actual ambient L10 and L50 background level.

(II) The "actual ambient background level" is the measured noise level at the appropriate measurement point as specified in subsection (3)(b) of this rule using generally accepted noise engineering measurement practices. Background noise measurements shall be obtained at the appropriate measurement point, synchronized with wind speed measurements of hub height conditions at the nearest wind turbine location. "Actual ambient background level" does not include noise generated or caused by the wind energy facility.

(III) The noise levels from a wind energy facility may increase the ambient statistical noise levels L10 and L50 by more than 10 dBA (but not above the limits specified in Table 8), if the person who owns the noise sensitive property executes a legally effective easement or real covenant that benefits the property on which the wind energy facility is located. The easement or covenant must authorize the wind energy facility to increase the ambient statistical noise levels, L10 or L50 on the sensitive property by more than 10 dBA at the appropriate measurement point.

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Oregon Secretary of State Administrative Rules

(2) Compliance. Upon written notification from the Director, the owner or controller of an industrial or commercial noise source operating in violation of the adopted rules shall submit a compliance schedule acceptable to the Department. The schedule will set forth the dates, terms, and conditions by which the person responsible for the noise source shall comply with the adopted rules.

(3) Measurement:

(a) Sound measurements procedures shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1), or to such other procedures as are approved in writing by the Department;

(b) Unless otherwise specified, the appropriate measurement point shall be that point on the noise sensitive property, described below, which is further from the noise source:

(A) 25 feet (7.6 meters) toward the noise source from that point on the noise sensitive building nearest the noise source;

(B) That point on the noise sensitive property line nearest the noise source.

(4) Monitoring and Reporting:

(a) Upon written notification from the Department, persons owning or controlling an industrial or commercial noise source shall monitor and record the statistical noise levels and operating times of equipment, facilities, operations, and activities, and shall submit such data to the Department in the form and on the schedule requested by the Department. Procedures for such measurements shall conform to those procedures which are adopted by the Commission and set forth in Sound Measurement Procedures Manual (NPCS-1);

(b) Nothing in this rule shall preclude the Department from conducting separate or additional noise tests and measurements. Therefore, when requested by the Department, the owner or operator of an industrial or commercial noise source shall provide the following:

(A) Access to the site;

(B) Reasonable facilities, where available, including but not limited to, electric power and ladders adequate to perform the testing;

(C) Cooperation in the reasonable operation, manipulation, or shutdown of various equipment or operations as needed to ascertain the source of sound and measure its emission.

(5) Exemptions: Except as otherwise provided in subparagraph (1)(b)(B)(ii) of this rule, the rules in section (1) of this rule shall not apply to:

(a) Emergency equipment not operated on a regular or scheduled basis;

(b) Warning devices not operating continuously for more than 5 minutes;

(c) Sounds created by the tires or motor used to propel any road vehicle complying with the noise standards for road vehicles;

(d) Sounds resulting from the operation of any equipment or facility of a surface carrier engaged in interstate commerce by railroad only to the extent that such equipment or facility is regulated by pre-emptive federal regulations as set forth in Part 201 of Title 40 of the Code of Federal Regulations, promulgated pursuant to Section 17 of the Noise Control Act of 1972, 86 Stat. 1248, Public Law 92-576; but this exemption does not apply to any standard, control, license, regulation, or restriction necessitated by special local conditions which is approved by the Administrator of the EPA after consultation with the Secretary of Transportation pursuant to procedures set forth in Section 17(c)(2) of the Act;

(e) Sounds created by bells, chimes, or carillons;

(f) Sounds not electronically amplified which are created by or generated at sporting, amusement, and entertainment events, except those sounds which are regulated under other noise standards. An event is a noteworthy happening and does not include informal, frequent, or ongoing activities such as, but not limited to, those which normally occur at bowling alleys or amusement parks operating in one location for a significant period of time;

(g) Sounds that originate on construction sites.

(h) Sounds created in construction or maintenance of capital equipment;

(i) Sounds created by lawn care maintenance and snow removal equipment;

(j) Sounds generated by the operation of aircraft and subject to pre-emptive federal regulation. This exception does not apply to aircraft engine testing, activity conducted at the airport that is not directly related to flight operations, and any other activity not pre-emptively regulated by the federal government or controlled under OAR 340-035-0045;

Exhibit 5a

Controlling the Adverse Effects of Blasting

This module addresses the control of offsite impacts that result from blasting, namely:

- vibrations,
- airblast, and
- flyrock.

Much of the information in the module is derived from the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The performance standards apply to all surface coal mines. Similar standards have been adopted on some State and local levels and applied to non-coal blasting operations such as quarrying and construction.

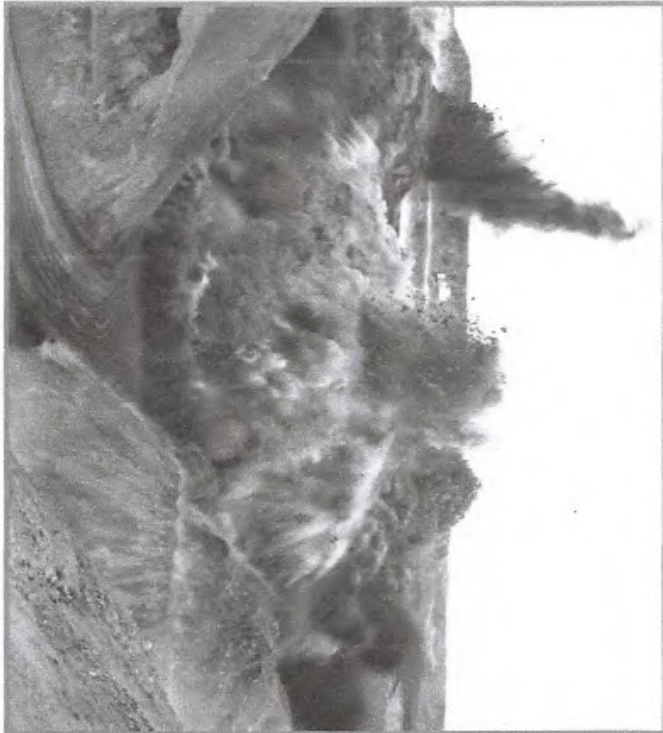
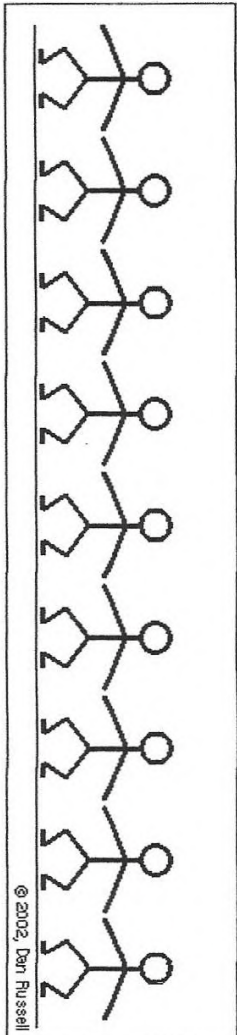


Exhibit 5b

Part I: Ground Vibrations, Airblast, and Flyrock

Explosive energy is used to break rock. However, the use of this energy is not 100-percent efficient. Some of the energy escapes into the atmosphere to generate *airblast or air vibrations*. Some of the energy also leaves the blast site through the surface soil and bedrock in the form of *ground vibrations*.



Both air and ground vibrations create waves that disturb the material in which they travel. When these waves encounter a structure, they cause it to shake. Ground vibrations enter the house through the basement and airblast enters the house through the walls and roof.

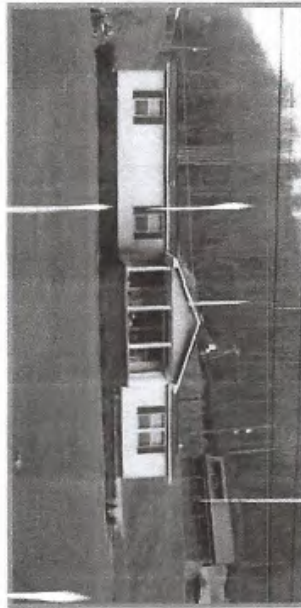
Airblast may be audible (noise) or in-audible (concussion). When outside a house the blast may be heard because of the noise, however noise has little impact on the structure. The concussion wave causes the structure to shake and rattles objects hanging on walls or sitting on shelves. This "interior noise" will alarm and startle people living in the house.

Flyrock is debris ejected from the blast site that is traveling through the air or along the ground. Flyrock the single most dangerous adverse effect that can cause property damage and personal injury or death.

Exhibit 5g

Blasting Impacts on Structures

Both above-ground and below-ground structures are susceptible to vibration impacts. Structures can include onsite mine offices and buildings, as well as offsite residences, schools, churches, power-transmission lines, and buried pipelines. Some of these structures may include historic or cultural features sensitive to even low levels of vibrations.



It is important to understand:

1. the causes of ground vibrations and airblast, and
2. what practices can be followed to control and minimize the adverse effects

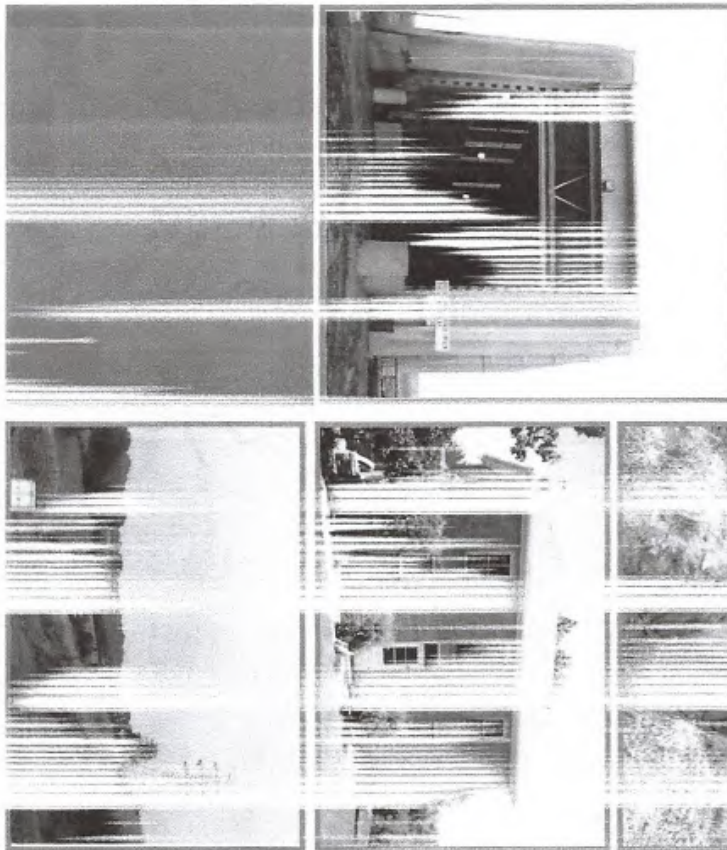
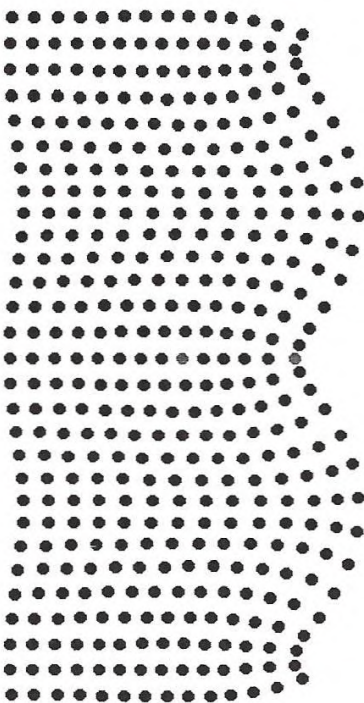


Exhibit 5d

Ground Vibrations

Ground vibrations propagate away from a blast site as Rayleigh (or surface) waves. These waves form a disturbance in the ground that displaces particles of soil or rock as they pass by. Particle motions are quite complicated. At the ground surface (free boundary), measured particle motions have the greatest displacements, and displacements decrease with depth (see the illustration below). At a depth of between 20 to 50 feet below ground surface, particle displacements are barely detectable. Structures that are well coupled to the ground tend to move with this motion; structures buried in the ground are less affected by surface motions.



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Ground vibrations are measured in terms of **particle velocity** and are reported in inches per second (ips) or the speed at which a particle of soil or rock moves.

At typical blasting distances from residential structures, the ground only moves with displacements equal to the thickness of a piece of writing paper. In terms of displacement, this equates to hundredths of an inch; visually, such movement cannot be detected.

Structure Response

Exhibit 5 F

As ground and air vibrations reach a structure, each will cause it to shake. Structure response is dependant on the vibration characteristics (frequency and amplitude) and structure type.

Ground Vibrations enter the house through the basement. This is like shaking the bottom of a flag pole. Movement at the top of the pole depends on how (frequency) and how hard (amplitude) the bottom of the pole is shaken. If shaken at just the right pace, or at the pole's natural frequency, the top will move significantly compared to the bottom. Motion at the top is amplified from the bottom motion.

All blast damage studies have measured incoming ground vibrations at the ground surface. The observed structure amplifications were typically between 1 to 4 times the ground vibration. Structure response below ground level is the same or less than the incoming vibrations

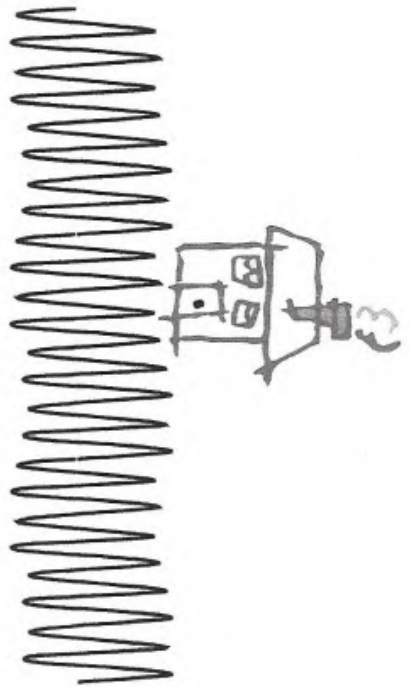
Airblast enters the house through the roof and walls. Like ground vibrations, the frequency and amplitude of the vibrations affect structure response. However the low frequency events (concussion) that most strongly affect structures is normally only a one or two cycle event.

Due to the different arrival times of ground and air vibrations, occupants may feel two distinct impacts on the house.

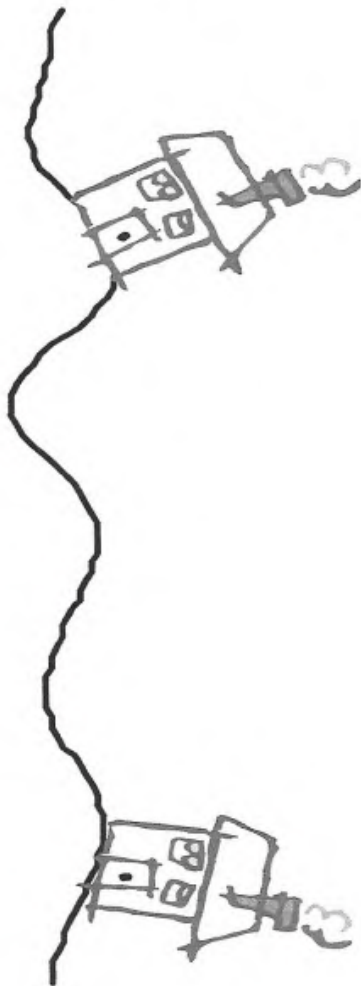


Ground Vibration Structure Response

Exhibit 5g



On the other hand, low-frequency wave cycles are long as compared with the dimensions of structures. Accordingly, low frequencies tend to efficiently couple energy into structures and to promote higher-amplitude, long-duration shaking.



High frequencies do not promote structure shaking. The length of a single high-frequency wave cycle is short as compared with the dimension of a structure. A structure does not significantly respond to high frequencies.

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A noisy problem - Harvard Health

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A noisy problem

People often become more sensitive to noise as they age, which can affect their mental and physical health.

Published: March, 2019



Image: © Juanmonino/Getty Images

Are you more sensitive to noises than you used to be? Do certain sounds now feel too loud and jarring? Don't worry; it's actually quite normal.

Age-related hearing loss is common among older adults and affects about two-thirds of men in their 70s and 85% of men ages 80 and older. Although it's not clear why, this can also make people hypersensitive to sounds that they used to tolerate easily, which in turn can affect their well-being.

"Exposure to noises from crowds, traffic, and other everyday sounds can become harder to tolerate and increase stress levels, leading to anxiety and a reduction in overall quality of life," says Dr. Stephanie Tompkins, an audiologist with Harvard-affiliated Massachusetts Eye and Ear. "As your sensitivity to noises increases, this can lead to greater isolation, too, as you may try to avoid potentially noisy places and situations."

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Hospital Noise: How Noise Reduction Helps Patients Heal



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Quiet in the Hospital: How Noise...

Quiet in the Hospital: How Noise Reduction Helps Patients Heal

on June 7, 2018 (<https://medcenterblog.uvmhealth.org/innovations/hospital-noise-reduction/>) in Innovation (<https://medcenterblog.uvmhealth.org/category/innovations/>) by UVM Medical Center (<https://medcenterblog.uvmhealth.org/author/uvmmedcenter/>)

Noise. It is present in almost every aspect of our lives. From the traffic in the streets, to the fan that provides us white noise in the background to sleep, noise exists. Unfortunately, like stress, too much of it can have a negative impact on a person's health and rest. Some sounds we do like to hear, such as birds chirping, signaling spring in Vermont, but what about sounds in a hospital?

Many of us get admitted to hospitals when we are too sick to take care of ourselves at home. We expect exceptional care from physicians and nurses and, of course, to rest in order to help our bodies heal. We understand that some noises in a hospital are necessary for care; however, others simply aren't.

The Sounds of a Hospital

Many organizations, including the UVM Medical Center, have high tech equipment, which greatly assists in the delivery of care to our patients, but can also be noisy. Sometimes, healthcare providers are the source of the noise as we interact and communicate with our patients and other health team members.

Another factor is visits from families and friends during visiting hours. It is difficult when one's roommate is trying to rest in the opposite bed. Yet, we need to be cognizant of noise in patient care areas as sounds can be magnified and misinterpreted, increasing agitation and even confusion for some patients.

We become accustomed to the noise; our patients are not.

The Research on Noise, Quiet, and Healing

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Hospital Noise: How Noise Reduction Helps Patients Heal

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Research has shown that noise plays a negative role in healing and that decreasing noise in patient care areas aids in healing processes and helps facilitate speedier recoveries for patients. Patients are able to heal, sleep better and recover more quickly when able to rest. A quieter environment can also help decrease burnout for hospital staff.

Studies show that patients are more likely to develop negative side effects from a noisy hospital, such as sleep disturbances, elevated blood pressure and heart rate, and increased use of pain medications.

Noise can also increase annoyance levels for staff. One study indicated noise, such as talking inside and outside patient rooms, is the most common source of noise as well as visitors' voices, TVs, and behaviors of other patients.

Research concluded that best practices to eliminate noise from talking included staff education about noise reduction, public indicators such as sound monitors, a quiet time protocol, and lower cost environmental fixes, such as fixing noisy doors and squeaky wheels. Lastly, by introducing scripting with routine monitoring, patients' perception of quietness increased and the perception of noise decreased.

How We Address Noise at the UVM Medical Center

We introduced the "Culture of Quiet" Organizational initiative. The Nursing Professional Governance Patient and Family Experience Global council continued this work. After convening a small task force of nurses and assessing current quiet strategies, we introduced the following tactics:

- Many hospital units have designated 'quiet hours' with automatically dimming of lights at quiet hour intervals.
- Signage is visible in most patient care areas to help keep patients, family, and visitors aware. Throughout the hospital, you will see signs with a relaxing pair of Adirondack chairs and the sun setting with details on when a unit has quiet hours.
- Many semi-private rooms have windows in doors, so doors can be closed allowing for patient rest.
- We offer headphones for TVs and earplugs to help minimize sounds.
- In-patient kits contain a sleeping mask and other comfort items that can be provided at time of admission. Each kit contains a card and explains, 'the best healing occurs in a quiet environment.'
- New education material is available for staff, patients and visitors-just ask to review the next time visiting.
- Some units offer white noise machines, others have this built in.
- Noisy equipment such as wheels and doors can be tagged and replaced.
- Our facility and distribution staff have changed their cleaning and supply delivery schedules to accommodate patient care.
- Healthcare teams within the hospital are focusing efforts to cluster patient care to minimize interruptions to provide restful moments.

How you can help us.

We ask patients and visitors to hold us accountable when sounds are too loud. We want our community to alert us when noise levels are high and we will do what we can to minimize sound. In turn, we ask that all members of the healthcare team, patients, family, and friends be aware to keep voices soft, cell phones on vibrate, and hold each other accountable for these are the times of the day when our patients take pause to rest and positively impact their healing.

8/4/2019

Dangerous Decibels: Hospital Noise More Than a Nuisance | RN.com

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Dangerous Decibels: Hospital Noise More Than a Nuisance

By Diane Sparacino, Staff Writer

Imagine a world where hospitals have become so noisy that the annoyance has topped hospital complaints, even more than for the tasteless, Jell-O-laden hospital food (Deardorff, 2011). If you're a nurse, you know that we're already there – with noise levels reaching nearly that of a chainsaw (Garcia, 2012). In fact, for more than five decades, hospital noise has seen a steady rise (ScienceDaily, 2005).

But it wasn't always that way. At one time, hospitals were virtually noise-free like libraries – respected spaces, preserved as quiet zones. The culture was such that a loud visitor might be silenced by a nurse's purposeful glare or sharply delivered "Shhh!" As early as 1859, the importance of maintaining a quiet environment for patients was a topic for discussion. In Florence Nightingale's book, "Notes on Nursing," she described needless noise as "the most cruel absence of care" (Deardorff, 2011).

Fast forward to 1995, when the World Health Organization (WHO) outlined its hospital noise guidelines, suggesting that patient room sound levels not exceed 35 decibels (dB). Yet since 1960, the average daytime hospital noise levels around the world have steadily risen to more than double the



Exhibit 8b

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Dangerous Decibels: Hospital Noise More Than a Nuisance | RN.com

acceptable level (from 57 to 72 dB), with nighttime levels increasing from 42 to 60 dB. WHO found that the issue was not only pervasive, but high noise levels remained fairly consistent across the board, despite the type of hospital (ScienceDaily, 2005).

Researchers at Johns Hopkins University began to look into the noise problem in 2003. They maintained that excessive noise not only hindered the ability for patients to rest, but raised the risk for medical errors. Other studies blamed hospital noise for a possible increase in healing time and a contributing factor in stress-related burnout among healthcare workers (ScienceDaily, 2005).

Technology is, of course, partly to blame. State-of-the-art machines, banks of useful alarms, respirators, generators, powerful ventilation systems and intercoms all add up to a lot of unwanted racket. When human voices are added to the mix, (i.e., staff members being forced to speak loudly over the steady din of medical equipment), it's anything but a restful environment. For the recovering patient in need of sleep, that can be a real issue (Deardorff, 2011).

Contributing to the problem, experts say, are the materials used in hospitals. Because they must be easily sanitized, surfaces cannot be porous where they could harbor disease-causing organisms. Rather than using noise-muffling materials like carpet, acoustic tiles and other soft surfaces, hospitals have traditionally been outfitted using smooth, hard surfaces – especially in patient rooms. Good for cleanliness – not so great for dampening sounds, which tend to bounce around the typical hospital (Deardorff, 2011).

Which brings us to the most recent research, published January 2012 in the *Archives of Internal Medicine*. In the report, Jordan Yoder, BSE, from the Pritzker School of Medicine, University of Chicago, and his colleagues associated elevated noise levels with "clinically significant sleep loss among hospitalized patients," perhaps causing a delay in their recovery time (Garcia, 2012). During the 155-day study period, researchers examined hospital sound levels. The numbers far exceeded (WHO) recommendations for average hospital-room noise levels, with the peak noise at an average 80.3 dB - nearly as loud as a chainsaw or electric sander (85 dB), and well over the recommended maximum of 40 dB. And while nights tended to be quieter, they were still noisier than recommended allowances, with "a mean maximum sound level of 69.7 dB" (Garcia, 2012).

Perhaps most interestingly, the researchers broke down the sources of noise into categories: "Staff conversation (65%), roommates (54%), alarms (42%), intercoms (39%), and pagers (38%) were the most common sources of noise disruptive reported by patients" (Garcia, 2012). "Despite the importance of sleep for recovery, hospital noise may put patients at risk for sleep loss and its associated negative effects," they wrote. In addition, researchers found that the intensive care and surgical wards had some work to do in dampening noise levels, with ICU peaking at 67 dB and 42 dB for surgical areas. Both far exceeded WHO's 30 dB patient room recommendation (Garcia, 2012).

Besides patient sleep deprivation, which itself can lead to a multitude of health problems including high blood sugar, high blood pressure and fatigue, studies have reported that elevated noise levels can increase heart and respiratory rates, blood pressure and cortisol levels. Recovery room noise causes patients to request more pain medication, and preterm infants "are at increased risk for hearing loss, abnormal brain and sensory development, and speech and language problems when exposed to prolonged and excessive noise" (Deardorff, 2011).

There is still more research to be done, of course, but Yoder and his colleagues had good news, as well; much of the hospital noise they identified is modifiable, suggesting that hospitals can take steps to successfully create a quieter environment for both patients and healthcare providers (Garcia, 2012).

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Around the country, "quiet campaigns" have been launched by hospitals in an attempt to dampen nighttime noise. Besides dimming lights and asking staff to keep their voices down at night, they are working to eliminate overhead paging systems, replace wall and/or floor coverings – even the clang of metal trashcans. Northwestern's Prentice Women's Hospital in Chicago was built with noise reduction in mind, replacing the idea of centralized nursing stations with the advent of smaller, multiple stations (Deardorff, 2011)

Billed as "one of the nation's largest hospital construction projects," Palomar Medical Center in North San Diego County is a state-of-the-art facility that has been designed "to encourage quietness," according to Tina Pope, Palomar Health Service Excellence Manager. Slated to open its doors this August, the hospital will feature a new nursing call system to route calls directly to staff and help eliminate the need for overhead paging, de-centralized nursing stations and clear sig lines, allowing staff to check on patients without having to leave unit doors open. With measures already in place including "Quiet Hospital" badges on staff and posters at the entrance of every unit, a "Quiet at Night" campaign (9 p.m. – 6 a.m.), and a "Quiet Champions" program that encourages staff to report noise problems, Palomar is one of a growing number of hospitals working toward a new era of quiet.

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8/6/2019

<https://knops.co/magazine/noise-and-ptsd/>

Exhibit 9
a



Noises Are Truly Horrible For People Who Have PTSD

20 Mar '2018 [Sound](#)

Noise is a really big issue for PTSD survivors: people who have mental health problems because of their traumas. How are they connected?

Almost everybody has experienced a trauma. But some traumas are more scarring than others and can even result in long-lasting mental disorders like **PTSD**, which can have an extreme impact on someone's life. It's a disorder that can develop in the brain after a horrifying experience, like war or a car crash.

Symptoms

The symptoms of PTSD are, to say the least, not pleasant. They range from nightmares about the traumatic events, disturbing thoughts and feelings, anxiety, trying to avoid anything that has something to do with the traumatic event, and an increase in the fight-or-flight response.

Around ten percent of the population suffers from PTSD, according to data from **NCBI**, a part of the US National Library of Medicine. And, remarkably enough, that percentage is the same for people who suffer from tinnitus (the sound of a constant beep in your ears). The NCBI clearly sees a link between the two.

PTSD survivors also suffer from the Exaggerated Startle Syndrome, with anxiety and actions in an extreme and irrational way too loud noises and bangs. And then there are the sounds that remind them of the sounds during the traumatic events, which can trigger memories of the

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8/6/2010

trauma or flashbacks.



Fear

PTSD can also cause a general fear of sounds: phonophobia, or a fear of some specific sounds: misophonia. Survivors of the disorder also are generally much more sensitive to sounds and perceive them as much louder than other people would.

All of this makes the life of people with PTSD very hard. If you think you are suffering from this, consult your doctor. Really, please do it. For yourself, and for the ones you love.

Do you have PTSD and would you like to tell your experiences to us? We are always very open and interested to hear what you have to say. And again: if you haven't done it yet, visit your doctor, please. Thank you!

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8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

Exhibit 10a



Front Psychol. 2013; 4: 578.

PMCID: PMC3757288

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PMID: [24009598](https://pubmed.ncbi.nlm.nih.gov/24009598/)

Does noise affect learning? A short review on noise effects on cognitive performance in children

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This article was submitted to *Developmental Psychology*, a section of the journal *Frontiers in Psychology*.

Received 2013 May 14; Accepted 2013 Aug 12.

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Abstract

The present paper provides an overview of research concerning both acute and chronic effects of exposure to noise on children's cognitive performance. Experimental studies addressing the impact of acute exposure showed negative effects on speech perception and listening comprehension. These effects are more pronounced in children as compared to adults. Children with language or attention disorders and second-language learners are still more impaired than age-matched controls. Noise-induced disruption was also found for non-auditory tasks, i.e., serial recall of visually presented lists and reading. The impact of chronic exposure to noise was examined in quasi-experimental studies. Indoor noise and reverberation in classroom settings were found to be associated with poorer performance of the children in verbal tasks. Regarding chronic exposure to aircraft noise, studies consistently found that high exposure is associated with lower reading performance. Even though the reported effects are usually small in magnitude, and confounding variables were not always sufficiently controlled, policy makers responsible for noise abatement should be aware of the potential impact of environmental noise on children's development.

Keywords: noise, cognitive performance, cognitive development, children, speech perception, listening comprehension, irrelevant sound effect, classroom acoustics

8/4/2019

Does noise affect learning? A short review on noise effects on cognitive performance in children

EXHIBIT 1012

In everyday life, cognitive tasks are often performed in the presence of task-irrelevant environmental noise. Accordingly, numerous studies on noise effects on performance have been conducted since the middle of the 20th century (for reviews see Hellbrück and Liebl, 2007; Szalma and Hancock, 2011), showing that—depending on characteristics of sounds and tasks—noise of low to moderate intensity may in fact evoke substantial impairments in performance.

Most of these studies were conducted with adults. The present review, however, will focus on studies including children. Children are especially vulnerable to harmful effects of environmental noise, as cognitive functions are less automatized and thus more prone to disruption. We will report findings concerning effects of acute noise on performance in concurrent auditory and non-auditory tasks, as well as effects of chronic noise on children's cognitive development.

Effects of acute noise on children's performance in auditory tasks

Psychoacoustic studies have consistently shown that children's speech perception is more impaired than adults' by unfavorable listening conditions. The ability to recognize speech under conditions of noise or noise combined with reverberation improves until the teenage years (Johnson, 2000; Wightman and Kistler, 2005; Talarico et al., 2007; Neuman et al., 2010). With stationary noise makers, signal-to-noise ratios (SNRs) have to be 5–7 dB higher for young children when compared to adults in order to achieve comparable levels of identification of speech or nonspeech signals, with adult-like performance reached at about 6 years of age (Schneider et al., 1989; Fallon et al., 2000; Werner, 2007). However, with maskers that vary over time, i.e., with trial-by-trial variation of the maskers' spectral composition (Oh et al., 2001; Hall et al., 2005; Leibold and Neff, 2007) or with fluctuating maskers such as single-talker speech (Wightman and Kistler, 2005), adult-like performance is usually not reached before the age of 10 years. Furthermore, children are less able than adults to make use of spectro-temporal and spatial cues for separation of signal and noise (Wightman et al., 2003; Hall et al., 2005). These findings demonstrate that children are especially prone to *informational* masking, i.e., masking that goes beyond energetic masking predicted by filter models of the auditory periphery.

Studies identified a range of linguistic and cognitive factors to be responsible for children's difficulties with speech perception in noise: concerning the former, children are less able than adults to use stored phonological knowledge to reconstruct degraded speech input. This holds for the level of individual phonemes, as children's phoneme categories are less well specified than adults' (Hazan and Barrett, 2000), but also for the lexical level since children's phonological word representations are more holistic and less segmented into phoneme units. Therefore the probability of successfully matching incomplete speech input with stored long-term representations is reduced (Nittrouer, 1996; Metsala, 1997; Mayo et al., 2003). In addition, young children are less able than older children and adults to make use of contextual cues to reconstruct noise-masked words presented in sentential context (Elliott, 1979). Concerning attention, children's immature auditory selective attention skills contribute to their difficulties with speech-in-noise perception. Children's susceptibility to informational masking has been attributed to deficits in focusing attention on auditory channels centered on signal frequencies, while ignoring nonsignal channels (Wightman and Kistler, 2005). Behavioral and ERP measures from dichotic listening paradigms provide evidence that auditory selective attention improves throughout entire childhood (Doyle, 1973; Pearson and Lane, 1991; Coch et al., 2005; Wightman et al., 2010; Gomes et al., 2012).

Owing to the mediating role of linguistic competence and selective attention, children with language or attention disorders are still more impaired than normally developing children by noise in speech perception tasks (Geffner et al., 1996; Ziegler et al., 2005, 2009). A stronger noise effect is also evident for children tested in their second language when compared to native children (Crandell and Smaldino,

8/4/2011

For example, he might refuse to go to school after a fire drill. He might become fearful of birthday parties after being frightened by a balloon that popped unexpectedly. Other signs of extreme distress can include yelling, crying, clinging and general agitation. Because your son may have difficulty communicating, it's important to observe his behavior for these signs of distress. This can help you determine what's triggering his fears.

Avoidance versus learning to cope

Many parents go to great pains to protect their children by avoiding agitating situations. This approach is sometimes appropriate and even necessary. However, it denies individuals the opportunity to learn how to manage anxiety-provoking situations on their own.

By helping your son learn to manage his fear, you can prepare him for an unpredictable world so that he can participate in it to the maximum extent possible.

Given the severity of your son's anxiety symptoms, I suggest that you seek professional support in addition to the strategies offered here. Families whose children have milder symptoms of anxiety can try these strategies on their own – seeking professional help if symptoms worsen.

Tackling one fear at a time

I suggest making a list of your child's major fears and worries. Try to rank order them from mild to severe. To encourage success, I'd start with a mild-to-moderate fear before taking on his extreme reaction to loud noises.

Key components of a cognitive behavioral approach include introducing coping strategies such as deep breathing and "helpful thoughts" that can help a person manage fearful reactions.

For example, you can teach your son to take deep slow breaths to help manage his body's physical anxiety reactions.

"Helpful thoughts" are statements that your son can say to himself when faced with a situation that makes him anxious. For example, you can coach to your son to say, "This is a loud noise. I don't like it, but I can handle it."

To help your son to learn these strategies, I suggest you model taking deep breaths while repeating a "helpful thought" out loud.

Graded exposure

The most important step is to help your son face his fears a little at a time. We call this "graded exposure." For example, explain to your son that the two of you are going to listen to a recording of thunder. The first time, you might play the recording at a soft volume, then gradually increase the volume over time as he demonstrates increased comfort with the sounds

Or you might try watching a video of a balloon pop – perhaps with the volume off the first time. Then he can watch a real balloon pop while standing some distance away. Over time, he can move closer and closer to the balloon.

After such exercises, you can present him with small rewards for being brave and "facing fears." Remember that even a small act of bravery – such as listening to a recording of thunder for 10 seconds – represents an important step toward handling fears. It deserves to be acknowledged.

Although graded exposure may seem counterintuitive, research indicates that this strategy is the single most effective strategy for getting over a particular fear.

I wish you and your son the very best. Please let us know how you're doing with an email to GotQuestions@autismspeaks.org.

60
Pages

Additional Resources & Tools

EXPERT
OPINION

[Help for Child with Autism & Recurring Behavioral Crises: Part 2](#)

EXPERT
OPINION

[Parents Seek Help for Son with Autism and Recurring Behavioral Crises](#)

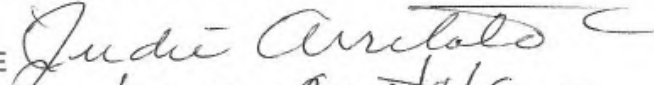


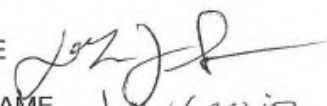
SCIENCE
NEWS


EXPERT
OPINION

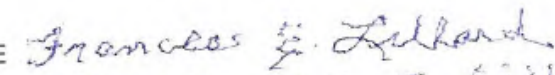
[Parents Seek Help: Child with Severe Autism Eats Only Sweets](#)


I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

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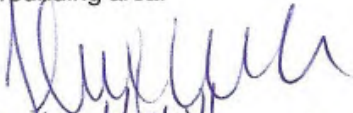
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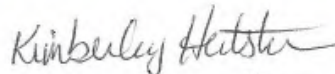
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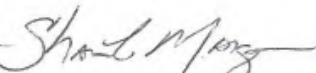
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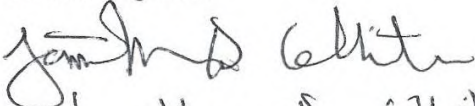
ADDRESS


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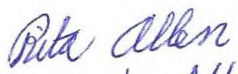
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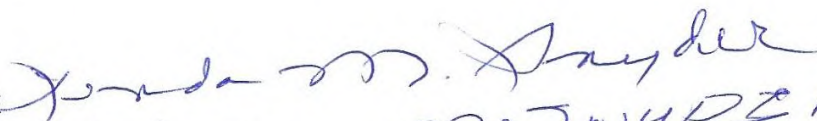
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I have read the attached letter regarding noise and it expresses my concerns and my request to abandon the use of the proposed route for the Boardman to Hemingway Transmission Project and that it be rerouted to an area that is much less impactful to the residents of La Grande and to the surrounding area.

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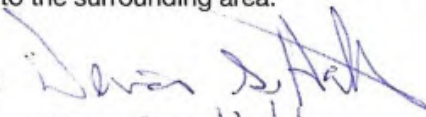
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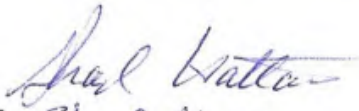
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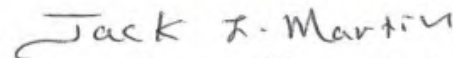
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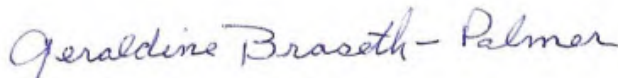
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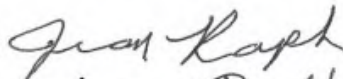
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ESTERSON Sarah * ODOE

From: Arlene Young <arlene.young@gmail.com>
Sent: Tuesday, August 20, 2019 11:46 AM
To: B2H DPOComments * ODOE
Subject: Stop B2H

August 20, 2019

Energy Facilities Siting Council

c/o Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St, N.E.

Salem, OR 97301

Sent Via E-Mail: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018;
Draft Proposed Order.

RE: Anadromous Fish in Ladd Creek, Union County

Dear Chair Beyeler and Members of the Energy Facility Siting Council:

I am writing in protest of the proposed Boardman to Hemingway Transmission Line Project. Specifically, I am protesting as a concerned citizen regarding the B2H Draft Proposed Order, the Final Environmental Impact Statement, and the project's plan regarding wild and threatened fish.

Both of the proposed routes in Union County for the Boardman to Hemingway Transmission Line project include a crossing of the Ladd Creek and/or its tributaries. Ladd Creek flows approximately 14 miles through the Wallowa Whitman National Forest and private land on the east side of the Blue Mountains, into the Ladd Marsh Wildlife area, connecting with Catherine Creek and the Grande Ronde, Snake, and Columbia Rivers.

Historically, there were anadromous fish (steelhead and salmon returning from the ocean) in Ladd Creek. ODFW has documented that steelhead and salmon used Ladd Creek for spawning. However, construction of Interstate 84 in the 1970's stopped the passage of these fish above the interstate due to a vertical culvert being installed (see Power Point "Ladd Creek Fish Passage Project - ODOT FTP").

The Oregon Department of Fish and Wildlife's Mission is to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations. The department is the only state agency charged exclusively with protecting Oregon's fish and wildlife resources. The state Wildlife Policy (ORS 496.012) and Food Fish Management Policy (ORS 506.109) are the primary statutes that govern management of fish and wildlife resources.

The B2H Draft Proposed Order (page 9-10 of *draft Fish Passage Plan in ASC Exhibit BB, Attachment BB-2*), states that Ladd Creek and its tributaries contain only local fish (trout), but **that status has changed** due to major culvert work along and under the I-84 interstate in the last 4 years. As a result, the information contained in the B2H Draft Proposed Order is incorrect and out of compliance with Oregon and Federal statutes.

In 2015, ODOT completed a 2-year project to replace culverts that previously had blocked fish passage in the creek and at the I-84 crossing of Ladd Creek (see <https://www.lagrandeobserver.com/csp/mediapool/sites/LaGrandeObserver/LocalState/story.csp?cid=4108250&sid=824&fid=151>).

According to ODFW Fish biologist Tim Bailey, in the year after completion of the fish passage project (2016) a steelhead redd was documented above the culvert, upstream from the freeway.

ODOT has continued this fish passage project in 2019 along with plans for freeway reconstruction and additional traffic lanes (see <https://www.constructionequipmentguide.com/odot-works-to-improve-i-84-fish-passage-in-ladd-canyon/45648>). Construction has resulted in costs over 32 million dollars, and the list of agencies and individuals in support of this costly fish passage project include ODFW, Union County Board of Commissioners, The Grande Ronde Model Watershed, the US Army Corps of Engineers, Senator Jeff Merkley, Senator Ron Wyden, and the National Marine Fisheries Service (see <https://www.oregon.gov/odot/projects/pages/project-details.aspx?project=20381>) and ([PPT] Ladd Creek Fish Passage Project - ODOT FTP).

An entire watershed is protected when it is determined that it contains federally threatened or endangered fish species. Idaho Power in its application and the B2H Draft Proposed Order have failed to incorporate information regarding identification of the habitat category or locations which will be impacted by the proposed B2H powerline development. Critical habitat is specifically identified in the federal law recording the listing of threatened species (ESA). The current application and site certificate fails to include requirements that would assure that the state is complying with federal laws in providing habitat protection for listed species (salmon and steelhead).

The B2H Draft Proposed Order contains the following outdated information:

1. In *Table 1. Road-Stream Crossing Ownership, Risk Summaries, Proposed Crossing Types, and Fish Passage Information* Idaho Power names 5 waters in the Ladd Creek area (page 9-11 of *draft Fish Passage Plan in ASC Exhibit BB, Attachment BB-2*) with stream crossings. The report states that the only fish in these waters are resident fish. This information is now incorrect.
2. The B2H Draft Proposed Order states that for all of Ladd Creek and its tributary streams that “No new ODFW fish plan anticipated.” (page 9-11 of Attachment BB-2). It cannot be overemphasized that this information is now incorrect.
3. The alternative route Idaho Power has chosen will necessitate a 3a/3b (page 11 BB-2) design change for a bridge crossing on Ladd Creek if this route is chosen, this will trigger an ODFW fish passage plan to be implemented (OAR 17 412-0035) based on Oregon Administrative Rules (OAR) 635-412-0020. Again, the B2H Draft Proposed Order information is now incorrect.

Because of the change of status of the fish population in Ladd Creek, the B2H Draft Proposed Order is out of compliance with several Federal and State laws including:

1. ORS 509.580 through 509.910: *Fish Passage; Fishways; Screening Devices; Hatcheries Near Dams*
2. OAR 635-41-0005 through 635-412-0040: *Fish Passage*
3. *Oregon Forest Practice Administrative Rules and Forest Practices Act, OAR Chapter 629 (ODF 2014)*
4. *Forest Practices Technical Note Number 4, Fish Passage Guidelines for New and Replacement Structures (ODF 2002)*

5. *Fish and Wildlife Mitigation Policy (OAR 635-415-0000), which states that :*

(a) The mitigation goal if impacts are unavoidable, is no net loss of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality.

(b) The Department shall act to achieve the mitigation goal for Category 2 habitat by recommending or requiring:

(A) Avoidance of impacts through alternatives to the proposed development action; or

(B) Mitigation of impacts, if unavoidable, through reliable in-kind, in-proximity habitat mitigation to achieve no net loss of either pre-development habitat quantity or quality. In addition, a net benefit of habitat quantity or quality must be provided. Progress towards achieving the mitigation goals and standards shall be reported on a schedule agreed to in the mitigation plan performance measures. The fish and wildlife mitigation measures shall be implemented and completed either prior to or concurrent with the development action.

(c) If neither 635-415-0025(2)(b)(A) or (B) can be achieved, the Department shall recommend against or shall not authorize the proposed development action.

In conclusion, the B2H Draft Proposed Order contains an improper evaluation of the potential short and long term negative impacts to the fish habitat in the Ladd Creek drainage, including surrounding creeks, given the fact that species listed as threatened under the Endangered Species Act are now returning to Ladd Creek, with their numbers expected to increase in upcoming months and years.

Sincerely,

Arlene Young

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ESTERSON Sarah * ODOE

From: Arlene Young <arlene.young@gmail.com>
Sent: Tuesday, August 20, 2019 11:54 AM
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Subject: Stop B2H

August 20, 2019

Energy Facilities Siting Council

c/o Kellen Tardaewether, Senior Siting Analyst

Oregon Department of Energy

550 Capitol St, N.E.

Salem, OR 97301

Sent Via email: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project 9/28/2018;
Draft Proposed Order.

RE: Endangered Fish in Ladd Creek and Tributaries, Union County

Dear Chair Beyeler and Members of the Energy Facility Siting Council:

I am writing in protest of the proposed Boardman to Hemingway Transmission Line Project. I request that my letter protesting issuance of an Oregon Site Certificate for the currently proposed Boardman-to-Hemingway Transmission Project (B2H Project) be entered into the permanent written record. I also request response to, and resolution of, the issues I raise herein.

Both of the proposed routes in Union County for the Boardman to Hemingway Transmission Line project include a crossing of the Ladd Creek and/or its tributaries. Ladd Creek flows approximately 14 miles through the Wallowa Whitman National Forest and private land on the east side of the Blue Mountains, into the Ladd Marsh Wildlife area, connecting with Catherine Creek and the Grande Ronde, Snake, and Columbia Rivers.

Historically, there were anadromous fish (steelhead and salmon returning from the ocean) in Ladd Creek. ODFW has documented that steelhead and salmon used Ladd Creek for spawning. However, construction of Interstate 84 in the 1970's stopped the passage of these fish above the interstate due to a vertical culvert being installed (see attached Power Point "Ladd Creek Fish Passage Project - ODOT FTP").

The Oregon Department of Fish and Wildlife's mission is to protect and enhance Oregon's fish and wildlife and their habitats for use and enjoyment by present and future generations. The department is the only state agency charged exclusively with protecting Oregon's fish and wildlife resources. The state Wildlife Policy (ORS 496.012) and Food Fish Management Policy (ORS 506.109) are the primary statutes that govern management of fish and wildlife resources.

The B2H Draft Proposed Order (pages 9-10 of *draft Fish Passage Plan in ASC Exhibit BB, Attachment BB-2*), states that Ladd Creek and its tributaries contain only local fish (trout), but that status has changed due to major culvert work along and under the I-84 interstate in the last 4 years. As a result, the information contained in the B2H Draft Proposed Order is incorrect and out of compliance with Oregon and Federal statutes.

In 2015, ODOT completed a 2-year project to replace culverts that previously had blocked fish passage in the creek and at the I-84 crossing of Ladd Creek (see <https://www.lagrandeobserver.com/csp/mediapool/sites/LaGrandeObserver/LocalState/story.csp?cid=4108250&sid=824&fid=151>).

According to ODFW Fish biologist Tim Bailey, in the year after completion of the fish passage project (2016) a steelhead redd was documented above the culvert, upstream from the freeway.

ODOT has continued this fish passage project in 2019 along with plans for freeway reconstruction and additional traffic lanes (see <https://www.constructionequipmentguide.com/odot-works-to-improve-i-84-fish-passage-in-ladd-canyon/45648>). Construction projects have resulted in costs above 32 million dollars, and the list of agencies and individuals in support of this costly fish passage project include ODFW, Union County Board of Commissioners, The Grande Ronde Model Watershed, the US Army Corps of Engineers, Senator Jeff Merkley, Senator Ron Wyden, and the National Marine Fisheries Service (see <https://www.oregon.gov/odot/projects/pages/project-details.aspx?project=20381>) and attached ([PPT]Ladd Creek Fish Passage Project - ODOT FTP).

An entire watershed is protected when it is determined that it contains federally threatened or endangered fish species. Idaho Power in its application and the B2H Draft Proposed Order have failed to incorporate information regarding identification of the habitat category or locations which will be impacted by the proposed B2H powerline development. Critical habitat is specifically identified in the federal law recording the listing of threatened species. The current application and site certificate fails to include requirements that would assure that the state is complying with federal laws in providing habitat protection for listed species (salmon and steelhead).

Idaho Power has two proposed line routes across and through Ladd Canyon, a preferred and an alternative. Idaho power has also stated that because there are only resident fish in Ladd Creek, that "No new fish passage plan anticipated" (page 9-11 of *draft Fish Passage Plan in ASC Exhibit BB, Attachment BB-2*).

Because the alternative route through Ladd Canyon would necessitate a 3a/3b design change for a bridge crossing on Ladd Creek and there are threatened anadromous fish in Ladd Creek, an ODFW fish passage plan will need to be implemented (OAR 17 412-0035) based on (OAR) 635-412-0020 for this route for Ladd Creek and its tributaries.

In conclusion, the B2H DPO contains improper evaluation of the potential long term negative impacts on fish habitat in the Ladd Creek drainage, including tributaries. The Endangered Species Act requires identification and evaluation of effects of the proposed action through ESA section 7(a)(2) consultation with NMFS (anadromous fish species). Federally protected anadromous species are currently present in Ladd Creek, and its tributaries.

Idaho Power's B2H DPO is not in compliance with State or Federal Protected Species laws. The applicant has failed to meet the requirements for issuance of a Site Certificate contained in OAR-345-022-0080. Therefore, issuance of a Site Certificate should be denied.

Sincerely,

Arlene Young

96 Penn Avenue

La Grande, OR 97850

arlene.young@gmail.com

541.963.3879

August 12, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

Via E-MAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project
9/28/2018; Draft Proposed Order 5/23/2019

To: Chairmen Beyeler and Members of the Council

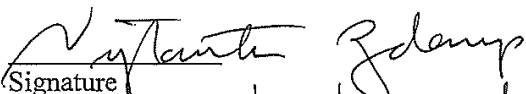
I appreciate the opportunity to comment on the Draft Project Order for the Boardman to Hemingway Transmission Project. I am very supportive of the Oregon California Trails Association (OCTA) and the work that they have done to protect the Oregon Trail, especially here in Oregon. OCTA is mentioned numerous times in **Exhibit S** and the **Historic Properties Management Plan and Programmatic Agreement**. OCTA does NOT believe that Exhibit S Historic Properties Management Plan is complete in 7.2.3 Field Crew, and offers this additional condition.

ADDITIONAL CONDITION #1 OCTA recommends that the Council add an Oregon Trail expert to the Cultural Resource Team. This Oregon Trail individual will have qualifications similar to Field crew members. For example, they will have an undergraduate degree in anthropology, archaeology, or in a field such as geology, engineering or history. It will not be necessary to have attended a field school. This individual will be recommended by the National OCTA President and agreed to by the Field Director.

The field surveys, even with SHPO and NPS data, have missed and/or mislabeled some sections of the emigrant trail. OCTA wants the public to know where the Trails are and I do too! OCTA over the years has marked the trail location with wooden signs, small triangles attached to trees, and more recently, carbonite posts and steel rails. Most private property owners are proud of the trail on their property, and after obtaining permission allow the public to walk and hike on the trail.

Idaho Power and their consultants have not acknowledged trail crossings shown on submitted Maps and do not ~~acknowledge visual intrusion of the line for 10 miles per standards, and only upon ODOE's RAI's, put into~~ documents some trail protections. This has been consistent from the BLM process to current day.

Considering the points above, Idaho Power does not comply with the state standards for cultural resources OAR 354-022-0090, or 345-022-0080, Scenic resources. **EFSC Must Deny the Site Certificate!**



Signature

Printed name: Vytautas Zdanys

Mailing address: P.O. Box 756
La Grande OR 97850

Email address: vytauszdanys@gmail.com
phone number: (optional)

12 August 2019

Oregon Energy Facility Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. N.E
Salem, OR 97301

Dear Chair Beyeler and Members of the Council:

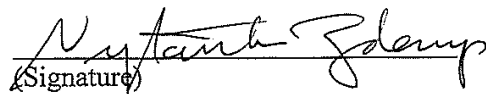
As I understand it, the applicant did not complete noise modeling on multiple noise sensitive properties within ½ mile of the development as required by OAR 340-035-0015(38). In fact, the closest noise modeling was performed at Hilgard, the junction of I-84 and 244, about 8 miles air miles away, with a train track near by. Applicant could scarcely have chosen a site less representative of the absolute silence typical of the Morgan Lake setting.

Page 145 (T-4-46) Baseline condition: "... A goal of minimal development of Morgan Lake Park should be maintained to preserve the maximum natural setting and to encourage solitude, isolation, and limited visibility of users..." Solitude, of course, suggests an absence of distraction from external stimuli including noise. Campers often comment on the tranquility of the park where a 5 mph speed limit is enforced to limit noise, and no shooting or motorized craft are allowed on the lake. Even when the campground is full, it's possible to picnic or hike beside the lake in absolute silence.

Noise Sensitive Property is "property normally used for sleeping, or normally used as schools, churches, hospitals, or public libraries. Obviously the noise corona of popping, humming transmission lines will interfere with the silence campers have every right to expect in a natural setting.

This transmission line is planned to be sited within 500' west of the park boundary, which would place it easily within less than 1/5 of a mile of overnight camp sites.

The applicant's ASC should be denied until all required and adequate noise modeling has been performed.


(Signature)

Name: Vytautas Zdanys

Address P.O. Box 756
LaGrande OR 97850

August 14, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

Via E-MAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project
9/28/2018; Draft Proposed Order 5/23/2019

To: Chairmen Beyeler and Members of the Council

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The Draft Proposed Order identifies significant impacts to the Oregon Trail in several Exhibits, including Exhibit C: Property Location and Maps; Exhibit L: Protected Areas; Exhibit R: Scenic Aesthetic Values; Exhibit S: Cultural Resources; Exhibit T: Recreational Facilities; and Exhibit X: Noise.

B2H crosses the Oregon Trail at least 8 times. EFSC has done a reasonable job of protecting the Trail during construction and operation, if the proposed requirements are followed, **except at the Oregon Trail Interpretive Center at Flagstaff Hill.**

The B2H Transmission Line should be buried for approximately 2 to 2 ½ miles to comply with the exhibits indicated above. Idaho Power has from the early years refused to do any significant analysis for this option. IPC uses cost as the reason for stating that undergrounding is not feasible. Cost is not a specific standard, and costs are the responsibility of the Oregon Public Utilities Commission during rate considerations. EFSC has determined that IPC has the Financial ability even if some partners choose to not participate, so reasonable cost should not be a determining factor for EFSC.

EFSC should refuse to approve the Draft Project Order for the following reasons:

1. Does not comply with Noise Standards as no measurements were done at the Oregon Trail viewpoint or walking trails endpoint near milepost 146. Perhaps not a "Noise Sensitive Property," in the context of residential sleeping areas; however, certainly for tourists and visitors to the Interpretive Center and hiking trails noise will be disturbing. Map 23 in Attachment X-1 does not even show the Oregon Trail.
2. Within OAR 345-022-0040 Protected Areas and ODEQ standards 340-035-0000-0100, this area should have been monitored and modeled as a Noise Sensitive Property and was not.
3. Does not comply with Scenic Values from the Blue Mountains Parkway and Oregon Trail Interpretive Center. The OR 86 encourages drivers to STOP and read interpretive signs, so viewer perception and resource change cause significant decrease of scenic vales. IPC says no significant impact.
4. The DPO does not comply with Exhibit L Protected Areas. The BLM ACEC at Flagstaff Hill has not considered undergrounding for the protection of the Oregon Trail. No analysis found the pristine, Class 1 swales of the Oregon Trail within the ACEC located at: Lat 44.813762 Long -117.750194 or 44° 48' 48.26"N 117° 75' 57.97"W. IPC proposes to build a new constructed road over the Oregon Trail in the area identified in the location above.
5. The DPO does not meet the standards required for Exhibit T Recreational Facilities, OAR 345-022-0100, especially at the Flagstaff Hill interpretive center, because of:
 - a. It is a BLM ACEC area managed for public tourism

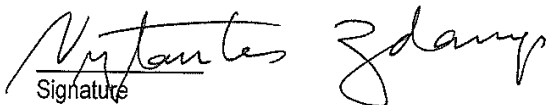


- b. It is the single most visited tourist facility in Baker County
 - c. The quality of the facility is outstanding
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6. The cost estimates of IPC do not compare with those of the *Edison Electric Institute*, January 2013 publication "Out of Sight, Out of Mind, An Updated Study of the Undergrounding of Power Lines." This article suggests that for 2.5 miles of rural undergrounding, the cost will be \$67,500,000. This is almost half the IPC estimate.

The Oregon Trail along the route of the B2H has the most damaging affects to its critical historic elements. Once the Trail is gone it cannot be reconstructed or mitigated back to life. Once gone, always gone. The only easily accessible public facility in Oregon is the Flagstaff Hill Interpretive Center near Baker City. The B2H must be buried to preserve this important site.

Considering the reasons above and the unconscionable desecration of our national treasure, the Council Must Deny the site certificate for the Boardman to Hemingway Transmission project.

Thank you,


Signature

Printed Name: Vytautas Zdanys

Mailing Address: P.O. Box 756, La Grande OR 97850

Email: vytauszdanys@gmail.com

ESTERSON Sarah * ODOE

From: randy zelick <rantidromic@gmail.com>
Sent: Tuesday, August 20, 2019 11:00 AM
To: B2H DPOComments * ODOE
Subject: opposed to b2h comment 1
Attachments: letter1-historic-properties.docx

Please see attached. I have taken the trouble to add personal comments and analysis, it is not just a form letter.

--

=Randy Zelick=

August 12, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

Via E-MAIL: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project
9/28/2018; Draft Proposed Order 5/23/2019

To: Chairmen Beyeler and Members of the Council

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Considering the points above, Idaho Power does not comply with the state standards for cultural resources OAR 354-022-0090, or 345-022-0080, Scenic resources.

I don't have to say that the proposed power line is monumental in its physical impact, from a visual and habitat perspective, and in many other regards. In my view, the **EFSC should require nothing less than an exemplary effort by Idaho power to contain the negative impacts**. Yet, there are scores of deficiencies, both minor and major in their proposal. Should the EFSC really approve this project given the oversights, errors, omissions and non-current data provided by Idaho power? Please put the citizens of Oregon before a shareholder-driven "utility" from another state.



Signature

Printed name: Randy Zelick

Mailing address: 2230 Washington Ave, Baker City, OR 97814

Email address: zelickr@pdx.edu

phone number: 503-710-1452 (cell)

August 14, 2019

Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol Street N.E.
Salem, OR. 97301

Via E-MAIL: B2H.DPOComments@Oregon.gov

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Have you visited the Oregon Trail museum? The view is spectacular, and gives a wonderful impression of what the Baker valley would have looked like in years past. All the way to the 1850's? Well no, but not too far off. The sense of heritage the view provides cannot be given a value, it is too high. Recently I was in Washington DC and in Boston, MA. I visited the Old South Church in Boston, a gorgeous old building, but now appearing as a complete anachronism as it is dwarfed by gigantic glass and steel skyscrapers in every direction. The visitor has no sense of historic perspective, no emotional connection to the place as it was early in the history of the United States. Washington DC was different. The settings of the buildings on the National Mall are as they were 100 and 200 years ago and in your mind you can transport yourself back in time. That is the value of forward thinking planning and consideration of heritage. In Eastern Oregon we do not have human-built grand buildings from the 1700's, but we do have the Oregon trail. This is our connection to place. Please be considerate of our heritage – it is your heritage too. In 100 years Oregonians may still be able to view the place as it was. What will they say of us, of the watchdogs for industrial excess and overreach? They did a great job not allowing 150 foot steel towers and crackling wires to ruin the view. Good for you EFSC. Or perhaps the tens of thousands of future visitors to the Oregon Trail will say "Can you believe it – Look at that abomination they allowed. For what? An obsolete and outdated minimal improvement in the power grid. They should be ashamed."

Thank you,



Signature

Printed Name: Randy Zelick

Mailing Address: 2230 Washington Ave, Baker City, OR, 97814

Email: zelickr@pdx.edu

August 18, 2019

**Energy Facilities Siting Council
c/o Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St N.E.
Salem, OR. 97301
Kellen.Tardaewether@oregon.gov**

Subject: Idaho Power Amended Application for the Boardman to Hemingway Transmission Project dated 9/28/2018; Draft Proposed Order dated 5/22/2019

Dear Chair Beyeler and Members of the Council;

My comments below concern Idaho Power's faulty and illegal "Noxious Weed Plan" (DPO Attachment P 1-5) as well as their failure to take into account in any way, the Oregon Conservation Strategy. First, though, I want to make a general comment about the power line right-of-way and access roads. This view comes from my 31 years as a Professor of Biology at Portland State University. Almost by definition, weeds are a type of plant that takes advantage of disturbed habitats. Regardless of any proposed mitigation, it will be nearly impossible to deal with invasive weeds along the power line route. Any mitigation would no doubt be implemented after tower construction and road building, but by this time it is too late. After all, building roads and towers could not be more effective at "disturbing" the habitat. Microscopic seeds will blow in and weed plants will be established, of course leading the hundreds of millions of additional seeds every year. Thus the real point is whether the value of the power line is worth the impact to the environment. With some great future effort, it would be possible to completely remove the towers. The effort to get rid of weeds, of non-native species where none existed before, is much greater and likely impossible. The power lines proposed are old technology and not forward thinking. Is this the legacy that the ODE wants? Please do not approve the project just because a huge company decides they want it. It makes much more sense that ODE instead promote innovative plans for energy security that do not cause habitat destruction.

The Oregon Conservation Strategy <http://oregonconservationstrategy.org/overview/> "represents Oregon's first overarching state strategy for conserving fish and wildlife. It uses the best available science to create a broad vision and conceptual framework for long-term conservation of Oregon's native fish and wildlife, as well as various invertebrates, plants, and algae. The Conservation Strategy emphasizes proactively conserving declining species and habitats to reduce the possibility of future federal or state listings. It is not a regulatory document but instead presents issues, opportunities, and recommended voluntary actions that will improve the efficiency and effectiveness of conservation in Oregon."

Under the Oregon Conservation Strategy, IPC's B2H project is a Key Conservation Issue: "(KCI)s are large-scale conservation issues or threats that affect or potentially affect many species and habitats over large landscapes throughout the state."

Despite being a Key Conservation Issue, the Oregon Conservation Strategy and its Goals, are not mentioned in IPC's Application at all! Consider Land Use Planning Goal 1: *Manage land use changes to conserve farm, forest, and range lands, open spaces, natural or scenic recreation areas, and fish and wildlife*

habitats. Neither the current Proposed Route nor Morgan Lake Alternative of IPC's Application to EFSC takes these into account! Even if we ignore the fact that the B2H Project likely is not needed at all, given lowered demand and improved technology of energy storage batteries—IPC intends to disregard the “Proposed Route” considered in the BLM/USFS Records of Decision. That “Proposed Route” was chosen by the agencies as being the least harmful to the greatest list of resources—yet IPC has abandoned that in favor of two other routes imminently MORE harmful and despised by MOST residents of Union County. Is Goal 1 being met when the B2H line goes less than 100 feet from Twin Lake, a gem of a wetland that deserves protection? Is Goal 1 being met when B2H goes through Rice Glass Hill property, proposed as a State Natural Area? Is Goal 1 being met when noxious weeds are spread by B2H through Union County's finest wet meadows and elk wintering habitat?

No, Goal 1 one is not being met. Another very specific example is 5 State listed rare plant species (DPO Exhibit Q) within the B2H “analysis area”. IPC claims “only” two of these rare species (Mulford's milkvetch and Snake River goldenweed) will suffer “direct impacts”, by blading with heavy equipment. IPC claims that, “Avoidance and minimization measures ...described in Section 3.5.4” will “mitigate” impacts. Upon reading 3.5.4 we find that this consists of “minimum buffer of 33 feet between the disturbance and the edge of the T&E occurrence”. Habitat for these plants will be completely fragmented and a buffer of 33 – or even a few hundred--feet will not stop invasion by noxious weeds! These species will suffer irreparable damage under B2H. The Oregon Conservation Strategy rightly recognizes, “Invasive species are the second-largest contributing factor causing native species to become at-risk of extinction in the United States.”

To delve further into rare plants slated for damage by B2H, *Trifolium douglasii* is a USFWS “Species of Concern” <https://www.fws.gov/oregonfwo/Documents/OregonSpeciesStateList.pdf> yet not even considered in IPC's 3.5 “Avoidance to Minimize Impacts”. Although List 1 under ORBIC's latest ranking <https://inr.oregonstate.edu/orbic/rare-species/ranking-documentation/vascular-plant-ranks> it is not shown as State listed Threatened or Endangered, so is ignored by IPC. Species of Concern are “Taxa whose conservation status is of concern to the U.S. Fish and Wildlife Service (many previously known as Category 2 candidates), but for which further information is still needed.” Douglas clover has a global rank of G2 “*Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (extirpation), typically with 6-20 occurrences*”. DPO Exhibit P Part 2b Appendix 3A and 3B Figure 9 of 23 shows Douglas clover directly on the Morgan Lake alternative! This is not even taking into account that areas of private land where access was not granted for survey, likely contain additional occurrences of Douglas clover. The area is THE main place where this rare plant grows in Oregon, and B2H is set to permanently alter and compromise its main habitat with weeds!

Another very obvious lack is IPC's failure to discuss Strategy Habitats, outlined in Oregon's Conservation Strategy: <http://oregonconservationstrategy.org/strategy-habitats/strategy-habitats-summary-by-ecoregion/>.

In Union County alone, the Strategy Habitats of Grasslands, Late Successional Mixed Conifer Forest, and Ponderosa Pine Woodlands would very obviously be impacted by B2H as proposed in the Application.

The Application also neglects to address Strategy Species under OCS “*The Conservation Strategy identifies 294 Strategy Species, which are Oregon's “Species of Greatest Conservation Need”. Strategy Species are defined as having small or declining populations, are at-risk, and/or are of management concern.* “This is completely unacceptable! How can an action set to devastate so many of Northeast Oregon's Strategy Habitats and Species not even respond to our State Conservation Strategy?

Moving on to invasives, IPC's "Noxious Weed Plan" is greatly lacking. As noted above, it is a threat to Oregon's native plant communities. Oregon's Conservation Strategy states "*Invasive non-native species can have many negative consequences throughout Oregon. Depending on the species and location, invasive plants can:*

- *affect food chain dynamics*
- *change habitat composition*
- *increase wildfire risk*
- *reduce productivity of commercial forestlands, farmlands, and rangelands*
- *modify soil chemistry*
- *accelerate soil erosion*
- *reduce water quality*"

Chapter 569 of Oregon law covers weeds. Oregon statute 569.180 (Noxious weeds as public nuisance policy) states, "In recognition of the imminent and continuous threat to natural resources...noxious weeds are declared to be a public nuisance and shall be detected, controlled and, where feasible, eradicated on all lands in this state."

Upon careful reading, "Noxious Weed Plan" breaks the law by exempting IPC from weed control after 5 years, denying responsibility for Class B and C Weed species (the vast majority of weeds), and holding IPC accountable for only the very limited area of ROW, despite the B2H project introducing and spreading weeds far and wide along a 300 mile stretch plus dozens of additional access roads and tensioning areas.

In summary, IPC's Application does not take into account the Oregon Conservation Strategy. The Application clearly is breaks Goal 1 of the Strategy in many ways; additionally the Application imperils a Federal "Species of Concern", and does not consider Strategy Habitats or Strategy Species. IPC's Noxious Weed Plan does not comply with Chapter 569 of Oregon law. I strongly urge you to deny IPC's Application. Our State Conservation Strategy and Goals and the integrity of our native plant habitats and rare plant occurrences cannot be sacrificed!

Sincerely,

Name
Address

Kellen Tardaewether, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St. NE
Salem, Oregon 97301
email: B2H.DPOComments@Oregon.gov

Dear Kellen Tardaewether,

I have reviewed a good deal of the information provided by Idaho Power with respect to environmental impacts. It is difficult to determine whether Idaho Power has performed due diligence in preparing their material. Indeed, much may be outdated and incorrect relative to recent understanding of climate change, current species surveys and so forth. One disturbing aspect of the project is habitat fragmentation and how this will impact a variety of species.

Reading through the 532 page document “2019-05-21-B2H-DPO-Attachment-3.pdf” I have the following comments and observations.

1. Idaho Power’s responses to lengthy critiques from various entities are minimal, typically lacking sufficient detail to appreciate that the responses have truly taken into consideration the issues outlined. The Oregon Department of Energy should not accept abbreviated and insufficient responses to valid critiques.
2. In response to questions about alternate routes for the transmission lines, the printed response that “Idaho Power has determined... least cost, least risk...” [alternative] should not be considered adequate. This is tantamount to putting the fox in charge of the henhouse. The Oregon Department of Energy should accept nothing less than an independent analysis, not contracted by Idaho Power.
3. In terms of ecological impacts and in particular habitat fragmentation, the concerns of native peoples and, it would seem, even those of ODOE have not been considered. References to habitat loss, fragmentation, and other human impacts have focused on either large mammals like livestock or on sensitive species such as pygmy rabbits, ground squirrels and sage grouse. As yet I have found no indication of an effort to consider general effects of habitat fragmentation. One concern in particular is the effect of roads that create small ecological islands, which in turn tend to concentrate small animals in those islands. A consequence of the concentration is more rapid and complete spread of viruses that not only have a deleterious effect on mammals but can impact humans as well. Of particular concern is the sin nombre strain of Hantavirus that infects both rodents and humans. People that come into contact with the virus by way of a rodent may suffer a potentially deadly respiratory disease. According to the Center for Disease Control:

“Hantavirus Pulmonary Syndrome (HPS) is a severe, sometimes fatal, respiratory disease in humans caused by infection with hantaviruses. Anyone who comes into contact with rodents that carry hantaviruses is at risk of HPS. Rodent infestation in and around the home remains the primary risk for hantavirus exposure. Even healthy individuals are at risk for HPS infection if exposed to the virus.”

A common “reservoir” for Hantavirus is the Deer Mouse (*Peromyscus maniculatus*), common in the areas proposed for the B2H transmission lines. So, the more fragmentation, the more likely it is for a farmer, rancher, tourist or power company worker to come into contact with the virus.

Furthermore, this project will go through the area surveyed for the Antelope Ridge Wind Development. Due to the lack of meaningful information being provided by Idaho Power in their application, it is necessary to go to the 2010 formal letter information summary to find their summary of effects. These are projected habitat impacts from the Antelope Ridge Wind Development in the area to be crossed by the B2H transmission line. ODFW comments regarding the surveys completed thus far have identified four active golden eagle nests in this area. ODFW recommended no new roads be constructed within 1 mile (1/2 mile line of site) of the nests. Construction and maintenance activities should not occur within 1 mile line of sight (1/2 mile non line of site) of nest between January 1 and July 15.

How will Idaho Power construct and maintain power lines yet not disturb eagle nesting habitat? How will a reduced safety distance continue to provide protection for golden eagles. Will the roads being built at the site comply with OAR 345-022-0060. Are you satisfied that Idaho Power has considered the most recent scientific data in terms of habitat impacts? Do you have their reference list? Much of what I observed in their proposal is material that was cut-and-paste from other projects done years ago. The Oregon Department of Energy should not accept conclusions of habitat and wildlife impacts that are based on outdated information.

Below is a brief bibliography of several scientific research studies that have looked into the Hanta Virus issue:

Boone JD, Otteson EW, McGwire KC, Villard P, Rowe JE, and St Jeor SC (1998) Ecology and demographics of hantavirus infections in rodent populations in the Walker River Basin of Nevada and California. *American Journal of Tropical Medicine and Hygiene* 59:445-451

Fahrig L (2003) Effects of habitat fragmentation on biodiversity. *Annual Review of Ecology and Systematics* 34:487-515

Mackelprang R, Dearing MD, and St Jeor S (2001) High prevalence of Sin Nombre virus in rodent populations, central Utah: a consequence of human disturbance? *Emerging Infectious Diseases* 7:480-482

Myers SS, Gaffikin L, Golden CD, Ostfeld RS, Redford KH, Ricketts TH, et al. (2013) Human health impacts of ecosystem alteration. *Proceedings of the National Academy of Sciences* 110:18753-18760

Olsson GE, White N, Ahlm C, Elgh F, Verlemyr AC, Juto P, et al. (2002) Demographic factors associated with hantavirus infection in bank voles (*Clethrionomys glareolus*). *Emerging Infectious Diseases* 8:924-929

Prugh LR, Hodges KE, Sinclair AR, and Brashares JS (2008) Effect of habitat area and isolation on fragmented animal populations. *Proceedings of the National Academy of Sciences* 105:20770-20775

Rubio, A.V., Ávila-Flores, R. & Suzán, G. (2014) Responses of Small Mammals to Habitat Fragmentation: Epidemiological Considerations for Rodent-Borne Hantaviruses in the Americas

EcoHealth 11: 526. <https://doi.org/10.1007/s10393-014-0944-9>

In my opinion, the environmental impact analyses for this project are inadequate. Despite a very large volume of information provided, many pernicious issues.

A handwritten signature in black ink, appearing to read "Randy Zelick". The signature is written in a cursive, flowing style.

Signature/name Randy Zelick

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Email: B2H.DPOComments@Oregon.gov

Subject: Idaho Power Application for a Site Certificate for the Boardman to Hemingway Transmission Project (B2H) 9/28/2018; Draft Proposed Order 5/23/2019.

Dear Chair Beyeler and Members of the Council,

This letter is a public comment for the above referenced project. Specifically, this letter will discuss Idaho Power's compliance with Standard 345-022-0110 - Public Services, in Exhibit U (3.5.6.2 and 3.5.6.5) of the EFSC application for B2H to ODOE. The letter will discuss the impact potential wildfires caused by the B2H transmission line will have on the ability of public and private providers within the analysis area to provide fire protection.

The effect of transmission lines on wildfire impact in western states has been well documented. In California, PG&E lines have caused 5 of the 10 most destructive fires since 2015, producing a liability of over 30 billion for PG&E. When considering the impact of B2H's operation, residents of Union County find the similarities between La Grande and Paradise California, where the infamous Camp Fire struck in 2018, deeply concerning. La Grande and Paradise share similar elevations and populations, however, La Grande has several characteristics that make it significantly more vulnerable to the ravages of wildfire than Paradise. For instance, La Grande averages 18 inches of rain yearly while Paradise enjoys 55 inches. Additionally, the proposed line runs adjacent to La Grande, while the line causing the Camp Fire was 7 miles from Paradise. *Oregon's 2006 Communities at Risk Assessment* by the Oregon Department of Forestry cites a startling fact: **The fire risk of the wildland urban interface (WUI) in La Grande has been rated the #1 WUI fire risk in Oregon!**

There is no doubt that construction of the proposed B2H transmission line would significantly increase the risk of wildfire in our area. From Idaho Power's own Draft Protection Order (Exhibit U-3.5.6.2, p. U-24): "Most activities will occur during summer when the weather is hot and dry. Much of the proposed construction will occur in grassland and shrub-dominated landscapes where the potential for naturally occurring fire is high. Project construction-related activities, including the use of vehicles, chainsaws, and other motorized equipment, will likely increase this potential risk in some areas within the Site Boundary. Fire hazards can also be related to workers smoking, refueling, and operating vehicles and other equipment off roadways. Welding on broken construction equipment could also potentially result in the combustion of native materials near the welding site." Idaho Power recognizes this hazard but makes no consideration of it in its application.

There are several specifics to examine in an analysis of the proposed B2H line's effects on Union County's ability to provide fire protection services. Firstly, firefighting crews in our region are

limited and volunteer. In their application, Idaho Power avers, "Most of the fire districts within the analysis area comprise volunteers, and in some cases, it takes considerable time to collect and mobilize an entire fire crew." As well, JB Brock, Union County emergency Manager states in Idaho Power's application "volunteer fire departments (rural fire protection districts) have a hard time finding volunteers due to budget constraints, similarly to budget constraints at the state and federal level. The wildland fires are getting bigger and cost more to fight" (U-1C-6). Fire crews in Union County are not equipped to handle potential wildfires generated by the proposed B2H transmission line.

The fact that fire crews are unstable, small and volunteer affects many aspects of their ability to respond to wildfires. Delayed response times, as noted in the quote from the previous paragraph, is one effect. Estimates of response time in the EFSC application are best-case scenarios. The estimate of 4 to 8 minutes as the response time in Union County (Table U-10) is far from even a best-case scenario (p. U-17). Residents that live on Morgan Lake Road concur that driving time is at least 10-15 minutes to the most accessible areas of the line from the base of Morgan Lake Road. Add to this estimate travel time from the La Grande Fire Station (approximately 7 minutes) and the time needed for individual fire fighters to travel to the Fire Station for a more realistic best-case scenario response time. The Paradise Camp Fire burned at a rate of over 1 acre per second!

Another factor in transmission line fires particularly impactful for small volunteer fire departments is the complications to firefighting introduced by the transmission lines themselves. According to Marvin Vetter, ODOF's Rangeland Coordinator, "local crews have no training in this scenario and will wait for the lines to be de-energized." JB Brock, Union County Emergency Manager, states, "The project (transmission line) could limit the ability on initial attack if fire fighters have to wait for power lines to be de-energized." (U-1C-6) These delays allow fires to grow even more.

How can communities struggling to maintain volunteer fire crews hope to address the overwhelming additional challenges and risks imposed by a project such as the B2H transmission line? Where is this addressed in Idaho Power's application and how can Idaho Power conclude that the proposed B2H transmission line is "not expected to have significant adverse impacts on fire protections services" (Exhibit U 3.5.6.2)? Considering the current capacities of fire protection services in Union County and the additional risks of wildfire imposed by the B2H transmission line, I urge you to act in accordance with state statute OAR 345-022-0110 and reject Idaho Power's application to construct the Boardman to Hemingway transmission line.

Sincerely,



Name Randy Zelick

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