BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

IN THE MATTER OF IDAHO
POWER COMPANY'S, PETITION FOR
CERTIFICATE OF PUBLIC CONVENIENCE
AND NECESSITY.

Docket: PCN 5

AMENDED Opening Testimony

Intervenor: STOP B2H COALITION

Date: February 1, 2023

Stop B2H Coalition 60366 Marvin Road La Grande, Oregon 97850 www.stopb2h.org

Submitted by: Jim Kreider, Co-Chair jkreider@campblackdog.org

- 1 Q: State your name and the organization you represent. Explain the mission of your organization and your role. 2 My name is Jim Kreider and I am the Co-Chair of the Stop B2H Coalition (aka Stop B2H A: 3 or STOP). Our mission is: 4 "To stop the approval and construction of an unneeded 305 mile, 500 kv transmission line 5 through Eastern Oregon and Western Idaho, thereby: 6 protecting environmental, historical and cultural resources; 7 preventing degradation of timber and agricultural lands and the Oregon National Historic 8 9 Trail; and promoting energy conservation and supporting the rapid development of new 10 technologies in energy generation, storage and distribution throughout the western region 11 and the USA." 12 13 Why doesn't the Stop B2H Coalition have an attorney representing them? 14 Q: A: STOP, as a regional grassroots organization, has been fundraising since its inception. All 15 the money we have raised has been dedicated to attorneys in the ODOE/EFSC site certificate 16 contested case and our appeal to the Oregon Supreme Court. Therefore, we are navigating this 17 docket without legal advice and using our best efforts to understand and navigate the contested 18
- Realizing that our footnoted citations in the original filing of our Opening Testimony may not have been admitted into the PCN-5 record based on the January 25, 2023 status

case process at OPUC. The OPUC process is different from the contested case process at

ODOE/EFSC so it is a steeper learning curve than expected.

19

conference with ALJ Mellgren, we are updating and including exhibits in this Amended Opening
Testimony.

Q: What does STOP think about the expedited procedural schedule in this docket?

A: It has put STOP and the landowner interveners, members of the public with no training to

engage in proceedings like this, at a distinct disadvantage. As a grassroots organization it takes

time to reach out and organize the public, understand and define the various regional/individual

issues, consult with attorneys or other knowledgeable experts, and develop training programs and

tips/guidance, so the public can represent themselves before the adjudicating body.

Idaho Power and PacifiCorp have legions of experienced utility attorneys that are being paid by us, the ratepayers, to fight us, the ratepayers. If there ever was an uneven playing field we are looking at it here. Therefore, we plead that the content of our argument, while probably not properly formatted or cited, be accepted with instructions to configure our future testimony in the proper manner. STOP is looking for attorneys and has been turned down by many. We have learned that representing STOP is the kiss of death to many attorneys that might want future work from the utilities.

Additionally, this timeline has an artificially fabricated urgency created by Idaho Power. Their assertion that the sky will fall if the B2H isn't on line by 2026 is not true. Idaho Power, after doubling their planning reserve margins in the 2021 IRP (a paper exercise) and the purchase of transmission rights by third parties outside their balancing authority shocked their planners and suddenly they have a large energy deficiency from the 2019 to 2021 IRP. They also claim the early exit of some of the Jim Bridger units will exacerbate this shortfall. It needs to be noted that units 1 and 2 were scheduled to be decommissioned and are now being converted to natural

- gas. That leaves units 3 and 4 which have scrubbers and meet the clean air act standards (that
- 2 units 1 and 2 did not have). These two units (3 and 4) do not have to be retired except for the
- 3 political greenwashing points for carbon reduction which the company is not required to do.
- We've heard their greenwashing since the beginning of the B2H project. The need for
- 5 transmission was to replace the coal plants. Now two of the coal plants are gas plants and we
- 6 have only more hollow promises.
- If it takes longer to correctly and fairly deal with a CPCN for the B2H there is enough
- 8 energy that Idaho will not go without power. The urgency is a red herring. Between the multi-
- 9 source RFP that Idaho Power has recently issued for more generation that will be online before
- 2016, the Jim Bridger units that will likely be kept on line until their end of life in 2034, and the
- 11 (academic) changes in their reserve margin, we reiterate that Idaho Power's urgency is self-
- created. Bottom line is we have time for thoughtful and careful consideration for the B2H
- 13 CPCN, to identify all the land parcels targeted for condemnation and all permits to be acquired.

15

Q: Why is the Stop B2H Coalition concerned about Idaho Power's CPCN application?

- A: As our mission states, Stop B2H is a coalition of people and organizations that have been
- trying to prevent the construction of this massive industrial intrusion into the lives, livelihoods,
- habitats, and special places in Eastern Oregon that we all cherish and wish to protect. With
- 19 nearly 1,000 members, thousands more who support us from our member organizations, and
- 20 years of research and docket engagements, STOP knows the B2H is unnecessary to meet the
- 21 energy needs in Idaho, it is very expensive, and it is counter to what we believe are better and
- 22 more secure ways to modernize our grid infrastructure and enhance our climate resiliency.

The CPCN would enable an out of state utility to export energy from the Mid-C, which is entering a resource inadequacy. The Pacific Northwest Power Supply Adequacy Assessment for 2027 in the Executive Summary in part it says¹,

As in the plan, this assessment found risk factors to monitor when determining how to implement and adapt the resource strategy to the wide range of uncertainties the region faces. If regional planners observe increased demand due to accelerated electrification in any part of the region without an associated increase in resources and reserves, and/or resources of significant size are retired without replacement, the risk of adequacy issues increases significantly.

The inadequacy is due to the accelerated retirement of carbon generation resources and a slower replacement of that lost capacity by renewable energy systems. Energy prices will increase due to this resource inadequacy naturally. Staff pointed out in the 2021 IRP LC 78 that the AURORA modeling for Mid-C prices was significantly lower than actual prices seen in the Mid-C. Additionally AURORA did not calculate the impacts of the resource inadequacy nor the impact to prices if the lower Snake River dams are taken down with their loss of generation capacity. These scenarios should be modeled in a 20 year plan. Energy prices will increase even more if the B2H is built for two additional reasons: 1) the B2H will export more of the Mid-C's limited energy supply thus increasing prices and; 2) the OATT for PATH 14 will increase because of B2H. All three price increases will be passed onto the customer.

Logic would suggest that if Idaho Power built more of their own renewable generation in Idaho, closer to load and enhancing its intrastate transmission/distribution system. It will reduce

¹ Pacific Northwest Power Supply Adequacy Assessment for 2027-Executive Summary

- energy costs in both markets. The IPUC staff in IPC-E-19-14 Application for Power Purchase
- 2 Sales Agreement with Jackpot Holdings found that the 120 MW PPA with Jackpot was more
- 3 cost effective than buying energy from the Mid-C (see Exhibit 1, pp. 10-13). If both regions
- 4 build renewables to meet their resource inadequacies, a new large transmission system will not
- 5 be needed. With regional generation and load more in balance the current transmission system
- 6 can be upgraded, reconducted, and fire hardened for maximum benefits.
- 7 STOP will address the incompleteness and inappropriateness of this CPCN application
- and reserves the right to add additional evidence once discovery is complete and all data requests
- 9 are received.

13

- 10 As STOP is also unrepresented at this time, we reserve the right to add legal counsel to
- our team, when we are able to retain one.

Q: Overall, tell us what issues STOP is contesting in this case.

- 14 A: STOP is contesting the fact that there are alternatives to this project that better protect the
- public health, safety and welfare of Oregonians, and that the application is still incomplete and
- therefore, prematurely filed. We trust that the OPUC is conducting its own investigation into the
- matter.² We understand that the OPUC will be relying on the decisions of EFSC, which approved
- a site certificate for the B2H project. However, there are decisions that are outside of the EFSC
- jurisdiction³, and others that need special consideration because: they are on appeal at the
- Oregon Supreme Court⁴; there are mitigation plans that are not complete and they need to be
- 21 complete and approved by various agencies/authorities before compliance with the site

² ORS 758.015(2): "...in addition to considering facts presented at such hearing, shall make the commission's own investigation to determine the necessity, safety, practicability and justification in the public interest..."

³ OAR 860-025-0035(2) "... has already been acknowledged or approved by regulatory or permitting authorities."

⁴ Links to the Supreme Court Briefs, which have been filed into the record by IPC previously: https://edocs.puc.state.or.us/efdocs/HAH/pcn5hah81518.pdf

- certificate can be assured⁵; and/or, because a new project amendment is pending which will be a
- 2 type A amendment requiring a contested case and they have only begun the amendment analysis
- 3 and decision making process under ODOE.⁶ At least 2 more project amendments are expected,
- 4 making this docket a longer process.

- 6 Q: Stop B2H Coalition says that its mission is more than just stopping the project, and
- you mentioned alternatives above. What are STOP's alternatives?
- 8 A: We have many alternatives. Some are alternatives to transmission and are more climate-
- 9 friendly solutions for Idaho Power; and some are about "right-siting," which is more
- 10 environmentally-friendly and considers the people impacted, if the project must go forward.
- Years of suggestions in our opening and closing comments in IPC's IRP's present
- numerous alternatives. We have presented opening and closing comments since 2015, attended
- all IRP meetings and IPC-led workshops since 2016. We have advocated for increased energy
- efficiency (EE) targets -- especially when IPC's own data demonstrated that their customers are
- achieving more EE than they projected. In 2017, STOP's IRP comments included a "Citizen
- 16 Portfolio" which included suggestions for more robust demand-side management programs,
- enhanced partnering with industrial and commercial customers in efficiency programs as well as
- 18 co-generation, aggressive roll-out of their smart grid technologies (e.g.: Advanced Metering
- 19 Infrastructures) while partnering with residential customers (utilizing their smart meters for two

⁵ See **Exhibit 2.a.** in particular, 5.0 Pre-Construction Conditions (GEN- and PRE-) in the EFSC issued Site Certificate. https://www.oregon.gov/energy/facilities-safety/facilities/Facilities/Facilities/20library/B2H-AMD1-pRFA-Attachments.pdf

⁶ The first amendments are noticed: https://www.oregon.gov/energy/facilities-safety/facilities/Facilities/20library/2022-12-15-B2H-AMD1-pRFA-Public-Notice.pdf and the Request for Amendment is **Exhibit 2.** https://www.oregon.gov/energy/facilities-safety/facilities/Facilities/20library/B2H-AMD1-pRFA-and-Cover-Letter.pdf

⁷ STOP Public Comments and Technical Filings 2015-2023, **Exhibit 2.b.** (102.b.)

⁸ Exhibit 3 (103) STOP's 2017 IRP comments pp. 17-18; and Exhibit 4 (104) Consortium of Groups' EIS objections comments: pp. 25-26.

- way communications and conservation), securing or building more renewable generation close to
- 2 load/demand and existing substations (BPA's "non-wires" solutions), battery storage and
- ancillary services (e.g.: smoothing and balancing voltage on the grid), again near substations.
- 4 STOP's years of advocacy for these types of alternatives are aligned with OAR 860-025-
- 5 0030(2)(n). ⁹
- 6 STOP has also been advocating for upgrading, digitizing, and fire-hardening our three
- 7 existing 230 kV lines in PATH 14 for many years. We believe this is in the best interest and
- 8 benefit of the public. The security of fire-hardening cannot be under-stated, security and
- 9 resiliency is gained by upgrading before building new, and it is prudent, in terms of common
- sense and fiscal responsibility. IPC says upgrading and fire hardening will cost more to their
- shareholders and customers. But financial costs are not the only consideration in prudency. Loss
- of natural, cultural and historical resources, habitats, and livelihoods and now potential
- property losses, all must be considered. It's impossible to put a price on them—they are
- Precious. Note: In the past week STOP learned that the BPA is upgrading and rebuilding the 45
- mile Roundup-La Grande 230 kV line beginning in 2023 in a letter from Henkels and McCoy,
- 16 Inc. STOP has asked for more details.

18

Q: You mentioned "right-siting" above. Can you address that?

- 19 A: Administrative rules in OAR 860-025-0030 "Petitions for CPCN for Construction of
- Overhead Transmission Lines" and its subsections 860-025-0030 2(c)(C), (g), (l), and "CPCN"

⁹ (n) An evaluation of available alternatives to construction of the transmission line, including but not limited to conservation measures, non-wires alternatives, and construction of one or more lower-voltage single or multi-circuit lines. The petitioner may make reference to relevant sections of its most recent integrated resource plan (IRP) filed under OAR 860-027-0400, local transmission plans, or a planning document substantially equivalent to an IRP;

- 1 Review Criteria" OAR 860-025-0035 1(c) and 2, address the applicant's evaluation of
- 2 alternative routes in various ways. All of these are part of 'right-siting' and IPC's petition is not
- 3 in compliance with these rules.

5

16

17

18

19

20

21

2223

24

- Q: Why are they not in compliance?
- 6 A: The most obvious example is Idaho Power's choice, with EFSC's approval, to not
- 7 include the BLM's Environmentally-Preferred route in Union County in its analysis. This does
- 8 not comply with OAR 860-025-0035 (2) which says that the Commission will give due
- 9 consideration to reviews that have already been approved by a regulatory or permitting agency. 10
- To summarize: the applicant has not evaluated all available alternative routes per ORS
- 469.370(13) which states, "For a facility that is subject to and has been or will be reviewed by a
- federal agency under the National Environmental Policy Act, 42 U.S.C. Section 4321, et seq., the
- council shall conduct its site certificate review, to the maximum extent feasible, in a manner that
- is consistent with and does not duplicate the federal agency review. Such coordination shall
- include, but need not be limited to:
 - (a) Elimination of duplicative application, study and reporting requirements;
 - (b) Council use of information generated and documents prepared for the federal agency review;
 - (c) Development with the federal agency and reliance on a joint record to address applicable council standards;
 - (d) Whenever feasible, joint hearings and issuance of a site certificate decision in a time frame consistent with the federal agency review; and
 - (e) To the extent consistent with applicable state standards, establishment of conditions in any site certificate that are consistent with the conditions established by the federal agency. In fact the environmentally preferred route selected by the BLM was not allowed

¹⁰ It should be noted that this issue is pending before the Supreme Court; it was delayed by the EFSC process. Petitioner McAllister intended to bring the issue forward to the Supreme Court in Nov 2020 but was informed by DOJ/EFSC Attorney Ratcliff that it could not be filed until the full EFSC process was completed. Hence, 2 years later, the case on the NEPA route can finally be heard. The public good was not served by the bureaucratic delay which favored Idaho Power's choice and influence of route selection.

to be evaluated by EFSC. EFSC erred in their decision to block consideration of this 1 2 properly analyzed route." 3 The Energy Facility Siting Council did not allow the National Environmental Policy Act (NEPA) 4 route, called the "Glass Hill Alternative," selected by BLM in its Record of Decision (ROD)¹¹ in 5 Union county be evaluated. In the BLM ROD (see Exhibit 5 (105)) which states, 6 7 "The ROW authorization decision applies only to BLM-administered lands in the B2H Project area. In making its decision, however, BLM considered effects on other public 8 9 lands managed by the BLM, as well effects on private lands and lands managed by 10 agencies other than the BLM. This decision would achieve the B2H Project's purpose while also avoiding, minimizing, or requiring compensation for impacts on sensitive 11 resources along the route." (Exhibit 105 p. 3, highlighted). 12 It is clear that the BLM designated Union County's Glass Hill Alternative as the environmentally 13 preferred route (see map, p. 4 in Exhibit 105, light blue line). Furthermore, on page 6 of Exhibit 14 15 105, it states: "Although the BLM does not have authority over state or private land, the Applicant has 16 agreed that provisions of the draft and final Construction PODs will be applied 17 18 consistently to state and private land as well as Federal land, unless otherwise indicated by the state and/or by private landowners." (page 6 of Exhibit 105, highlighted). 19 Pro Se Michael McAllister in the ODOE/EFSC contested case regarding a site certificate 20 21 for the B2H transmission line in OAH Case No. 2019-ABC-02833 was prohibited by the ALJ

and EFSC from arguing that the BLM NEPA environmentally preferred route, the Glass Hill

¹¹ BLM Record of Decision (November 2017), See Exhibit 5 (105) for Excerpt. https://eplanning.blm.gov/public_projects/nepa/68150/125243/152690/20171117_Record_Of_Decision.pdf

- Alternative should be evaluated. In Mr. McAllister's appeal to the Oregon Supreme Court¹² he 1
- quotes, "Based on this construction of Petitioner's issue, the Council held the matter was outside 2
- of its jurisdiction, adopting the reasoning: An applicant's choice of routes, and whether 3
- Applicant selects the route with the least environmental impact, are matters that fall outside 4
- Council's jurisdiction. There is no siting standard requiring Council to consider routes not 5
- proposed by Applicant and no siting standard allowing Council to recommend routes that are not 6
- proposed in the ASC. Because Applicant's selection of the Morgan Lake Alternative route 7
- (instead of the Agency Selected NEPA Route, or other possible routes) falls outside Council's 8
- 9 jurisdiction, the above issues are not properly raised for consideration in the contested case. OAR
- 345-015-0016(3)"¹³. 10

19

20

- Mr. McAllister's two (2) comments in PCN 5, with the subjects of "In the Matter of 11
- Idaho Power Utility Company Petition for Certificate of Public Convenience and Necessity, PCN 12
- 5, Memorandum Issued: December 19, 2022 (January 6, 2023)"14 and "Comments of Michael 13
- McAllister PCN 5 IDAHO POWER CERTIFICATION OF PUBLIC CONVENIENCE AND 14
- NECESSITY (January 10, 2023)"15 he further details the failures of EFSC and the EFSC's ALJ 15
- to follow ORS 469.370(13) to allow for an evaluation of the Glass Hill Alternative which is the 16
- BLM's preferred NEPA route in Union County. 17

Why should the OPUC evaluate the Glass Hill Alternative, BLM's Environmentally **Q**:

Preferred Route in the ROD?

¹² Michael McAllister versus Energy Facility Siting Council, Oregon Department of Energy, and Idaho Power Company (IPC), Respondents - S069920: https://edocs.puc.state.or.us/efdocs/HAH/pcn5hah81518.pdf

¹³ Links to the Oregon Supreme Court opening Briefs sent by Idaho Power per ALJ Mellgren's December 19, 2022 Memorandum asking for documents related to all appeals of the Energy Facility Siting Council's site certificate for the Boardman to Hemingway Transmission Line pdf, page. 90.

https://edocs.puc.state.or.us/efdocs/HAH/pcn5hah81518.pdf

¹⁴ https://edocs.puc.state.or.us/efdocs/HAC/pcn5hac144747.pdf, McAllister's response to ALJ Mellgren.

https://edocs.puc.state.or.us/efdocs/HAC/pcn5hac161936.pdf, McAllister's public comment, PCN-5.

- 1 A: As stated earlier, 860-025-0030 2(c)(C), (g), (l) and 860-025-0035 1(c) and 2, instructs
- the OPUC in varying ways to evaluate all possibilities to construct and evaluate transmission
- lines for the public good. In evaluating a petition under this rule (860-025-0035(2)), the
- 4 Commission will give due consideration to related regulatory reviews and permitting approvals
- 5 as pertinent to the proposed transmission line, if the transmission line has already been
- 6 acknowledged or approved by regulatory or permitting authorities.
- 7 In this case the BLM under NEPA has evaluated and approved the Glass Hill Alternative
- 8 in Union County which has not been evaluated for this CPCN and therefore it should be
- 9 evaluated and compared with the other routes to achieve the best public good in terms of "right
- 10 siting."

- 12 Q: Where can we find the EFSC B2H Record?
- 13 A: If it has not been admitted into the record of this docket, we are introducing it
- electronically into the record via Exhibit 7 (107).
- 16 Q: In OAR 860-0250-0035 (1) the commission is charged with determining the
- 17 necessity, safety, practicability, and justification in the public interest for the proposed
- transmission line. Tell me why STOP believes this line cannot be operated safely?
- 19 A: STOP contends that the transmission line will not be operated in a manner that protects
- 20 the public health, safety and welfare of Oregonians. 16 "Safety" means "the condition of being

¹⁶ ORS 467.010: "The Legislative Assembly finds that the increasing incidence of noise emissions in this state at unreasonable levels is as much a threat to the environmental quality of life in this state and the health, safety and welfare of the people of this state as is pollution of the air and waters of this state. To provide protection of the health, safety and welfare of Oregon citizens from the hazards and deterioration of the quality of life imposed by excessive noise emissions, it is hereby declared that the State of Oregon has an interest in the control of such pollution, and that a program of protection should be initiated...."

- safe, freedom from being exposed to danger; exemption from hurt, injury, or loss."¹⁷ To
- 2 establish the safety of a project, the developer must show that the project will be constructed,
- 3 operated, and maintained in a manner that protects the public from danger.
- One of the reasons that Idaho Power and its partner cannot comply with this statute is
- 5 because of the industrial noise pollution. Idaho Power has said it best themselves in the
- 6 application for a Site certificate to EFSC: the project would be "unpermittable." EFSC's site
- 7 certificate gives the B2H project a blanket waiver to Oregon's Rules and Standards (designed to
- protect people) along the entire 300 mile route. STOP asserts that: 1) EFSC erred when it held
- 9 that it has the authority to grant variances, under a statute (OAR 467.060) in which the
- legislature gave that authority solely to a different agency (the EQC) and; 2) Similarly, but
- separately, EFSC erred when it held that it could grant exceptions to noise rules promulgated by
- a different agency (the DEQ). Stop B2H and a number of other petitioners in the EFSC
- contested case process, brought forward volumes of compelling testimony and evidence. 19
- 14 STOP's evidence includes reports from: 1) the original ODOE consultant used for reviewing the
- project, ²⁰ 2) the former Noise Control Administrator for the DEQ, ²¹ 3) personal declarations and
- affidavits from other petitioners, and 4) a letter from the Engineering Leader of the project and
- 17 current Idaho Power Vice President for Planning, Engineering and Construction, Mitch Colburn,
- to the BLM²² stating that it would be "...untenable to propose locating a 500-kV transmission

KuGgBp0ACia6zeJbmwHEYOH96cw.

¹⁷ Pacific Power Petition for Public Convenience and Necessity, UM 1495, Order No. 11-366 p 4 (Sept. 22, 2011)

¹⁸ Idaho Power cannot comply with Oregon DEQ's Ambient Degradation Noise Rules/Standards; the project is "unpermittable." (ASC p X-1.) See Exhibit 6 (106); and Exhibit 9 (109) p 7.

¹⁹ The file organization is complex and at times confusing therefore we are providing screen shots to hopefully help the reader to find the information. See **Exhibit 7 (107)** screen shots of The Full Record of the EFSC process and Contested Case, can be found here: https://oregonenergy-my.sharepoint.com/:f:/g/personal/askenergy odoe state or us/EiXVWw7QhEZOiNDjGP-

²⁰ Exhibit 8 (108) STOP's written direct testimony in ODOE/EFSC contested case, Exhibit #5; and Surrebuttal testimony NC-2, NC-3, NC-4 Kreider Attachment A.

²¹ Exhibit 8 (108), pp. 11-18.

²² Exhibit 9 (109) STOP's written testimony in ODOE/EFSC contested case, Exhibit #3, page 7.

line within 1,200 feet of so many residences when a viable alternative exists that would avoid

2 those impacts.

3

4 Q: Didn't the EFSC already grant a variance and exception to the Noise Control

5 standards?

- 6 A: Yes they did and it is currently on appeal at the Oregon Supreme Court. Nonetheless, it
- 7 needs to be mentioned that there were more problems with this blanket variance and exception
- 8 than is being appealed. The appeal focuses on **the legal authority** matters. Significant problems
- 9 still exist that the Commission may want to consider, including but not limited to, the rationale
- that EFSC used to make its (illegal) determinations for variance and exception. ²³ (See Exhibit
- 11 10.)

12

13

Q: Can you give us a practical example of this rationale and its impact?

- 14 A: One example is a metric that IPC used and ODOE acquiesced, for determining the level
- of corona sound exceedances. ODOE and IPC convinced the volunteer members of EFSC that
- the frequency of sound or noise exceedances in the project vicinity would be "infrequent and
- unusual" because we have a dry climate.²⁴ The ODEQ rules state that the metric that should be
- utilized for determining the frequency of an exceedance is "60 consecutive minutes (or one hour)
- 19 for every 24 hours."²⁵ In the case of "foul weather"²⁶ Idaho Power convinced ODOE and EFSC
- 20 that this state rule was not to be followed, and rather the metric should be by minutes not hours.
- We are confident that the professionals at the OPUC will see this difference and note that unless

²³ **Exhibit 10 (1010):** STOP Written Testimony, NC-2 Kreider, pp 3-9, including Exhibit #4; STOP Closing Argument Opening Brief pp. 5-9; STOP Closing Argument Response Brief pp 5-22.

²⁴ Moist conditions increase corona noise.

²⁵ ODEQ's OAR 340-035-0015(7)

²⁶ Foul weather, i.e.: rain and wind were measured and averaged using the 4 regional weather stations.

- or until there was a reason to change this ODEQ standard's definition, that the frequency of
- 2 possible exceedances forecasted is accurate. Humidity, ice, fog and other condensation aside,²⁷
- based only on the historical weather of rain, there are predicted exceedances for 13% of the time,
- 4 for the region as a whole, and 22% in the La Grande area. This is NOT infrequent! In the
- 5 record, there are more examples and we hope the OPUC will investigate because of the impact
- 6 that increased corona noise will have on the public health and safety of the people living in
- 7 Eastern Oregon.

9

Q: Is there some kind of mitigation that can occur?

- 10 A: No, there is no current technology for masking corona noise. We know already, that by
- 11 IPC's forecasts that 41 homes are predicted to exceed standards, primarily clustered in Malheur
- and Union Counties. Residents are burdened with the legal costs, stress, and time for negotiating
- some kind of mitigation (per Site Certificate NC4). The residents have not been assessed as to
- their health, and if any special accommodation is necessary and/or possible, beyond IPC's
- proposed mitigation ideas (i.e.: window treatments, coverings, and possible home insulation.)
- STOP proposed additional mitigations, such as monitoring and upgrading the masking
- techniques as they become technologically available in the future; however EFSC disagreed.

18

19

Q: Does STOP have other safety concerns?

- 20 A: Yes, Wildfire is a big one! The EFSC Process was ineffective in assessing risks and
- 21 mitigation plans for Idaho Power and the B2H in the context of wildfire. This was primarily
- because the OPUC was promulgating its own rules at the time and Idaho Power was claiming
- that it would comply with OPUC and therefore they met EFSC standard. STOP has been

Also contributors of elevated corona noise.

- involved in the AR 638 and UM 2209 dockets regarding utilities' wildfire plans. IPC has missed
- a number of high risk areas along the B2H, namely in Union County²⁸ and Morrow Co.²⁹ In
- 3 Union County: the state, county, and Oregon Trail Electric Cooperative (OTEC), identify the
- 4 Morgan Lake area, which the B2H runs right through, as a high-risk Urban Wildfire Interface
- 5 area. There were four additional contest cased issues about wildfire risks and planning in the
- 6 EFSC contested case demonstrating the seriousness of concern.³⁰
- 7 Q: You mentioned that STOP believes the application has been filed prematurely. Can
- 8 you explain why?
- 9 A: STOP takes issue with the fact that the forecasted costs, as required in 860-025-
- 10 0030(2)(d)(a) thru (F), are very preliminary; and, the application is still incomplete.
- 11 Q: What do you mean by incomplete? Didn't Idaho Power file this petition correctly?
- 12 A: No. 860-025-0030(2)(p) states,
- "A narrative that identifies all land use approvals and permits required for construction of
 the transmission line. This narrative must include information on whether petitioner has
 submitted an application for each approval or permit, the status of all such applications,
 and an explanation as to why petitioner did not obtain any pending or outstanding
 approvals or permits before submitting a petition under this rule as applicable, including
 anticipated timelines for issuance of any pending or outstanding approvals and permits,
 and the section of OAR 860-025-0040 under which the petitioner seeks to demonstrate

compliance with that rule;"

²⁸ Exhibit 11 (1011) STOP's Comments in UM2209 docket.

²⁹ **Exhibit 12 (1012)** Written Direct Testimony in ODOE/EFSC contested case-Myers LU-9.

³⁰ See Contested Case Issues in Exhibit 7 (107), Issues: PS-4, PS-9, PS-10.

The company states on p 11 of its petition that "the Company is submitting this Petition

2 prior to obtaining the outstanding permits and approvals due to scheduling constraints."³¹ In staff

3 DR 12 the company further answers, "The permits and approvals beyond those discussed above

are in various stages of their respective application and approval processes, the status of which is

presented in the chart below, and Idaho Power expects they will be issued prior to the start of

6 construction in 2023."

4

5

8

11

12

14

16

In Idaho Power's Application for Site Certificate (Sept. 28, 2018), Exhibit E Permits for

Construction and Operation, Section 3.2 lists Permits Outside the Council's Jurisdiction (Not

9 Included In or Governed by Site Certificate). There are 16 federal, state, or county permits listed.

Many of these permits from Attachment 16, Permit Status Chart,³² are pending with deadlines

passed or they have nebulous deadlines. Additionally there is no analysis of the probability of

getting them, if they can be permitted. Since the Land Use Compatibility Statement ("LUCS")

13 860-025-0040 (3)(a)-(c) was developed for land use permit situations outside the EFSC site

certificate it would be logical for the commission to require the same degree of due diligence for

all other permits.

Q: Is STOP concerned about the B2H budget?

A: As STOP has pointed out in IPC's 2019 and 2021 IRP's the budget for B2H defining the

"least cost portfolio" as B2H is incomplete. 33 It is not up to industry standards and ready for an

Scheduling constraints and urgency are red herrings. Idaho Power's protracted 2019 IRP is a prime example of their own delays and constraints. Plus, with coal plants being converted to natural gas and new renewables being built in Idaho, the pressure for urgent needs has been eliminated.

³² Exhibit 13 (1013): Permit Status Chart.

³³ Exhibit 14 (1014): STOP Closing Comments, LC 78 - Idaho Power's 2021 IRP, pp 5-8.

1	RFP. A budget ready for an RFP is the budget STOP believes should be vetted for proper cost			
2	estimates and STOP reserves its right to comment on the final budget once it is developed. In			
3	addition, costs have not been fully updated to reflect inflation, supply chain issues, labor issues,			
4	and all the other assorted snafu's that large industrial projects are having with cost overruns.			
5	However the budget is bid, there needs to be a stop-loss-clause to protect the ratepayers; and			
6	keep Idaho Power's zealous defense of their budget projects on the shareholders and not the			
7	ratepayers.			
8	This Petition for a CPCN is premature. Suspending the docket is the most protective and prudent at this time.			
10	Thank you for your consideration.			
11	Submitted by:			
12 13	/s/ Jim Kreider Jim Kreider			
14	February 1, 2023			
	CERTIFICATE OF MAILING			
15				
16	On February 1, 2023, I certify that I filed the above Opening Testimony with the			
17	Administrative Law Judge via the OPUC Filing Center, for the Docket # PCN-5, and to the			
18	following party as noted below.			
19	/s/ Jim Kreider			
20 21 22 23	Jim Kreider Stop B2H Coalition, Co-Chair Intervenor, PCN-5			

By: Arrangement for hand delivery: John C. Williams 1

- 2
- PO Box 1384
- 3 La Grande, OR 97850

5

EXHIBIT 1

IPUC Staff Comments

Case No IPC-E-19-14

Re: Jackpot Holding and the Mid-C market

Refer to Pages: 10-13

EDWARD J. JEWELL
DEPUTY ATTORNEY GENERAL
IDAHO PUBLIC UTILITIES COMMISSION
PO BOX 83720
BOISE, IDAHO 83720-0074
(208) 334-0314
IDAHO BAR NO. 10446

RECEIVED

OND FOR A: 50

Street Address for Express Mail: 11331 W CHINDEN BVLD, BLDG 8, SUITE 201-A BOISE, ID 83714

Attorney for the Commission Staff

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION OF)	
IDAHO POWER FOR APPROVAL OF A)	CASE NO. IPC-E-19-14
POWER PURCHASE AGREEMENT WITH)	
JACKPOT HOLDINGS, LLC, FOR THE SALE)	
AND PURCHASE OF UP TO 220 MEGAWATTS)	COMMENTS OF THE
OF RENEWABLE SOLAR GENERATION.)	COMMISSION STAFF
)	

The Staff of the Idaho Public Utilities Commission comments as follows on Idaho Power Company's Application.

BACKGROUND

On April 4, 2019, Idaho Power Company ("Idaho Power" or "Company") filed an Application seeking approval of a Power Purchase Agreement ("PPA" or "Agreement") with Jackpot Holdings LLC, ("Jackpot Solar") for energy generated by the Jackpot Solar Facility ("Facility"). The Facility is located between Twin Falls and the Nevada border.

On April 25, 2019, the Commission issued a Notice of Application and Notice of Intervention Deadline. Order No. 34321. No parties intervened.

On June 5, 2019, the Commission issued a Notice of Modified Procedure and set a comment deadline of July 23, 2019, and a reply comment deadline of August 6, 2019. Order No. 34353.

On July 19, 2019, the Company submitted a letter to the Commission indicating that the Company supported an adjustment to the comment deadline because the Company could not provide a supplemental economic modeling analysis requested by Staff within the original comment period.

On July 23, 2019, Staff filed comments recommending the Commission vacate the comment deadline and set a revised comment deadline after the Company filed the supplemental economic modeling analysis.

On August 5, 2019, the Commission issued a Notice of Suspended Comment Period, which ordered "that the previously established comment deadlines are vacated until the Company files additional analysis and the Commission establishes new comment deadlines." Order No. 34399 at 2. The Commission also notified the public that "the Company expects the additional analysis to take until the end of August 2019." *Id.*

On October 23, 2019, the Company submitted Comments of Idaho Power Company Regarding PPA Elections ("Comments Regarding PPA Elections"). In its Comments Regarding PPA Elections, the Company notified the Commission that pursuant to terms of the PPA the Company elected to: 1) decline its option to purchase the 100 MW output from the Option Facility; and 2) exercise its right, through a non-regulated IDACORP affiliate of Idaho Power Company, to negotiate for ownership of the Facility.

The Comments Regarding PPA Elections state that the Company "is completing and providing to Staff through discovery updated portfolio analysis from its 2019 Integrated Resource Plan ("IRP") relating to the inclusion of Jackpot Solar (120 MW) and Franklin Solar (100 MW) as generation resources in the IRP." *Id.* at 3.

On November 7, 2019, the Commission re-established comment deadlines. Order No. 34479.

The PPA prices Net Output at \$21.75/MWh escalated at 1.5% for 20 years. This pricing assumes the Facility owner can secure the 30% federal Investment Tax Credit, which would require significant action before December 31, 2019.

STAFF REVIEW

Introduction

The overall purpose of Staff's review is to make a recommendation on the prudence of the Jackpot Solar PPA. Specifically, Staff's review consists of the following:

- 1. An economic analysis to determine if the resource and associated transmission upgrade investments will likely provide a net benefit to customers;¹
- A review of the terms contained within the PPA to determine if there are specific issues of concern; and
- Identification of important considerations needed to protect Idaho Power's customers given the potential purchase of Jackpot Solar facility by the non-regulated IDACORP affiliate.

Through its review, Staff concludes: 1) Jackpot Solar is likely to provide a net economic benefit to customers; 2) there are no contract terms that raised any major concerns; and 3) extra scrutiny will be required to ensure that IDACORP is not unduly profiting from Idaho Power customers because of the affiliated transaction with the regulated utility.

Economic Analysis

Staff believes Jackpot Solar is a resource decision based primarily on a time-limited economic opportunity and not on the need of the resource to meet reliability requirements. The opportunity is time-limited because the PPA contains contract prices that reflect investment tax credits that are only available if a minimum threshold of investments are made by the developer before the end of the 2019 calendar year. The justification needs to be based on economics, providing a net benefit to Idaho Power's customers, because the resource is not needed to meet load over the next decade. Application at 8-9.

Because the time-limited nature of the project precludes the ability to evaluate other alternative resources that could be more beneficial to customers,² Staff believes the project needs to pass increased scrutiny in terms of cost-savings and minimal risk.

Due to increased scrutiny for the project, Staff believes the "expected" analysis for determining the prudence of Jackpot Solar, given the Company's modeling capabilities, should be based on Net Present Value ("NPV") cost comparisons over the life of the contract with and without the project. The analysis would be similar to the type of analysis the Company included in its Application using models and data from the 2017 IRP.

¹ Although the Company's proposed cost of the proposed transmission upgrades was evaluated in the 2019 IRP analysis and in the contract price to market price comparison, a determination of prudence should be based on actual cost in the next general rate case.

² Alternative resources would be identified through a robust request-for-proposal process and included for evaluation.

Unlike the 2017 IRP analysis, the "expected" analysis would use the most recent data and assumptions and would be tested across a range of the most cost-sensitive variables that could change in the future in order to evaluate risk, such as natural gas prices, CO2 prices, and several potential resource portfolios that the Company might implement in the future. The analysis would start by first identifying several portfolios that perform well under a range of potential future conditions without including the resource in question. If the NPV cost for each of these portfolios improves by adding the resource to each portfolio across a reasonable range of alternative futures, then the resource is likely to be economically prudent.

For a range of reasons to be discussed, the Company was not able to provide Staff's "expected" analysis for Jackpot Solar using data and assumptions from the 2019 IRP. However, the Company did provide 2019 IRP model runs that Staff analyzed indicating a cost saving to customers. Because the 2019 IRP analysis was not as robust as needed to pass the increased scrutiny required for a standalone analysis, Staff supplemented its review by performing comparisons of forecasted market price vs. the PPA contract price, and by reviewing the Company's analysis using the 2017 IRP included in the Company's Application. The sum-total of all three of these analyses indicate that the project is likely to be a cost-savings to customers over the length of the contract. A more comprehensive description, results, and shortcomings, of each analysis will be provided in the sections to follow.

2019 IRP Analysis

Historical Context and Method

The Company has used the hourly time-step dispatch module in the Aurora power cost modeling software for longer than a decade. The dispatch module can only provide "what-if" capability, returning relative cost differences between different feasible portfolios. ³ In past IRPs, the Company has developed portfolios outside the model. The best the Company can provide using this functionality is the lowest cost feasible portfolio among a limited set of portfolios provided as inputs.

In this year's IRP, the Company attempted to implement Aurora's Long-term Capacity Expansion ("LTCE") module which is supposed to provide an optimal least-cost portfolio within

³ A feasible portfolio is a resource plan that meets load, reliability, environmental, and other operational constraints needed by the system. A feasible portfolio may not be optimal, but an optimal portfolio must be feasible.

a set of constraints as an output. For the LTCE module to work, the Company must input a wide variety of potential resources that the LTCE can select to fill resource deficits in the Company's current load and resource balance. For the PPA filing and for the 2019 IRP, the menu of potential resources included both Jackpot and Franklin Solar projects. If the LTCE selected either or both of the solar projects, it would indicate that the projects selected were cost effective for a given natural gas forecast, CO2 price, and Boardman-to-Hemmingway ("B2H") scenario.

However, the analysis in the Company's Application showed that Jackpot Solar and/or Franklin Solar was not included in 7 of the 12 optimized portfolios that included the B2H Transmission Line. This concerned Staff because B2H is the resource the Company has chosen to fill the first capacity deficit in the past several IRP's.

After sharing Staff's concern, the Company agreed to perform additional model runs comparing portfolios where the solar projects were both forced and eliminated for selection into portfolios by the LTCE. After simulating the portfolios using the dispatch module, the results showed that the projects were not economic under several alternative futures, but more importantly indicated a problem with the LTCE model logic. The Company realized that because the logic was designed to optimize the cost of the entire Western Electricity Coordinating Council ("WECC") region, it can result in portfolios that are sub-optimal for Idaho Power's system.⁴

Although the Company had to mostly abandon the LTCE module to evaluate the solar projects and to produce optimal portfolios for the IRP, the Company re-ran all 24 alternative future scenarios through the LTCE to produce WECC-optimized portfolios as a starting point. This created portfolios for evaluation in the dispatch module that, although not optimized, are considered feasible in Idaho Power's system. It also provided the opportunity, prior to running the LTCE, for the Company to: 1) update some of the assumptions used in the dispatch modules; 2) re-evaluate exercising the Company's right-of-first-refusal to purchase Jackpot Solar; and 3) decide if the Company wanted to purchase the output from the Franklin Solar facility.

The Company incorporated Renewable Energy Credits ("REC") generated by the project as benefits and added about \$11 million in "transmission upgrade" cost, neither of which were included in the analysis in the original Application. According to the Company, it did not include any value for the sale of RECs generated from the projects originally because "if the

⁴ Staff repeatedly pointed out in IRP meetings that optimizing the WECC region in the LTCE was problematic.

REC sales were to be included, the net benefit to customers would be even higher." (Larkin, DI, p.16). Staff believes the value of the project's RECs were needed to offset the cost of transmission upgrades that have since become the responsibility of the Company.

The Company did not include the cost of transmission upgrades at the time of Application because the seller had executed a Generator Interconnection Agreement ("GIA") for Jackpot Solar as an Energy Resource. Application at 7. However, according to the Company,

[O]nce the project contracted to sell all of its output to Idaho Power, Idaho Power was required to request Network Integration Transmission Service. The network upgrades for the associated Network Integration Transmission Service are funded by the Transmission Provider pursuant to the OATT, which in this case is Idaho Power Transmission. Therefore, these costs are appropriately included in the updated Jackpot analysis, as they reflect a Company-funded investment in its transmission system. Production Request No. 34.

Staff believes this is the proper treatment for upgrades required for a resource designated as a Network Resource. According to FERC,

Most improvements to the Transmission System, including Network Upgrades, benefit all transmission customers, but the determination of who benefits from such Network Upgrades is often made by a non-independent transmission provider, who is an interested party. In such cases, the Commission has found that it is just and reasonable for the Interconnection Customer to pay for Interconnection Facilities but not for Network Upgrades. FERC, Docket No. RM02-1-000, Order No. 2003, July 24, 2003.

In addition to updating costs and benefits in the models, the Company decided to exercise its contractual rights to purchase the Jackpot Solar facility through its affiliate, IDACORP, and to forego its right to acquire the 100 MW output from Franklin solar. This eliminated consideration of Franklin Solar as a resource in any of the resource portfolios. But no other changes to the economic analysis would be required as a result of the affiliate's purchase of the facility because according to the Company, "the PPA with Idaho Power as presented to the Commission, along with the associated benefits to Idaho Power customers, would not change." Idaho Power Comments, October 23, 2019 at 8.

The top performing WECC-optimized portfolios with and without B2H were further manually adjusted to lower the cost and to create additional feasible portfolios. ⁵ By manually adjusting the WECC-optimized portfolios to achieve a better result when simulated in the

-

⁵ The manual adjustments included modifying Jim Bridger retirement dates and the timing of additional future resources to get lower cost portfolios.

dispatch module, it provided validation that the LTCE module was not returning optimized portfolios for Idaho Power's system. Although the Company's decision has resulted in significant rework and delays, the change has increased Staff's confidence in the Company's overall modeling results.

Due to limited time to perform additional analyses and to meet the production tax credit deadlines, Staff requested NPV dispatch model comparisons both with and without Jackpot Solar for: (1) the highest performing three manually-adjusted portfolios; (2) Planning and Mid-level gas price forecasts; (3) Planning and Zero CO2 cost assumptions; and (4) portfolios with and without B2H. This request produced 18 different scenarios to help Staff evaluate the costs, benefits, and risks associated with including the project in Idaho Power's System. The results of this analysis are discussed in the following section.

2019 IRP Analysis Results

Staff requested an analysis similar to its "expected" analysis using 2019 IRP models with the intent to functionally isolate the economic effect of adding Jackpot to already high performing portfolios without the project. Instead, the Company provided results of an analysis that economically compares portfolios with Jackpot Solar to similar portfolios substituting Jackpot with other resources to meet future load. Staff analyzed two sets of NPV comparisons from the results of this analysis: the first was the NPV differential results provided by the Company as a result of Staff's production request; the second was a more conservative comparison calculated by Staff. The results of both of these analyses showed a net positive benefit to customers in all scenarios except for one. However, the best conclusion that these analyses can provide is that adding Jackpot Solar at the end of 2022 is better than alternative resources that may or may not be least-cost, least risk resources added later. Staff believes this provides some indication that Jackpot Solar is economic, but on its own is not sufficient. The results of this analysis and its shortcomings are discussed further.

The net present value differential results (NPV(d))⁶ of the Company's analysis using different combinations of with and without B2H, Planning and Mid-level gas price forecasts, and Planning and Zero carbon prices are shown in Table 1 below.

⁶ The NPV(d) shows if the project is a benefit to customers, a negative value, or a cost to customers, a positive value, over the 20 year time frame of the IRP analysis.

Table 1- Company 2019 IRP Analysis NPV(d)
Results

(Benefit)/Cost (\$ x1000)

Scenarios	NPV(d) with B2H	NPV(d) thout B2H
1st Portfolio - Planning Gas, Planning Carbon	\$ (70,177)	\$ (36,006)
2nd Portfolio - Planning Gas, Planning Carbon	\$ (35,130)	\$ (52,936)
3rd Portfolio - Planning Gas, Planning Carbon	\$ (52,225)	\$ (482)
1st Portfolio - Mid Gas, Planning Carbon	\$ (69,582)	\$ (47,851)
2nd Portfolio - Mid Gas, Planning Carbon	\$ (41,915)	\$ (62,648)
3rd Portfolio - Mid Gas, Planning Carbon	\$ (52,613)	\$ (2,990)
1st Portfolio - Planning Gas, Zero Carbon	\$ (77,294)	\$ (28,919)
2nd Portfolio - Planning Gas, Zero Carbon	\$ (36,549)	\$ (48,902)
3rd Portfolio - Planning Gas, Zero Carbon	\$ (52,486)	\$ (3,121)
Average	\$ (54,219)	\$ (31,539)
All Scenario Average	\$ (42,879)	

The analysis shows that the portfolios with Jackpot Solar compared against alternative portfolios for each modeled alternative future results in a net benefit. Staff believes there is value in this analysis, but the analysis is not sufficient for determining the pure economic benefit as described by Staff's expected analysis. For example, some of the results reflected in Table 1 are counter-intuitive. Jackpot Solar, which is a zero carbon-emitting resource, shows lower benefits with planning carbon than it does with the zero carbon scenarios with B2H. Although explainable, the counter-intuitive results reflect the fact that the resources substituted for Jackpot Solar into portfolios used for comparison were not least-cost alternatives.

Table 2- Staff 2019 IRP Analysis NPV(d) Results

(Benefit)/Cost (\$ x1000)

Scenarios	NPV(d) with B2H	NPV(d) without B2H
1st Portfolio - Planning Gas, Planning Carbon	\$ (53,462)	\$ (15,712)
2nd Portfolio - Planning Gas, Planning Carbon	\$ (35,130)	\$ (2,393)
3rd Portfolio - Planning Gas, Planning Carbon	\$ (24,848)	\$ (482)
1st Portfolio - Mid Gas, Planning Carbon	\$ (53,491)	\$ (3,548)
2nd Portfolio - Mid Gas, Planning Carbon	\$ (41,915)	\$ (13,768)
3rd Portfolio - Mid Gas, Planning Carbon	\$ (30,535)	\$ (2,990)
1st Portfolio - Planning Gas, Zero Carbon	\$ (25,427)	\$ 2,020
2nd Portfolio - Planning Gas, Zero Carbon	\$ (36,549)	\$ (1,822)
3rd Portfolio - Planning Gas, Zero Carbon	\$ (18,729)	\$ (3,121)
Average	\$ (35,565)	\$ (4,646)
All Scenario Average	\$ (20,106)	

Utilizing results from the Company's analysis, Staff performed a more conservative set of comparisons illustrated in Table 2 above. This analysis compares the results for each model run with Jackpot Solar to the best performing portfolio without Jackpot Solar for a given alternative future. As can be seen in Table 2 above, these comparisons show that all NPV differences result in a net positive savings in all cases except for one.

Shortcomings of the 2019 IRP Analysis

Although the results of this analysis provide some indication that Jackpot Solar will provide a net benefit to customers, Staff believes the analysis is insufficient for several reasons including: (1) the method of analysis does not reflect the intent to show that Jackpot Solar is justified based on economics and not a need to meet load; (2) there is no evidence that the resources used to compare to Jackpot Solar are least-cost without some type of competitive bidding; and (3) the analysis does not cover a sufficient range of natural gas and CO2 prices to evaluate risk.

First, as mentioned above, the analysis performed by the Company does not isolate the effect of adding Jackpot Solar to an already high-performing feasible portfolio without the resource. Instead, it essentially compares how Jackpot Solar portfolios compare to a hypothetical set of resources within an alternative portfolio. Staff believes there is no way to

determine if the combination of these resources substituted for Jackpot Solar are least-cost resources which can lead to a high-cost portfolio used for comparison, biasing the result.

This leads to the second shortcoming: the 2019 IRP analysis does not compare Jackpot Solar to resources that are competitively bid. While the 2019 IRP-based analysis did compare Jackpot Solar against other resources included in the IRP, it did not compare the project against actual alternatives that are determined through a robust request-for-proposal process. As stated by the Company,

The Commission requires Idaho Power to comply with the competitive procurement rules applicable in the Company's Oregon service area in the acquisition of new supply-side resources. Case No. IPC-E-10-03, Order No. 32745. However, there was not sufficient time to conduct a full competitive procurement request for proposals process for the generation, and as a time-limited opportunity that benefits customers, this resource acquisition is exempt from the competitive procurement rules of the Public Utility Commission of Oregon. Application at 3.

Staff agrees the time-limited nature of this project restricted a full request for proposal, but because of this constraint, Staff believes that a different but increased scrutiny for determination of prudency is required.

Third, the analysis did not cover a full enough range of values for risk variables that can affect the cost of the portfolios. Staff only requested two levels of natural gas and CO2 prices given the amount of time left to meet safe harbor requirements to obtain the investment tax credits.

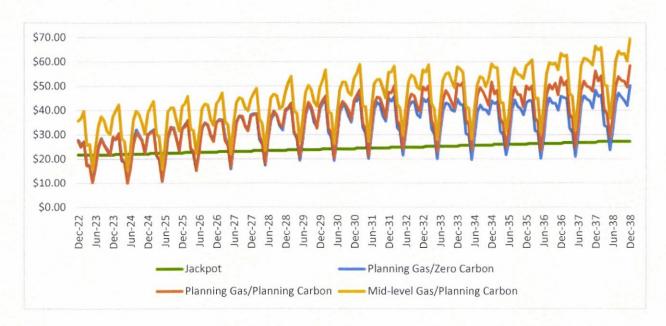
Market Price to Contract Price Analysis

Staff conducted a market price to contract price comparison, mainly because of issues and shortcomings in the Company's 2019 IRP analysis. Normally, Staff would have used a 2019 IRP-modeled analysis on a stand-alone basis to evaluate Jackpot Solar, but due to deficiencies, Staff placed increased weight on this analysis to determine its recommendation. Staff believes this analysis adds validity because the cost of Jackpot Solar is primarily energy cost with only a small amount of capital. The analysis showed a \$145,000 savings during the first year of the PPA, and increased savings thereafter.

Analysis Method and Results

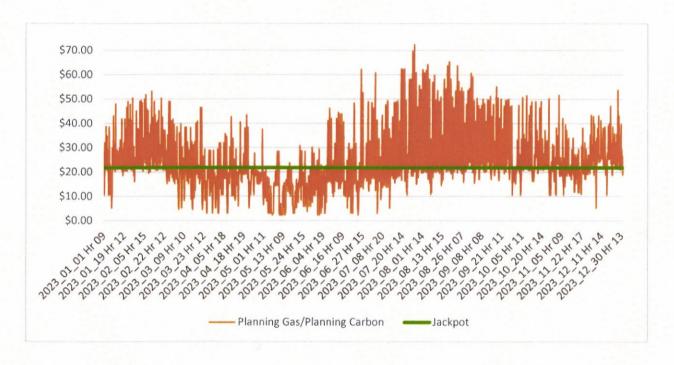
Staff performed several comparisons between the contract price and market prices generated for the Mid-Columbia market hub (Mid-C) generated by Aurora. The analysis include both average hourly and monthly comparisons over likely alternative futures. If the assumption is made that market prices are an acceptable surrogate for the marginal energy cost of Idaho Power's system, then customers should see a cost saving with the addition of Jackpot Solar to the Company's resource mix.

Staff first compared the contract price against average monthly market prices for several alternative futures modeled in Aurora. One of the main functions of Idaho Power's implementation of Aurora is to predict hourly market prices across all the hubs in the WECC region. Predicted Mid-C market prices were used for the comparisons because Idaho Power transacts most of its market purchases through the Mid-C hub. Although in the initial years of the contract, the forecasted monthly average market price reflects some months of the year that are lower than the contract price, this is not the case in the majority of future years since market prices are predicted to increase faster than contract prices. Price comparisons for three alternative futures across the 2019 IRP planning horizon are reflected in the graph below: (1) Planning Gas/Planning Carbon; (2) Planning Gas/Zero Carbon; and (3) Mid Gas/Planning Carbon.



Comparing average monthly prices gives a general indication of how the contract prices compare with overall market prices, but does not provide the granularity needed to compare

prices when Jackpot Solar will be producing energy. To compare the price when Jackpot Solar will be producing energy, Staff compared several years of average hourly market prices to the contract price only when Jackpot Solar is producing energy. This comparison for the first full year of the contract uses Planning gas/Planning carbon Mid-C prices as illustrated as an example in the graph below.



Although the market price is lower than the contract price for 52% of hours during the first year of the contract, the total cost difference when market prices are higher than the contract price is much greater than when market prices are lower than the contract price. In other words, if the Company had to pay market prices instead of the contract price for the same amount of Jackpot Solar generation, the cost would be much higher. This is made clear by examining how much larger the orange area is above the contract price line (green line) compared to the orange area below the line in the graph above.

Staff quantified the cost difference by calculating the cost of energy produced by Jackpot Solar using the contract price and compared it against the cost for an equivalent amount of energy using the market price. The results show that the cost of energy using the contract price is approximately \$145,000 less. For the second year of the contract, the annual cost is \$492,000 lower using the contract price. The difference continues to grow for subsequent years since the average market price increases at a rate faster than the contract price.

Shortcomings of the Market Price-to-Contract Price Analysis

Staff identified two shortcomings that can affect the validity of this analysis. First, neither the REC benefits generated by the project nor the transmission upgrade capital costs are included in this analysis. However, Staff did compare the annualized cost of the transmission upgrades and determined that the annualized REC benefits more than covered the additional transmission upgrade cost, minimizing the effect of this shortcoming.

Second, as mentioned earlier, a market price to contract price comparison assumes that market prices are equivalent to the marginal energy cost in Idaho Power's system. This assumption only holds true if the market is consistently the marginal cost resource in Idaho Power's system. This is not always the case. The Company's IRP model captures the marginal resource in the Company's resource stack for every hour modeled over the planning horizon. By performing model runs with and without Jackpot Solar, as described in Staff's "expected" analysis, the savings generated by including Jackpot Solar will always reflect the marginal avoided cost for whatever resource is at the margin and available to meet load. The additional benefit of an IRP-modeled analysis is that it captures potential changes in future resources that can affect the marginal cost.

Analysis Based on 2017 IRP

The Company performed an analysis of Jackpot Solar using models from its 2017 IRP. Results showed approximately \$90 million in total savings. The Company's methodology is similar to Staff's "expected" analysis, but was insufficient on a standalone basis for reasons discussed below. Staff reviewed the analysis to substantiate Staff's final conclusions, but due to shortcomings, Staff gave it an appropriately reduced weight. A description of the Company's methodology, the results, as well as shortcomings of the analysis are provided.

Analysis Method and Results

The Company compared the dispatch cost of the Company's preferred portfolio from the 2017 IRP with the dispatch costs of the preferred portfolio including Jackpot Solar. The models were run over a 20-year period (2017-2036) using contract prices with escalation rates included in the contract and under the planning case for natural gas. The method was similar to Staff's "expected" analysis because it started by determining the cost with a high performing portfolio, in this case the Company's preferred portfolio, and then by adding Jackpot Solar to the portfolio.

By keeping everything constant and only changing the portfolio by adding Jackpot Solar, the Company was able to quantify the economic benefit of Jackpot Solar in isolation.

The results from the analysis showed a net customer savings in dispatch costs of about \$90 million, which is significantly higher than the \$20 million average savings generated from the 2019 IRP analysis described above.

Shortcoming of the 2017 IRP Analysis

Staff reduced the weight it gave the 2017 IRP analysis performed by the Company because: 1) the method did not evaluate different types of risk that could likely affect the results; and 2) it used outdated and missing information.

Staff expects that a prudence analysis of Jackpot Solar needs to be tested across a reasonable range of the most cost-sensitive variables that could change in the future such as natural gas price, CO2 prices, and other potential future resource alternatives. According to the Company, they only ran their dispatch model using the planning case for natural gas. This is insufficient to test the economics of the project across alternative future natural gas prices or CO2 prices. In addition, the Company only compared the cost results using the Company's 2017 IRP preferred portfolio. Staff believes that the resources contained in the preferred portfolio are not likely to be the resources the Company actually implements due to dynamically changing conditions. Evaluating the amount of cost savings ought to be tested across multiple high-performing portfolios with and without Jackpot Solar to determine if the savings are durable using different resource portfolios.

Another source of deficiency is the data used as inputs in the models. Data from the 2017 IRP is over 2 years old. The Company also did not include the cost of the transmission upgrades, which became the Company's responsibility when the interconnection was designated a Network Resource.

PPA Contract Terms

Company Opt-out of the Franklin Solar Project

As part of the Jackpot Solar PPA, the Company had the option to add 100 MW of capacity from the Franklin Solar Facility. In Comments to the Commission on

October 23, 2019, the Company stated that it decided not to purchase an additional 100 MW from the Franklin Solar Project for the following reasons: 1) Preliminary Company IRP analysis (optimized for the WECC region and including Franklin Solar) showed benefits to customers, but additional assessment of the Project revealed that more specific variable integration and system studies are needed to integrate solar beyond 173 MW;8 2) A 220 MW facility would be among the largest solar facilities in the nation; 3) The incremental 100 MW in the PPA causes an overall contract price increase and the Company has received offers that are priced lower than the Franklin Solar Project; 4) The Company has received several existing and potential customer requests for large incremental additions of solar generation that are not already committed solar installations, as Jackpot Solar and the Franklin Project would be; and 5) The Company's credit rating agencies take an unfavorable view of large, non-PURPA, PPA obligations. Staff was presented with several iterations of Company IRP analysis that were difficult to interpret and believes the Company was unable to determine from supplemental IRP analyses if the Franklin Solar Project would provide overall system benefit. Given the issues outlined in Company Comments, Staff finds that the decision not to pursue the additional 100 MW output from Franklin Solar is reasonable. Staff would point out that the IRP and integration study, the size of the solar facility with the Franklin Project, and the credit rating impact for the PPA, were all existing issues when the Company submitted the PPA Application.

Right of First Offer/Purchase Option

Comments to the Commission on October 23, 2019 also included notice that Idaho Power has acted on Right of First Offer and the Ownership/Purchase Options for Jackpot Solar. Staff recognizes that the Company has a right to exercise these components of the PPA, and although ownership of Jackpot Solar may change, Staff expects the terms of the PPA and assigned obligations will remain the same.

⁷ Comments of Idaho Power Company Regarding PPA Elections. October 23, 2019.

⁸ The Company filed a Variable Energy Resource Study in Oregon that identified 173 MW could be integrated without compromising Idaho Power Company system reliability. Larkin DI at 20-22. The Company stated that 2019 IRP Aurora analysis allowed a more dynamic study of reserves and indicated the Company had sufficient regulating reserves to integrate more than 173 MW of renewable generation. Larkin DI at 25-26.

Output Guarantee

The PPA includes a performance provision in the form of an Output Guarantee. Jackpot Solar is obligated to deliver a defined Net Output each month. If the delivered energy is less than 90% of the estimated generation amount, Jackpot Solar must pay an "Output Shortfall" multiplied by Idaho Power's "Cost to Cover" as Liquidated Damages. Agreement, Section 7.12.1 at 40. Staff believes the output stability provision provides a degree of protection from excessive peak market pricing for replacement energy caused by any output shortfall, and that the amount of liquidated damages be reflected as reduced net power cost in the Power Cost Adjustment ("PCA") Mechanism.

Forecasting

Idaho Power has agreed to provide the Solar Energy Forecast of monthly net output for Jackpot Solar, which has commonly been provided by the generation facility to the Company. Jackpot Solar will pay the cost of the Solar Energy Production Forecasting, with a first-year cap at 0.1% of total energy payments made to Jackpot Solar. After the first contract year, the Company will estimate the Annual Solar Energy Production Forecasting Cost based on the previous year's cost and expected costs. Agreement, Section 7.7.2. Staff finds it reasonable for Jackpot Solar to pay Idaho Power to create the monthly output forecast.

Affiliate Transaction

On October 23, 2019, Idaho Power filed comments in this case regarding elections under the PPA contract. Specifically, Idaho Power notified the Commission that it intends to "commence negotiations for the purchase of the Facility through a non-regulated IDACORP affiliate, and would leave the PPA in place as submitted, with the only change being the IDACORP affiliate as the ultimate owner of the Facility and counter-party to the Idaho Power Company in the contract." *Id* at 7.

In order to avoid affiliated companies of a regulated utility from unduly profiting off the customers of the utility, transactions between affiliates must be included in customer rates at the lower of cost or market. Any additional benefits gained by an affiliated transaction should be passed onto ratepayers, while any loss incurred by an affiliated transaction should not be borne by customers. If IDACORP is successful in its negotiations to purchase Jackpot Solar, Idaho

Stop B2H/100 Kreider/101 Page 18

Power should only be allowed to recover through the PCA the lower of the contract price in the PPA, or IDACORP's cost to produce the electricity.

Idaho Power has stated in its October 23 comments that if IDACORP concludes the purchase of the Facility, Idaho Power will make a subsequent filing with the Commission regarding the affiliate transaction. Staff looks forward to the subsequent filing so that it can outline appropriate cost recovery and any required risk mitigation for the affiliated PPA transactions.

STAFF RECOMMENDATIONS

Staff recommends the Commission approve the PPA by December 20, 2019, to allow investment tax credit deadlines to be met. If approved, Staff recommends that all payments for purchases of generation under the PPA be allowed as prudently incurred expenses for ratemaking purposes and be included for collection in future Power Cost Adjustment filings.

Respectfully submitted this day of November 2019.

Edward J. Jewell

Deputy Attorney Genera

Technical Staff: Michael Eldred

Travis Culbertson Rachelle Farnsworth Michael Louis Stacey Donohue

i:umisc/comments/ipce19.14ejmetncrfsd comments

CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 26th DAY OF NOVEMBER 2019, SERVED THE FOREGOING COMMENTS OF THE COMMISSION STAFF, IN CASE NO. IPC-E-19-14, BY MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

DONOVAN WALKER REGULATORY DOCKETS IDAHO POWER COMPANY PO BOX 70

BOISE ID 83707-0070

E-mail: dwalker@idahopower.com dockets@idahopower.com

MATT LARKIN IDAHO POWER COMPANY PO BOX 70 BOISE ID 83707-0070

E-mail: mlarkin@idahopower.com



Preliminary Request for Amendment 1 (RFA1) to the B2H Site Certificate

December 07, 2022

Ms. Kellen Tardaewether Oregon Department of Energy 550 Capitol Street NE, 1st Floor Salem, OR 97301

Re: Request for Amendment 1 for the Boardman to Hemingway Transmission Line Project

Dear Ms. Tardaewether,

Idaho Power Company (Certificate Holder), a wholly owned subsidiary of IDACORP, Inc. is requesting an amendment (RFA 1) to the Boardman to Hemingway Transmission Line Project (Project) Site Certificate. The Project consists of approximately 300 miles of high-voltage electric transmission line between the proposed Longhorn Station near Boardman, Oregon, and the Hemingway Substation in southwestern Idaho.

IPC is submitting this RFA 1 to amend the site boundary approved in the Site Certificate to accommodate: (a) re-location of the transmission line on three properties based on IPC's coordination and agreement with the affected landowners; and (b) refinement of the location of certain roads resulting from additional design and engineering review.

The materials delivered as part of RFA 1 include:

- PDF and Word versions of the RFA 1, delivered electronically via a Microsoft Teams site
- Two (2) printed hard copies mailed to ODOE office in Salem, OR

The Certificate Holder submits RFA 1 pursuant to Oregon Administrative Rule (OAR) 345-027-0350(4)(c) or "Type A" amendment review process because IPC is proposing to design, construct, and operate a portion of the Project in a manner that is different from the description in the Site Certificate and that requires a change to condition GEN-GS-06.

Thank you for your consideration. We look forward to working with you during the amendment process. Please feel free to contact Joe Stippel [(208)-388-2675] or Dave Wymond [(208) 388-2742] at any time with any questions or comments regarding this RFA 1.

Sincerely,

Joe Stippel

Idaho Power Company

C. Coliff

Dave Wymond

Request for Amendment #1

Boardman to Hemingway Transmission Line Project

Prepared for:



Prepared by:

Tetra Tech

3380 Americana Terrace, Suite 201 Boise, ID 83706 (208) 389-1030

December 2022

TABLE OF CONTENTS

1.0	1.0 INTRODUCTION					
	1.1 1.2		t Summary and Requestdural History			
2.0	AME	NDMEN	IT DETERMINATION AND APPLICABLE REVIEW PROCESS	1		
	2.1 2.2		dment Required for Change to Site Certificate Condition GEN-GS-06			
3.0		• •	E HOLDER INFORMATION			
	3.1		of the Facility			
	3.2	Name	and Mailing Address of the Certificate Holder	3		
	3.3	Name	and Mailing Address of the Individuals Responsible for Submitting the			
4.0	DES	CRIPTIC	ON OF PROPOSED CHANGE	4		
	4.1	Effect	on the Facility	4		
	4.2		on Protected Resources or Interests			
	4.3	Location	on of the Proposed Change	6		
5.0	DIVIS	SION 21	INFORMATION	6		
	5.1	Project	t Description	6		
		5.1.1	Corridor Selection Assessment	6		
		5.1.2	Information Required for Transmission Line Projects – Length of	0		
	5.2	Drojoct	Transmission Linet Location			
	5.2	5.2.1	Maps of the Proposed Changes			
		5.2.2	Location Description			
		5.2.3	Segment 1 – Morrow County			
		5.2.4	Segment 2 – Umatilla County	10		
		5.2.5	Segment 3 – Union County			
		5.2.6	Segment 4 – Baker County			
	F 2	5.2.7	Segment 5 – Malheur County			
	5.3	5.3.1	s of this StateSurveys and Removal-Fill Permitting			
		5.3.1	Description and Location of Waters of this State	15		
		5.3.3	Impacts to Waters of this State			
		5.3.4	Description of Significance of Impacts to Waters of this State			
		5.3.5	Why Removal-Fill Authorization is Not Needed	16		
		5.3.6	Information to Support Removal-Fill Authorization	17		
6.0	PRO	POSED	CHANGES TO SITE CERTIFICATE	17		
7.0	APPL	LICABLE	E STATUTES, RULES, STANDARDS, AND ORDINANCES	17		
	7.1	Divisio	n 22 Standards Discussed in Detail	47		
		7.1.1	Structural Standard – OAR 345-022-0020			
		7.1.2	Soil Protection – OAR 345-022-0022			
			7.1.2.1 Background Review			
			7.1.2.2 Surveys			
			7.1.2.3 Findings			
		7.1.3	Land Use – OAR 345-022-0030			

			7.1.3.1	Morrow County Applicable Substantive Criteria and Comprehensive Plan	51
			7.1.3.2	Umatilla County Applicable Substantive Criteria and	
			1.1.3.2	Comprehensive Plan	56
			7.1.3.3	Union County Applicable Substantive Criteria and	50
			1.1.3.3	Comprehensive Plan	60
			7121	·	02
			7.1.3.4	Baker County Applicable Substantive Criteria and Comprehensive Plan	67
			7.1.3.6		07
			1.1.3.0	City of North Powder Applicable Substantive Criteria and Comprehensive Plan	70
			7.1.3.7		1 2
			1.1.3.1	City of Huntington Applicable Substantive Criteria and	70
			7120	Comprehensive Plan Updated Applicable Substantive Criteria	70
			7.1.3.8		
			7.1.3.9	New Applicable Substantive Criteria	
			7.1.3.10	Directly Applicable Statutes and Administrative Rules	
			7.1.3.11	Statewide Planning Goals	
			7.1.3.12		
		711		Federal Land Management Plans	
		7.1.4 7.1.5		d Areas – OAR 345-022-0040	
		7.1.5		Wildlife Habitat – OAR 345-022-0060	
			7.1.5.1	Background Review	
			7.1.5.2	Surveys	
			7.1.5.3	Findings	
		7.4.0	7.1.5.4	Conclusion	
		7.1.6		ed and Endangered Species – OAR 345-022-0070	
			7.1.6.1	Background Review	
			7.1.6.2	Surveys	
			7.1.6.3	Findings	
			7.1.6.4	Conclusion	
		7.1.7		esources – OAR 345-022-0080	
		7.1.8		I, Cultural and Archaeological Resources – OAR 345-022-009	309E
			7.1.8.1	Background Review	
			7.1.8.2	Surveys	
			7.1.8.3	Findings	
			7.1.8.4	Conclusion	
		7.1.9		on – OAR 345-022-0100	
				Prevention and Risk Mitigation – OAR 345-022-0115	
	7.2			and Laws	
		7.2.1		ontrol Regulations - OAR 340-035-0035	
			7.2.1.1	Methods	
			7.2.1.2	Construction, Regular Maintenance, and Helicopter Noise	
			7.2.1.3	Corona Noise	
			7.2.1.4	Quiet Areas	
			7.2.1.5	Impulse Sound	114
			7.2.1.6	Measures to Reduce Noise Levels or Noise Impacts, or to	
				Address Complaints	
			7.2.1.7	Monitoring	
			7.2.1.8	List of Noise Sensitive Properties	
		7.2.2	Removal	-Fill Law	115
8.0	PRO	PERTY (OWNERS	OF RECORD - OAR 345-027-0360(1)(F)	115

9.0	CONCLUSION1	16
10.0	REFERENCES1	16
	LIST OF TABLES	
	e 4.1-1. Proposed Site Boundary Additions	
	e 5.2-1. Summary of Proposed Changes – Morrow County	
	e 5.2-2. Acres of Land Disturbed during Construction and Operation - Morrow County	
Table	e 5.2-3. Summary of Proposed Changes – Umatilla County	11
Table	e 5.2-4. Acres of Land Disturbed during Construction and Operation – Umatilla County	11
Table	e 5.2-5. Summary of Proposed Changes – Union County	12
Table	e 5.2-6. Acres of Land Disturbed during Construction and Operation – Union County	12
	e 5.2-7. Summary of Proposed Changes – Baker Countye 5.2-8. Acres of Land Disturbed during Construction and Operation – Baker County	
	e 5.2-9. Summary of Proposed Changes – Malheur County	
	e 5.2-10. Acres of Land Disturbed during Construction and Operation – Malheur County	
	e 5.3-1. Estimated Temporary and Permanent Impacts on Waters of this State for RFA 1.	
	e 7-1. Standards and Laws Relevant to Proposed Amendment	
	e 7.1-1. Soil Orders within the Site Boundary of RFA 1	
	e 7.1-2. High Value Farmland Soils within Site Boundary of RFA 1	
	e 7.1-3. Erosion Factors in RFA 1 Construction Disturbance Area	
	e 7.1-4. Soil Reclamation Factors in RFA 1 Construction Disturbance Area	
	e 7.1-5. Morrow County Applicable Substantive Criteria	
	e 7.1-6. Umatilla County Applicable Substantive Criteria	
	e 7.1-7. Union County Applicable Substantive Criteria	
	e 7.1-8. Baker County Applicable Substantive Criteriae 7.1-9. Malheur County Applicable Substantive Criteria	
	e 7.1-10. Comparison of Updated Applicable Substantive Criteria and Archived Applicable	
Table	Substantive Criteria Previously Analyzed with the ASC	
Table	e 7.1-11. Biological Resources Surveys	
	e 7.1-12. Habitat Categorization of RFA 1 Site Boundary	
	e 7.1-13. Temporary and Permanent Impact Calculations	
	e 7.1-14. State Listed Threated and Endangered Species Potentially Present within the	
	Analysis Area	
	e 7.1-15. Status and Results of Surveys by Proposed Change	
	e 7.1-16. Potentially Impacted Resources	
Table	e 7.2-1. Summary of Acoustic Modeling Results for the Proposed Site Boundary Additions	
	1	12
	I IST OF FIGURES	

Figure 4-1. RFA 1 Site Boundary Changes (Alternative Routes)

Figure 4-2. RFA 1 Site Boundary Changes (Access Roads)

Figure 5-1. Wetlands and Other Waters

Figure 7-1. Geology (Alternative Routes)

Figure 7-2. Geology (Access Roads)

Figure 7-3. Soils (Alternative Routes)

Figure 7-4. Soils (Access Roads)

Figure 7-5. Protected Areas

Figure 7-6. Protected Areas- Viewshed

Figure 7-7. Fish and Wildlife Habitat (Alternative Routes)

Figure 7-8. Fish and Wildlife Habitat (Access Roads)

Figure 7-9. Scenic Resources – Viewshed

Figure 7-10. Scenic Resources

Figure 7-11. Inventoried Recreation Opportunities

Figure 7-12. Inventoried Recreation Opportunities – Viewshed

Figure 7-13. Location of NSR 3

Figure 7-14. Location of NSR 5010

Figure 8-1. Property Owners of Record

LIST OF ATTACHMENTS

Attachment 6-1. Red-lined Site Certificate

Attachment 7-1. Soil Properties by Soil Map Unit

Attachment 7-2. Identification, Assessment, and Visual Analysis of Protected Areas

Attachment 7-3. 2022 Washington Ground Squirrel Survey Report (Confidential)

Attachment 7-4. Pygmy Rabbit Survey

Attachment 7-5. Scenic Resource Tables

Attachment 7-6. Recreational Opportunities in the Analysis Area and Importance Assessment

Attachment 7-7. Wildfire Mitigation Plan

Attachment 8-1. Property Owners of Record

ACRONYMS AND ABBREVIATIONS

ACEC Area of Critical Environmental Concern

ASC Application for Site Certificate

BCZSO Baker County Zoning and Subdivision Ordinance

BLM Bureau of Land Management

CHZO City of Huntington Zoning Ordinance

CI Commercial Industrial
COB COB Energy Facility LLC
CR Commercial Residential
Council or EFSC Energy Facility Siting Council

CTUIR Confederated Tribes of the Umatilla Indian Reservation

dBA A-weighted decibels EFU Exclusive Farm Use

ESH Essential Salmonid Habitat

HAC Historical, Archeological or Cultural HPMP Historic Properties Management Plan

IPC; Certificate Holder Idaho Power Company
JPA Joint Permit Application

kV kilovolt

LiDAR light detection and ranging MCC Malheur County Code

MCCP Morrow County Comprehensive Plan MCZO Morrow County Zoning Ordinance

NED National Elevation Dataset

NEPA National Environmental Policy Act NHD National Hydrography Dataset

NRCS Natural Resources Conservation Service
NRHP National Register of Historic Places

NSR noise-sensitive receptor
NWI National Wetlands Inventory

NWSTF Boardman Naval Weapons Systems Training Facility – Boardman

OAR Oregon Administrative Rules

ODEQ Oregon Department of Environmental Quality
ODFW Oregon Department of Fish and Wildlife

ODOE Oregon Department of Energy
ODSL Oregon Department of State Lands

ORS Oregon Revised Statutes
PA Programmatic Agreement

Project; B2H Boardman to Hemingway Transmission Line Project

RFA 1 Request for Amendment 1

RSA Rural Service Area

SHPO State Historic Preservation Office
STATSGO State Soil Geographic Database
UCCP Umatilla County Comprehensive Plan
UCDO Umatilla County Development Ordinance

UCZPSO Union County Zoning, Partition, and Subdivision Ordinance

USDA U.S. Department of Agriculture

USFS U.S. Department of Agriculture, Forest Service

USGS U.S. Geological Survey
WAGS Washington ground squirrel
ZVI zone of visual influence

1.0 INTRODUCTION

1.1 Project Summary and Request

Idaho Power Company (IPC or Certificate Holder) has a site certificate to construct, operate, and maintain the Boardman to Hemingway 500-kilovolt (kV) transmission line (Project). The Project consists of approximately 300 miles of high-voltage electric transmission line between the proposed Longhorn Station near Boardman, Oregon, and the Hemingway Substation in southwestern Idaho. The Project is sited across approximately 275 miles in Oregon and 24 miles in Idaho. The Project includes construction of a single-circuit 500-kV transmission line, removal of approximately 12 miles of existing 69-kV transmission line, rebuilding of approximately 1 mile of a 230-kV transmission line, and rebuilding of approximately 1 mile of an existing 138-kV transmission line.

IPC is submitting this Request for Amendment 1 (RFA 1) to amend the site boundary approved in the Site Certificate (the "Previously Approved Site Boundary") to accommodate: (a) relocation of the transmission line on three properties based on IPC's coordination and agreement with the affected landowners; and (b) refinement of the location of certain roads resulting from additional design and engineering review (the "Proposed Site Boundary Additions"). This includes approximately 7.2 miles of 500-kV transmission line alternatives, and 33.8 miles of access road changes associated with the Approved Route. The Proposed Site Boundary Additions cover 952.5 acres and are described in detail in Section 4.0 below.

1.2 Procedural History

The Oregon Energy Facility Siting Council (EFSC or Council) approved a site certificate for the Project on September 27, 2022 (Site Certificate). This is IPC's first request for an amendment to the Site Certificate.

2.0 AMENDMENT DETERMINATION AND APPLICABLE REVIEW PROCESS

2.1 Amendment Required for Change to Site Certificate Condition GEN-GS-06

OAR 345-027-0350. Changes Requiring an Amendment

Except for changes allowed under OAR 345-027-0353, an amendment to a site certificate is required to:

- (1) Transfer ownership of the facility or the certificate holder as described in OAR 345-027-0400;
- (2) Apply later-adopted law as described in OAR 345-027-0390;
- (3) Extend the construction beginning or completion deadline as described in OAR 345-027-0385:
- (4) Design, construct, or operate a facility in a manner different from the description in the site certificate, if the proposed change:

- (a) Could result in a significant adverse impact that the Council has not addressed in an earlier order and the impact affects a resource or interest protected by an applicable law or Council standard:
- (b) Could impair the certificate holder's ability to comply with a site certificate condition; or
- (c) Could require a new condition or a change to a condition in the site certificate.

IPC is submitting this RFA 1 per Oregon Administrative Rule (OAR) 345-027-0350(4)(c), because IPC is proposing to design, construct, and operate a portion of the Project in a manner that is different from the description included in the Site Certificate and that requires a change to Site Certificate Condition GEN-GS-06. Specifically, IPC is proposing to amend the Previously Approved Site Boundary by adding the Proposed Site Boundary Additions as alternative corridors to accommodate: (a) requests by three landowners to re-locate the Project on their land; and (b) refinements of the Project roads based on additional engineering and design review. Because the Proposed Site Boundary Additions do not appear in "ASC Exhibit C Attachment C-2 and C-3 mapsets," as referenced in GEN-GS-06, IPC is requesting that the condition be amended to incorporate the Proposed Site Boundary Additions as follows:

GEN-GS-06: Subject to conditions of the site certificate, the certificate holder may construct the facility anywhere within the site boundary (approved corridor(s)), and as described in ASC Exhibit B and represented in ASC Exhibit C Attachment C-2 and C-3 mapsets and Amendment 1 mapsets. The approved corridors include:

- a. The transmission line route extending approximately 273-miles through Morrow, Umatilla, Union, Baker, and Malheur counties;
- b. West of Bombing Range Road alternative 1 and the west of Bombing Range Road alternative 2 in Morrow County;
- c. Morgan Lake alternative in Union County; and
- d. Double Mountain alternative in Malheur County; and
- e. Amendment 1 site boundary additions.

2.2 Application of Type A Review Process

OAR 345-027-0351(2): The type A review process, consisting of OAR 345-027-0359, 345-027-0360, 345-027-0363, 345-027-0365, 345-027-0367, 345-027-0371 and 345-027-0375, is the default review process and applies to the Council's review of a request for amendment proposing a change described in OAR 345-027-0350(2), (3), or (4).

Because IPC is seeking an amendment proposing a change described in OAR 345-027-0350(4), the Type A review process is the default review process and applies to the Council's review of RFA 1. Pursuant to OAR 345-027-0051(2), the terms of the Type A review process are set forth in OAR 345-027-0359, OAR 345-027-0360, OAR 345-027-0363, OAR 345-027-0365. OAR 345-027-0367, OAR 345-027-0371, and OAR 345-027-0375.

3.0 CERTIFICATE HOLDER INFORMATION

OAR 345-027-0060(1) sets forth the requirements for a request for amendment.

OAR 345-027-0360(1): To request an amendment to the site certificate required by OAR 345-027-0050(3) or (4), the certificate holder must submit a written preliminary request for amendment to the Department that includes the following:

(a) The name of the facility, the name and mailing address of the certificate holder, and the name, mailing address, email address and phone number of the individual responsible for submitting the request;

. . .

3.1 Name of the Facility

The name of the facility is the Boardman to Hemingway Transmission Line Project.

3.2 Name and Mailing Address of the Certificate Holder

The name and mailing address of the Certificate Holder is:

Idaho Power Company 1221 W. Idaho Street Boise, ID 83702-5627

IPC is a wholly owned subsidiary of IDACORP, Inc.:

IDACORP, Inc. 1221 W. Idaho Street Boise, ID 83702-5627

3.3 Name and Mailing Address of the Individuals Responsible for Submitting the Request

The names, mailing addresses, email addresses, and phone numbers of the individuals responsible for submitting this RFA 1 on behalf of IPC are:

Joe Stippel, Project Manager Idaho Power Company 1221 W. Idaho Street Boise, ID 83702-5627 JStippel@IdahoPower.com (208) 388-2675

Dave Wymond, Senior Resource Professional Idaho Power Company 1221 W. Idaho Street Boise, ID 83702-5627 DWymond@IdahoPower.com (208) 388-2742

4.0 DESCRIPTION OF PROPOSED CHANGE

OAR 345-027-0360(1): To request an amendment to the site certificate required by OAR 345-027-0350(3) or (4), the certificate holder must submit a written preliminary request for amendment to the Department that includes the following:

. . .

- (b) A detailed description of the proposed change, including:
- (A) A description of how the proposed change affects the facility;
- (B) A description of how the proposed change affects those resources or interests protected by applicable laws and Council standards, and
- (C) The specific location of the proposed change, and any updated maps and/or geospatial data layers relevant to the proposed change;

OAR 345-027-0360(1)(b) requires a description of the proposed change, including a description of the effect on the facility, the effect on protected resources and interests, and the location of the proposed change.

4.1 Effect on the Facility

OAR 345-027-0360(1)(b)(A): A description of how the proposed change affects the facility;

The Project, as approved, is a yet-to-be constructed electrical transmission line facility. Since the submission of the Application for Site Certificate (ASC) for the Project, IPC worked with certain landowners to identify an alternative route on their respective properties that would minimize impacts to the landowners while also meeting IPC's design criteria and avoiding impacts to sensitive resources. In addition, based on further design and engineering review, IPC has refined the location of several roads associated with the Project as approved in the Site Certificate. IPC is including road design changes in this RFA 1 where the changes extend outside of the Previously Approved Site Boundary.

The Proposed Site Boundary Additions would be in general proximity to the Previously Approved Site Boundary, be constructed of the same materials and components previously described in Exhibit B of the ASC and approved by the Council in its Final Order, and affect or occur in similar fish and wildlife habitat types, topography, and land uses to those previously considered. Accordingly, as discussed in more detail in Sections 5 through 8 below, the Proposed Site Boundary Additions will neither create significant new impacts, affect interests protected by the Council's siting standards, nor alter the basis of the Council's previous findings that the Project complies with all applicable laws and standards.

IPC is requesting that the Proposed Site Boundary Additions be represented as alternative routes, allowing IPC the option to develop either the alternatives or the original routes, depending on the outcome of further discussions between IPC and the landowners.

The Proposed Site Boundary Additions are summarized below in Table 4.1-1.

Table 4.1-1. Proposed Site Boundary Additions

Proposed Site Boundary Additions	County	Length of Change – Transmission Line (miles)	Length of Change – Access Road (miles)	Area of Change (acres)	Description of Site Boundary Change
Little Juniper Canyon Transmission Line Alternative	Morrow	1.0	1.4	78.7	Shifted transmission line to the west to minimize impacts to proposed solar facility
Access Road Changes in Morrow County	Morrow	NA	4.2	61.9	Road design changes
Access Road Changes in Umatilla County	Umatilla	NA	3.4	71.3	Road design changes
Access Road Changes in Union County	Union	NA	1.8	36.7	Road design changes
True Blue Gulch Transmission Line Alternative	Baker	4.3	8.6	422.8	Adjusted transmission line to the west and south to minimize noise and visual impacts
Durbin Quarry Transmission Line Alternative	Baker	1.9	2.1	130.0	Shifted transmission line to avoid crossing ODOT quarry
Access Road Changes in Baker County	Baker	NA	17.0	95.5	Road design changes
Access Road Changes in Malheur County	Malheur	NA	7.4	139.1	Road design changes
TOTAL	NA	7.2	45.9	1,036.0	NA

ODOT = Oregon Department of Transportation

4.2 Effect on Protected Resources or Interests

OAR 345-027-0360(1)(b)(B): A description of how the proposed change affects those resources or interests protected by applicable laws and Council standards, and

In Sections 5 through 8 below, IPC discusses in detail how the Proposed Site Boundary Additions will affect resources and interests protected by applicable laws and the Council standards.

4.3 Location of the Proposed Change

OAR 345-027-0360(1)(b)(C): The specific location of the proposed change, and any updated maps and/or geospatial data layers relevant to the proposed change;

The specific locations of the Proposed Site Boundary Additions are shown in Figure 4-1 and summarized in Table 4.1-1. In Section 5.2, IPC further describes the locations of the Proposed Site Boundary Additions in relation to information requested under OAR 345-021-0010(1)(c).

5.0 DIVISION 21 INFORMATION

OAR 345-027-0360(1): To request an amendment to the site certificate required by OAR 345-027-0350(3) or (4), the certificate holder shall submit a written preliminary request for amendment to the Department that includes the following:

. .

(c) References to any specific Division 21 information that may be required for the Department to make its findings;

IPC has identified certain Division 21 ASC information related to the Project Description, the Project Location, and Waters of this State that may be required for the Council to make its findings on this RFA 1.

5.1 Project Description

The Exhibit B requirements of OAR 345-021-0010(1)(b) require an applicant to provide certain information related to the description of the project. Idaho Power has identified below those subsections of that provision that may be required for the Department to make its findings on this amendment request.

5.1.1 Corridor Selection Assessment

OAR 345-021-0010(1)(b)(D): If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a transmission line or pipeline that, by itself, is an energy facility under the definition in ORS 469.300, a corridor selection assessment explaining how the applicant selected the corridors for analysis in the application. In the assessment, the applicant must evaluate the corridor adjustments the Department has described in the project order, if any. The applicant may select any corridor for analysis in the application and may select more than one corridor. However, if the applicant selects a new corridor, then the applicant must explain why the applicant did not present the new corridor for comment at an

informational meeting under OAR 345-015-0130. In the assessment, the applicant must discuss the reasons for selecting the corridors, based upon evaluation of the following factors:

. . .

IPC underwent an extensive siting process over several years, evaluating several routing and re-routing options to avoid as many identified constraints and sensitive resources as practicable. The result of IPC's siting studies, and consideration of the outcome of the federal review process, resulted in the proposed and alternative routes identified in the ASC.

Following the submission of the ASC, IPC has continued to communicate with the landowners affected by the Project. In the case of the landowners affected by this RFA 1, IPC and the landowners have identified an alternative route on their respective property that would minimize impacts to the landowners while also meeting IPC's design criteria and avoiding impacts to sensitive resources. The Proposed Site Boundary Additions occur in general proximity to the routes approved in the Site Certificate and within the original ASC corridor selection assessments.¹

OAR 345-021-0010(1)(b)(D)(i): Least disturbance to streams, rivers and wetlands during construction;

IPC has designed the Proposed Site Boundary Additions to avoid impacts to streams, rivers, and wetlands to the maximum extent practicable. Details on the occurrence of and impacts on Waters of this State are provided in Section 5.3 and Section 7.2.2 below.

OAR 345-021-0010(1)(b)(D)(ii): Least percentage of the total length of the pipeline or transmission line that would be located within areas of Habitat Category 1, as described by the Oregon Department of Fish and Wildlife;

The Proposed Site Boundary Additions will avoid all Category 1 habitat, as explained in Section 7.1.5 below.

OAR 345-021-0010(1)(b)(D)(iii): Greatest percentage of the total length of the pipeline or transmission line that would be located within or adjacent to public roads and existing pipeline or transmission line rights-of-way;

The Proposed Site Boundary Additions do not include co-locating with existing rights-of-way, because the changes are relatively short in length and because IPC was focused on addressing individual landowner concerns on their particular parcels and not on re-visiting project-wide efforts to co-locate.

OAR 345-021-0010(1)(b)(D)(iv): Least percentage of the total length of the pipeline or transmission line that would be located within lands that require zone changes, variances or exceptions;

The Proposed Site Boundary Additions minimize zoning changes, variances or exceptions, which are discussed in detail in Section 7.1.3 below.

OAR 345-021-0010(1)(b)(D)(v): Least percentage of the total length of the pipeline or transmission line that would be located in a protected area as described in OAR 345-022-0040;

¹ See ASC, Exhibit B, and associated siting studies at Attachments B-1, B-2, B-3, B-4, and B-6.

The Proposed Site Boundary Additions will not be located in any protected areas, as discussed in more detail in Section 7.1.4 below.

OAR 345-021-0010(1)(b)(D)(vi): Least disturbance to areas where historical, cultural or archaeological resources are likely to exist:

The Proposed Site Boundary Additions will avoid impacts on historical, cultural, or archaeological resources to the maximum extent practicable, as discussed in more detail in Section 7.1.8 below.

OAR 345-021-0010(1)(b)(D)(vii): Greatest percentage of the total length of the pipeline or transmission line that would be located to avoid seismic, geological and soils hazards;

The Proposed Site Boundary Additions will avoid seismic, geological, and soils hazards, as discussed in more detail in Sections 7.1.1 and 7.1.2 below.

OAR 345-021-0010(1)(b)(D)(viii): Least percentage of the total length of the pipeline or transmission line that would be located within lands zoned for exclusive farm use;

The Proposed Site Boundary Additions will avoid lands zoned as exclusive farm use (EFU) where practicable, as discussed in more detail in Section 7.1.3.

5.1.2 Information Required for Transmission Line Projects – Length of **Transmission Line**

OAR 345-021-0010(1)(b)(E): If the proposed energy facility is a pipeline or transmission line or has, as a related or supporting facility, a transmission line or pipeline of any size:

(i) The length of the pipeline or transmission line;

The length of the transmission line provided in the Proposed Site Boundary Additions is included in Table 4.1-1, totaling 7.2 miles of transmission line centerline.

5.2 Project Location

The Exhibit C provisions of OAR 345-021-0010(1)(c) require an applicant to provide certain information related to the project location. Idaho Power has identified below those subsections of that provision that may be required for the Council to make its findings on this RFA 1.

5.2.1 Maps of the Proposed Changes

OAR 345-021-0010(1)(c)(A): A map or maps showing the proposed locations of the energy facility site, all related or supporting facility sites and all areas that might be temporarily disturbed during construction of the facility in relation to major roads, water bodies, cities and towns, important landmarks and topographic features, using a scale of 1 inch = 2000 feet or smaller when necessary to show detail;

Figures 4-1 and 4-2 show the locations of the Proposed Site Boundary Additions and are organized by county, proceeding north to south showing the location of each proposed change. Each set of county maps includes series of detailed maps that are at a scale of 1 inch equals 1,000 feet. Project features shown include the site boundary, structure locations, and access

roads. Temporary project features are also shown, including structure work areas and pulling and tensioning sites.

5.2.2 Location Description

OAR 345-021-0010(1)(c)(B): A description of the location of the proposed energy facility site, the proposed site of each related or supporting facility and areas of temporary disturbance, including the total land area (in acres) within the proposed site boundary, the total area of permanent disturbance, and the total area of temporary disturbance. If a proposed pipeline or transmission line is to follow an existing road, pipeline or transmission line, the applicant must state to which side of the existing road, pipeline or transmission line the proposed facility will run, to the extent this is known; and

The Proposed Site Boundary Additions are on predominantly private lands in five counties in Oregon. Consistent with the ASC, IPC has prepared descriptions of the proposed changes by segment, with each segment summarizing the proposed changes at the county level. The Proposed Site Boundary Additions are described by number or amount of each major component and related and supporting facilities. Acreages of ground disturbance associated with those facilities is also described.

Forest-clearing activities associated with vegetation management in the right-of-way will occur in Umatilla and Union counties. The Proposed Site Boundary Additions do not include transmission line centerline changes in forested areas. To the extent that changes to roads involves forest clearing, those impacts will be inventoried and included in the Final Right-of-Way Clearing Assessment prior to construction and in accordance with OAR 345-025-0016 and in compliance with Site Certificate Condition GEN-LU-13.

5.2.3 Segment 1 – Morrow County

The Little Juniper Canyon Alternative is located between Little Juniper Lane and Bombing Range Road approximately 3 miles south of Naval Weapons Systems Training Facility – Boardman (NWSTF Boardman). The predominant land use at the Little Juniper Canyon Alternative is dryland agriculture (Figure 4-1, Map 1). Several proposed changes in Morrow County are associated with access road design updates along the Previously Approved Site Boundary. This includes roads in agricultural areas near NWSTF Boardman (Figure 4-2, Maps 1 to 2) and roads in rangeland areas near Butter Creek (Figure 4-2, Maps 3 to 4). Table 5.2-1 identifies the major components and related and supporting facilities associated with each of the site boundary changes in Morrow County. Table 5.2-2 summarizes the amount of ground disturbance associated with the proposed changes in Morrow County.

Table 5.2-1. Summary of Proposed Changes – Morrow County

Project Features	Little Juniper Canyon Alternative	Access Road Changes	Total Number of Sites
Towers – Single Circuit 500-kV Lattice	4	-	4
Pulling and Tensioning Sites	2	-	2
Access Roads			Total Miles
Existing, 21-70% Improved	1.0	0.9	1.9
Existing, 71-100% Improved	-	-	-
New, Bladed	0.2	1.8	2.0
New, Overland	0.2	0.1	0.3
Crossings			Number of Crossings
High-Voltage Transmission Line Crossings ¹	-	-	0
Existing Road Crossings ²	1	-	1
Existing Railroad Crossings ³	-	-	0
10 10010 1111 0			0011/

¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.

Table 5.2-2. Acres of Land Disturbed during Construction and Operation - Morrow County

	Land Affected During	Land Reclaimed After	Land Permanently Converted to
Proposed Changes/Project Component	Construction (acres)	Construction (acres)	Operations (acres)
Little Juniper Canyon Alternativ	ve ,		
Access Roads – New or Substantial Improvements	3.2	0.9	2.3
Structure and Other Work Areas	10.7	10.5	0.2
Subtotal	14.0	11.5	2.5
Access Road Changes			
Access Roads – New or Substantial Improvements	9.8	5.0	4.8
Subtotal	9.8	5.0	4.8
Morrow County – Total	23.8	16.4	7.3

Note: Acreages are rounded and may not sum exactly.

5.2.4 Segment 2 – Umatilla County

The Proposed Site Boundary Additions in Umatilla County are limited to access road design updates along the Previously Approved Site Boundary in open rangeland and forested areas (Figure 4-2, Maps 5 to 11). Table 5.2-3 identifies the major components and related and supporting facilities associated with each of the proposed changes in Umatilla County. Table 5.2-4 summarizes the amount of ground disturbance associated with the proposed changes in Umatilla County.

² Source: U.S. Census (2020), primary and secondary highways.

³ Source: Oregon Department of Transportation (2014).

Table 5.2-3. Summary of Proposed Changes – Umatilla County

Project Features	Access Road Changes	Total Number of Sites
Towers – Single Circuit 500-kV Lattice	-	-
Pulling and Tensioning Sites	-	-
Access Roads		Total Miles
Existing, 21-70% Improved	1.4	1.4
Existing, 71-100% Improved	-	-
New, Bladed	2.0	2.0
New, Overland	-	-
Crossings		Total Crossings
High-Voltage Transmission Line Crossings ¹	- -	-
Existing Road Crossings ²	-	-
Existing Railroad Crossings ³	-	-

¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.

Table 5.2-4. Acres of Land Disturbed during Construction and Operation – Umatilla County

Proposed Changes/Project Component	Land Affected During Construction (acres)	Land Reclaimed After Construction (acres)	Land Permanently Converted to Operations (acres)			
Approved Route Access Road Changes	Approved Route Access Road Changes					
Access Roads – New or Substantial Improvements	11.1	5.5	5.6			
Subtotal	11.1	5.5	5.6			
Umatilla County – Total	11.1	5.5	5.6			

Note: Acreages are rounded and may not sum exactly

5.2.5 Segment 3 – Union County

The Proposed Site Boundary Additions in Union County are limited to access road design updates along the Previously Approved Site Boundary in open rangeland and forested areas (Figure 4-2, Maps 12 to 17). Table 5.2-5 identifies the major components and related and supporting facilities associated with each of the proposed changes in Union County. Table 5.2-6 summarizes the amount of ground disturbance associated with the proposed changes in Union County.

² Source: U.S. Census (2020), primary and secondary highways.

³ Source: Oregon Department of Transportation (2014).

Table 5.2-5. Summary of Proposed Changes – Union County

Project Features	Access Road Changes	Total Number of Sites
Towers – Single Circuit 500-kV	-	-
Lattice		
Pulling and Tensioning Sites	-	-
Access Roads		Total Miles
Existing, 21-70% Improved	0.3	0.3
Existing, 71-100% Improved	0.1	0.1
New, Bladed	1.4	1.4
New, Overland	-	-
Crossings		Total Crossings
High-Voltage Transmission Line	-	-
Crossings ¹		
Existing Road Crossings ²	0	0
Existing Railroad Crossings ³	0	0

¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.

Table 5.2-6. Acres of Land Disturbed during Construction and Operation – Union County

Proposed Changes/ Project Component	Land Affected During Construction (acres)	Land Reclaimed After Construction (acres)	Land Permanently Converted to Operations (acres)
Approved Route Access Road Changes			
Access Roads – New or Substantial Improvements	6.5	3.6	2.9
Subtotal	6.5	3.6	2.9
Union County – Total	6.5	3.6	2.9

Note: Acreages are rounded and may not sum exactly

5.2.6 Segment 4 – Baker County

The Proposed Site Boundary Additions in Baker County include two transmission line alternatives and proposed access road changes. The True Blue Gulch Alternative is approximately 4 miles southwest of Durkee and one mile south of the Burnt River Canyon in mountainous terrain (Figure 4-1, Maps 2 to 4). The True Blue Gulch Alternative includes a portion of Site Boundary that is larger than typical to allow for flexibility in the final design (Figure 4-1, Map 2). The Durbin Quarry Alternative is located on the west side Interstate 84 at Huntington in open rangeland (Figure 4-1, Maps 5 to 6). The proposed access road changes are predominantly in open rangeland settings in Baker County (Figure 4-2, Maps 18 to 27). Table 5.2-7 identifies the major components and related and supporting facilities associated with each of the proposed changes in Baker County. Table 5.2-8 summarizes the amount of ground disturbance associated with the proposed changes in Baker County.

² Source: U.S. Census (2020), primary and secondary highways.

³ Source: Oregon Department of Transportation (2014).

Table 5.2-7. Summary of Proposed Changes – Baker County

Project Features	True Blue Gulch Alternative	Durbin Quarry Alternative	Access Road Changes	Number of Sites
Towers – Single Circuit 500-kV Lattice	14	10	-	24
Pulling and Tensioning Sites	4	4	-	8
Access Roads				Total Miles
Existing, 21-70% Improved	-	-	3.0	3.0
Existing, 71-100% Improved	4.7	-	1.8	6.5
New, Bladed	3.8	2.1	1.3	7.2
New, Overland	0.1	-	0.2	0.3
Crossings				Total Crossings
High-Voltage Transmission Line Crossings ¹	0	0		0
Existing Road Crossings ²	0	0		0
Existing Railroad Crossings ³	0	0		0

¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.

Table 5.2-8. Acres of Land Disturbed during Construction and Operation – Baker County

Proposed Changes/ Project Component	Land Affected During Construction (acres)	Land Reclaimed After Construction (acres)	Land Permanently Converted to Operations (acres)				
True Blue Gulch Alternative							
Access Roads – New or Substantial Improvements	33.1	18.7	14.5				
Structure and Other Work Areas	37.6	37.0	0.7				
Subtotal	70.8	55.6	15.1				
Durbin Quarry Alternative							
Access Roads – New or Substantial Improvements	9.0	5.4	3.6				
Structure and Other Work Areas	22.2	21.8	0.4				
Subtotal	31.2	27.2	4.1				
Approved Route Access Road Change	Approved Route Access Road Changes						
Access Roads – New or Substantial Improvements	18.6	7.9	10.7				
Subtotal	18.6	7.9	10.7				
Baker County – Total	120.6	90.7	29.9				

Note: Acreages are rounded and may not sum exactly.

² Source: U.S. Census (2020), primary and secondary highways.

³ Source: Oregon Department of Transportation (2014).

5.2.7 Segment 5 – Malheur County

The Proposed Site Boundary Additions in Malheur County are limited to access road changes in open rangeland (Figure 4-2, Maps 28 to 41). Table 5.2-9 identifies the major components and related and supporting facilities associated with each of the proposed changes in Malheur County. Table 5.2-10 summarizes the amount of ground disturbance associated with the proposed changes in Malheur County.

Table 5.2-9. Summary of Proposed Changes – Malheur County

Project Features	Access Road Changes	Number of Sites
Towers – Single Circuit 500-kV	-	-
Lattice		
Pulling and Tensioning Sites	•	-
Access Roads		Total Miles
Existing, 21-70% Improved	1.9	1.9
Existing, 71-100% Improved	1.5	1.5
New, Bladed	3.7	3.7
New, Overland	0.3	0.3
Crossings		Total Crossings
High-Voltage Transmission Line	-	-
Crossings ¹		
Existing Road Crossings ²	-	-
Existing Railroad Crossings ³	-	-

¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.

Table 5.2-10. Acres of Land Disturbed during Construction and Operation – Malheur County

Proposed Changes/Project Component Approved Route Access Road Change	Land Affected During Construction (acres)	Land Reclaimed After Construction (acres)	Land Permanently Converted to Operations (acres)
Access Roads – New or Substantial Improvements	25.2	12.8	12.4
Subtotal	25.2	12.8	12.4
Malheur County – Total	25.2	12.8	12.4

Note: Acreages are rounded and may not sum exactly.

5.3 Waters of this State

The Exhibit J requirements of OAR 345-021-0010(1)(j) require an applicant to provide certain information about impacts to Waters of this State. IPC has identified below those subsections of that provision that may be required for the Council to make its findings on this RFA 1.

² Source: U.S. Census (2020), primary and secondary highways.

³ Source: Oregon Department of Transportation (2014).

5.3.1 Surveys and Removal-Fill Permitting

To identify any Waters of this State affected by the Proposed Site Boundary Additions, IPC applied the same methodology used in the ASC and approved by the Council in the Final Order. For those areas where IPC has completed on-the-ground wetland delineations and reporting (Phase 2 and Phase 3 in the ASC), IPC has incorporated the results in this RFA 1. For those areas where IPC has not had access or has not completed on-the-ground wetland delineations and reporting, IPC utilizes desktop data from the National Wetland Inventory (NWI), the National Hydrography Dataset (NHD), and aerial photo interpretation analysis (described as Phase 1 in the ASC). Per Site Certificate Condition PRE-RF-01, prior to construction, IPC will complete all necessary surveys and submit wetland delineation reports to the Oregon Department of Energy (ODOE) and Oregon Department of State Lands (ODSL) and receive a Letter of Concurrence from the ODSL.²

IPC will submit a final Joint Permit Application (JPA), including the final Compensatory Wetland and Non-Wetland Mitigation Plan, and Site Rehabilitation Plan. Impact quantities and compensatory mitigation required for the Project will be based on the results of the completion of field surveys and final impact calculations.

5.3.2 Description and Location of Waters of this State

OAR 345-021-0010(1)(j)(A): A description of all areas within the site boundary that might be waters of this state and a map showing the location of these features;

Wetlands and waters described in the section below are located within the Proposed Site Boundary Additions. Maps showing the location of waters of this state are included in Figure 5-1 and Figure 5-2. Surveys are ongoing and delineation reports will be prepared in support of the final JPA. Therefore, Figure 5-1 and Figure 5-2 include delineated wetlands and waters where surveys have been performed; where surveys have not been completed, IPC utilized NWI and NHD data to inform this RFA 1.

5.3.3 Impacts to Waters of this State

OAR 345-021-0010(1)(j)(B): An analysis of whether construction or operation of the proposed facility would adversely affect any waters of this state;

Wetland and water delineation surveys in the RFA 1 areas are not yet complete and so NWI and NHD data were used to determine impacts in areas where access has not yet been obtained. Similarly, data about the width of the waterways is unavailable as of this RFA 1 and so the calculation for potential impacts is given in linear feet instead of acres. The estimated impacts on waters of this state are provided in Table 5.3-1.

The certificate holder shall:

a. Prior to construction of a phase or segment of the facility, submit updated electronic wetland delineation report(s) to the Department and to the Oregon Department of State Lands. All wetland delineation report(s) submitted to the Oregon Department of State Lands shall follow its submission and review procedures.

² Site Certificate Condition PRE-RF-01 provides:

b. Prior to construction of a phase or segment of the facility, the Department must receive a Letter of Concurrence issued by the Oregon Department of State Lands referencing the applicable wetland delineation for the phase or segment of the facility.

Table 5.3-1. Estimated Temporary and Permanent Impacts on Waters of this State for RFA 1

County/	Tempora	ary Impacts	Permar	nent Impacts
RFA 1 Alternative	Acres ¹	Feet ²	Acres ¹	Feet ²
Little Juniper Canyon Alternative		450.14		15.24
True Blue Gulch Alternative	0.48	1,103.62	0.23	278.91
Durbin Quarry (ODOT) Alternative		971.32		
Approved Route Access Road Changes	0.12	1,088.51	0.11	704.78
Total	0.60	3,613.59	0.34	998.93

¹ Impact acres pertain to field delineated wetlands and mapped NWI wetlands in Alternative areas where Project disturbance activities intersect wetlands. NWI mapping was used for impact calculations in Alternative areas that have not been ground surveyed yet. Once wetland surveys are completed, and mapped NWI wetland sites have been field surveyed, it is likely the total NWI wetland impacts will be lower that estimated.

5.3.4 Description of Significance of Impacts to Waters of this State

OAR 345-021-0010(1)(j)(C): A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B);

For many waters of this state, a Removal-Fill Authorization is required if a project will involve 50 cubic yards of fill and/or removal (cumulative) within the jurisdictional boundary. For activities in Essential Salmonid Habitat (ESH) streams, State Scenic Waterways and compensatory mitigation sites, a permit is required for any amount of removal or fill.

The impacts described in Section 5.3.3 are the result of temporary and permanent access roads as well as temporary work areas.

5.3.5 Why Removal-Fill Authorization is Not Needed

OAR 345-021-0010(1)(j)(D): If the proposed facility would not need a removal-fill authorization, an explanation of why no such authorization is required for the construction and operation of the proposed facility.

OAR 345-021-0010(1)(j)(D) requires an explanation if a removal-fill authorization (Removal-Fill Permit) is not needed. Here, because the Project will require a Removal-Fill Permit, OAR 345-021-0010(1)(j)(D) does not apply. See Section 7.2.2 for further information on the Removal-Fill Permit.

² Impacts displayed in feet pertain to field delineated intermittent and perennial streams and mapped NHD streams in Alternative areas where Project ground disturbance activities intersect streams. Once wetland surveys are completed, it is likely that many NHD streams will be considered ephemeral; therefore, not waters of the state, thereby reducing the total regulated stream impacts.

5.3.6 Information to Support Removal-Fill Authorization

OAR 345-021-0010(1)(j)(E): If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR Chapter 141 Division 85.

Section 7.2.2 below discusses the application submission requirements and agency review standards relevant to a Removal-Fill Permit application.

6.0 PROPOSED CHANGES TO SITE CERTIFICATE

OAR 345-027-0360(1)(d): The specific language of the site certificate, including conditions, that the certificate holder proposes to change, add, or delete through the amendment;

Attachment 6-1 includes the red-lined Site Certificate, which reflects the proposed changes of RFA 1. Specific amendments include the following:

Adding language to a general standard of review condition to expand the facility description to include any modifications approved during the site certificate amendment process.

Site Certificate Condition GEN-GS-06: Subject to conditions of the site certificate, the, certificate holder may construct the facility anywhere within the site boundary (approved corridor(s)), and as described in ASC Exhibit B and represented in ASC Exhibit C Attachment C-2 and C-3 mapsets and Amendment 1 mapsets. The approved corridors include:

- a. The transmission line route extending approximately 273-miles through Morrow, Umatilla, Union, Baker, and Malheur counties;
- b. West of Bombing Range Road alternative 1 and the west of Bombing Range Roadalternative 2 in Morrow County;
- c. Morgan Lake alternative in Union County; and
- d. Double Mountain alternative in Malheur County-; and
- e. Amendment 1 site boundary changes.

7.0 APPLICABLE STATUTES, RULES, STANDARDS, AND ORDINANCES

OAR 345-027-0360(1)(e): A list of all Council standards and other laws, including statutes, rules and ordinances, applicable to the proposed change, and an analysis of whether the facility, with the proposed change, would comply with those applicable laws and Council standards. For the purpose of this rule, a law or Council standard is "applicable" if the Council would apply or consider the law or Council standard under OAR 345-027-0375(2); and

OAR 345-027-0360(1)(e) requires a list of all applicable Council standards, laws, rules, and ordinances. For this RFA 1, which involves adding new area to the site boundary, the Council must determine that proposed changes comply with all Council standards, laws, rules, and

ordinances applicable to the original Site Certificate and that the amount of the bond or letter of credit in the Site Certificate is adequate.³

Table 7-1 lists the Council standards, laws, rules, and ordinances applicable to the original Site Certificate; addresses the RFA 1 compliance with the same; and lists the relevant Site Certificate conditions.

To issue an amended site certificate, the Council must determine that the preponderance of evidence on the record supports the following conclusions:

³ OAR 345-027-0375(2) provides, in relevant part:

⁽a) For a request for amendment proposing to add new area to the site boundary, the portion of the facility within the area added to the site by the amendment complies with all laws and Council standards applicable to an original site certificate application;

⁽d) For all requests for amendment, the amount of the bond or letter of credit required under OAR 345-022-0050 is adequate.

Table 7-1. Standards and Laws Relevant to Proposed Amendment

Standard or Other Permit	Compliance	Related Site Certificate Conditions
OAR 345-022-0000 General Standard of Review	The General Standard of Review requires compliance with the EFSC Statutes and Standards. As demonstrated in the remainder of this Table 7-1 and elsewhere in the findings, analysis, and conclusions within this RFA 1, IPC demonstrates the Proposed Site Boundary Additions comply with all applicable EFSC Statutes and Standards and, by extension, OAR 345-022-0000. IPC does not specifically address the General Standard of Review in more detail in this RFA 1. Instead, the applicable EFSC Statutes and Standards are addressed throughout this RFA 1 in the context of the relevant statutes, rules, standards, and ordinances. In relation to this standard, IPC is proposing an amendment to Site Certificate Condition GEN-GS-06.	GEN-GS-01 Construction deadlines GEN-GS-02 Pre-construction compliance CON-GS-01 Semi-annual construction reporting OPR-GS-01 Annual operation reporting OPR-GS-02 Legal description GEN-GS-03 Compliance during all phases CON-GS-02 Construction in one area while route changes elsewhere GEN-GS-04 Notification of environmental impacts OPR-GS-03 Implementation of the Reclamation and Revegetation Plan GEN-GS-05 Transfer of ownership GEN-GS-06 Construction within the site boundary
OAR 345-022-0010 Organizational Expertise	The Organizational Expertise Standard requires that the applicant have the organizational expertise to construct, operate, and retire the facility in compliance with Council standards and site certificate conditions. Because RFA 1 does not propose any changes that would affect IPC's organizational expertise, or that would introduce any new Project components or related or supporting facilities requiring new types of organizational expertise, the Council's existing findings, analysis, and conclusions in the Final Order regarding organizational expertise and the related Site Certificate conditions are adequate to ensure the Proposed Site Boundary Additions comply with OAR 345-022-0010. • IPC does not address this standard in more detail in this RFA 1. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	OPR-OE-01 Submission of inspection documentation with annual reporting GEN-OE-01 Notification of qualifications and contractor identity changes PRE-OE-01 Notification of contractor identities PRE-OE-02 Assurance of contractor compliance PRE-OE-03 Submission of third-party permit list and permits GEN-OE-02 Issuance of notice of violation GEN-OE-03 Reporting of Site Certificate violations
OAR 345-022-0020 Structural Standard	The Structural Standard requires that the applicant adequately characterize and address potential seismic hazards. As discussed in Section 7.1.1 below, for the Proposed Site Boundary Additions, IPC has adequately characterized the potential seismic hazards and will further refine that characterization prior to construction consistent with the existing Site Certificate conditions. Moreover, IPC demonstrates that the existing Site Certificate conditions requiring IPC to avoid, minimize, and mitigate seismic hazard risks will adequately address any potential seismic hazards related to the Proposed Site Boundary Additions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with OAR 345-022-0020.	PRE-SS-01 Submission of geological and geotechnical investigation plan ar report GEN-SS-01 Compliance of building codes GEN-SS-02 Avoidance of seismic hazards GEN-SS-03 Notification of foundation changes GEN-SS-04 Notification of other geological observations
	 IPC addresses this standard in more detail in Section 7.1.1 below. In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions. 	

Standard or Other Permit OAR 345-022-0022 Soil Protection	Compliance The Soil Protection Standard requires 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. As discussed in Section 7.1.2 below, for the Proposed Site Boundary Additions, IPC has adequately characterized the potential soil impacts, and IPC demonstrates that the existing Site Certificate conditions requiring IPC to avoid, minimize, and mitigate soil impacts will adequately address any potential soil impacts related to the Proposed Site Boundary Additions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with OAR 345-022-0022. • IPC addresses this standard in more detail in Section 7.1.2 below. • In relation to this standard, IPC is not proposing any new	Related Site Certificate Conditions GEN-SP-01 Implementation of National Pollutant Discharge Elimination System (NPDES) 1200-C and Erosion Sediment Control Plan GEN-SP-02 Implementation of Construction Spill Prevention Control and Countermeasures (SPCC) Plan GEN-SP-03 Implementation of Operations SPCC Plan GEN-SP-04 Implementation of final Blasting Plan OPR-SP-01 Inspection of facility components and mitigation for soil impacts
OAR 345-022-0030 Land Use	The Land Use Standard requires that the facility complies with the statewide planning goals. As discussed in Section 7.1.3 below, IPC demonstrates that the Proposed Site Boundary Additions comply with local applicable substantive criteria, Land Conservation and Development Commission rules and goals, and any land use statutes directly applicable to the facility. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with OAR 345-022-0030. • IPC addresses this standard in more detail in Section 7.1.3 below. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-LU-01 Submission of Morrow County permits, aggregate supplier identities, and riparian impact consultation GEN-LU-02 Adherence to Morrow County setback requirements GEN-LU-03 Submission of Umatilla County permits and Air Contaminant Permit PRE-LU-01 Road construction consultation with Umatilla County Public Works GEN-LU-04 Adherence to Umatilla County setback requirements GEN-LU-05 Submission of Union County permits GEN-LU-06 Adherence to Union County setback requirements PRE-LU-02 Submission of aggregate supplier identities to Baker County GEN-LU-07 Submission of Baker County permits CON-LU-01 Adherence to Baker County setback requirements GEN-LU-09 Adherence to Malheur County setback requirements GEN-LU-10 Adherence to City of North Powder setback requirements GEN-LU-11 Implementation of final Agricultural Assessment and Mitigation Plan GEN-LU-12 Limitations of right-of-way within Goal 4 forest lands GEN-LU-13 Implementation of final Right-of-Way Clearing Assessment CON-LU-02 Submission of Memorandum of Agreement with City of LaGrande for Morgan Lake Park improvements

Standard or Other Permit	Compliance	Related Site Certificate Conditions
OAR 345-022-0040 Protected Areas	The Protected Area Standard requires that the facility avoid certain protected areas, except in certain situations, and that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to protected areas. As discussed in Section 7.1.4 below, IPC demonstrates that the Proposed Site Boundary Additions will not be located in a designated protected area and will not otherwise significantly adversely impact any such protected areas. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with OAR 345-022-0040. • IPC addresses this standard in more detail in Section 7.1.4 below. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-PA-01 Implementation of protection measures for the Ladd March Wildlife Area GEN-PA-02 Avoidance of Ladd Marsh Wildlife Area if Morgan Lake alternative route chosen
OAR 345-022-0050 Retirement and Financial Assurance	The Retirement and Financial Assurance Standard requires that the site, taking into account mitigation, can be restored, and that the applicant has a reasonable likelihood of obtaining a bond or letter of credit to fund that restoration. Because RFA 1 does not propose any changes that would affect a potential site restoration or IPC's ability to fund that restoration, the Council's existing findings, analysis, and conclusions in its final order regarding retirement and financial assurance and the related Site Certificate conditions are adequate to ensure the Proposed Site Boundary Additions comply with OAR 345-022-0050. • IPC does not address this standard in more detail in this RFA 1. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-RT-01 Prevention of hazardous site conditions RET-RT-01 Retirement of facility in compliance with the Retirement Plan RET-RT-02 Retirement of facility upon permanent cessation PRE-RT-01 Adjustment of bond or letter of credit during construction OPR-RT-01 Submission and maintenance of bond or letter of credit during operations

Standard or Other Bermit	Compliance	Polotod Sito Contificate Canditions
Standard or Other Permit OAR 345-022-0060 Fish and Wildlife Habitat	Compliance The Fish and Wildlife Habitat Standard requires that the design, construction and operation of the facility, taking into account mitigation, are consistent with ODFW's fish and wildlife habitat mitigation goals and standards and with the Greater Sage-Grouse Conservation Strategy for Oregon. As discussed in Section 7.1.5 below, for the Proposed Site Boundary Additions, IPC has adequately characterized the potential fish and wildlife habitat impacts, and IPC demonstrates that the existing Site Certificate conditions requiring IPC to avoid, minimize, and mitigate fish and wildlife impacts will adequately address any fish and wildlife habitat impacts related to the Proposed Site Boundary Additions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with OAR 345-022-0060. • IPC addresses this standard in more detail in Section 7.1.5 below. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	Related Site Certificate Conditions GEN-FW-01 Implementation of final Reclamation and Revegetation Plan GEN-FW-02 Implementation of final Noxious Weed Plan GEN-FW-03 Implementation of final Noxious Weed Plan GEN-FW-04 Implementation of final Habitat Mitigation Plan GEN-FW-05 Implementation of worker environmental awareness training GEN-FW-06 Flagging of environmentally sensitive areas GEN-FW-07 Speed limit enforcement GEN-FW-08 Adherence with the Avian Protection Plan and fatality reporting PRE-FW-01 Preconstruction surveys to be completed on unsurveyed portions of the site boundary. PRE-FW-02 Preconstruction surveys to be completed on entirety of site boundary PRE-FW-03 Submission of final Sage-Grouse Habitat Mitigation Plan PRE-FW-04 Perform preconstruction traffic study in elk habitat and sage-grouse habitat CON-FW-01 Avoidance of elk or mule deer winter range during temporal restriction CON-FW-02 Notification of pygmy rabbit colonies or State Sensitive bat species CON-FW-03 Conduct construction avian surveys during migratory bird nesting season CON-FW-04 Avoidance of raptor nests within buffers and temporal restrictions CON-FW-05 Implementation of final Sage-Grouse Habitat Mitigation Plan CON-FW-06 Avoidance of sage-grouse habitat during temporal restriction OPR-FW-01 Adherence with final compensatory mitigation calculations OPR-FW-03 Submission of traffic studies data for indirect sage-grouse habitat impact calculations OPR-FW-04 Perform operations traffic study in elk habitat and sage-grouse habitat

Standard or Other Permit	Compliance	Related Site Certificate Conditions
OAR 345-022-0070 Threatened and Endangered Species	The Threatened and Endangered Species Standard requires that the design, construction and operation of the facility, taking into account mitigation, adequately address potential impacts to state-designated threatened and endangered species. As discussed in Section 7.1.6 below, for the Proposed Site Boundary Additions, IPC has adequately characterized the potential impacts to such species, and IPC demonstrates that the existing Site Certificate conditions requiring IPC to avoid, minimize, and mitigate impacts to threatened and endangered species will adequately address any impacts to such species related to the Proposed Site Boundary Additions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with OAR 345-022-0070. • IPC addresses this standard in more detail in Section 7.1.6 below. • In relation to this standard, IPC is not proposing any new	CON-TE-01 Avoidance of Category 1 Washington ground squirrel habitat CON-TE-02 Avoidance of threatened or endangered plant species within buffers
OAR 345-022-0080 Scenic Resources	conditions or changes to existing conditions. The Scenic Resources Standard requires that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to certain scenic resources. As discussed in Section 7.1.7 below, for the Proposed Site Boundary Additions, IPC has adequately characterized the potential impacts to scenic resources, and IPC demonstrates that the existing Site Certificate conditions requiring IPC to avoid, minimize, and mitigate impacts to certain scenic resources will adequately address any impacts to such resources related to the Proposed Site Boundary Additions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with OAR 345-022-0080. • IPC addresses this standard in more detail in Section 7.1.7 below. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-PA-02 Avoidance of Ladd Marsh Wildlife Area if Morgan Lake alternative route is chosen GEN-SR-01 Usage of dull-galvanized steel for lattice towers and non-specular conductors GEN-SR-02 Union County visual impact reduction GEN-SR-03 Reduction of National Historic Oregon Trail Interpretive Center visual impacts GEN-SR-04 Reduction of Birch Creek Area of Critical Environmental Concern visual impacts

Standard or Other Permit	Compliance	Related Site Certificate Conditions
OAR 345-022-0090 Historic, Cultural and Archaeological Resources	The Historic, Cultural and Archaeological Resources Standard requires that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to certain historic, cultural and archaeological resources. As discussed in Section 7.1.8 below, for the Proposed Site Boundary Additions, IPC has adequately characterized the potential impacts to historic, cultural and archaeological resources, and IPC demonstrates that the existing Site Certificate conditions requiring IPC to avoid, minimize, and mitigate impacts will adequately address any potential impacts to such resources related to the Proposed Site Boundary Additions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with OAR 345-022-0090. • IPC addresses this standard in more detail in Section 7.1.8 below. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-HC-01 Avoidance of Oregon Trail/National Historic Trail resources GEN-HC-02 Implementation of final HPMP OPS-HC-01 Submission of Cultural Resources Technical Report
OAR 345-022-0100 Recreation	The Recreation Standard requires that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities. As discussed in Section 7.1.9 below, for the Proposed Site Boundary Additions, IPC has adequately characterized the potential impacts to important recreational opportunities, and IPC demonstrates that the Proposed Site Boundary Additions will not result in any significant impacts to such opportunities. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with OAR 345-022-0100. • IPC addresses this standard in more detail in Section 7.1.9 below. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-RC-01 Reduction of Morgan Lake Park visual impacts

Standard or Other Permit	Compliance	Related Site Certificate Conditions
OAR 345-022-0110 Public Services	The Public Services Standard requires that the construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to the ability of providers to provide public services. Because RFA 1 does not propose any changes that would affect public service providers differently, or that would introduce any new Project components or related or supporting facilities requiring new types of public service providers, the Council's existing findings, analysis, and conclusions in its final order regarding public service providers and the related Site Certificate conditions are adequate to ensure the Proposed Site Boundary Additions comply with OAR 345-022-0110. • IPC does not address this standard in more detail in this RFA 1. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-PS-01 Submit Helicopter Use Plan GEN-PS-02 Submit Final Fire Prevention and Suppression Plan GEN-PS-03 Submit Wildfire Mitigation Plan PRE-PS-01 Consultation with Owyhee Irrigation District PRE-PS-02 Submit county-specific Transportation and Traffic Plan PRE-PS-03 Submit FAA form 7460-1 Notice of Proposed Construction or Alteration PRE-PS-04 Implementation of Environmental and Safety Training Plan
OAR 345-022-0120 Waste Minimization	The Waste Minimization Standard requires that, to the extent reasonably practicable, the plans for the construction and operation of the facility are likely to minimize the generation of waste, and the management of waste is likely to result in minimal adverse impacts to the surrounding and adjacent areas. Because RFA 1 does not propose any changes that would affect Idaho Power's waste minimization plans, or that would introduce any new types of waste, the Council's existing findings, analysis, and conclusions in its final order regarding waste minimization and the related Site Certificate conditions are adequate to ensure the Proposed Site Boundary Additions comply with OAR 345-022-0120. • IPC does not address this standard in more detail in this RFA 1. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-WM-01 Implementation of Construction Waste Management Plan
OAR 345-023-0005 Need	The Need Standard requires that the applicant demonstrate the need for the Project either through the least-cost plan rule or system reliability rule. Because RFA 1 does not propose any changes that would affect the consideration of the Project under IPC's Integrated Resource Plan, or that would impact the need of the Project to enable IPC's transmission system, the Council's existing findings, analysis, and conclusions in its final order regarding the need for the Project are adequate to ensure the Proposed Site Boundary Additions comply with OAR 345-023-0005. • IPC does not address this standard in more detail in this RFA 1. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	

Standard or Other Permit	Compliance	Related Site Certificate Conditions
OAR 345-024-0090 Transmission Lines	The Sitting Standards for Transmission Lines require that the design, construction and operation of the facility meet certain alternating current operating criteria and minimize induced currents. Because RFA 1 does not propose any changes that would affect the alternating current electric fields or induced currents, the Council's existing findings, analysis, and conclusions in its final order regarding alternating current and induced current, and the related Site Certificate conditions, are adequate to ensure the Proposed Site Boundary Additions comply with OAR 345-024-0090. • IPC does not address this standard in more detail in this RFA 1. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-TL-01 Management of electromagnetic field exposure OPR-TL-01 Reduction of induced current and nuisance shock risks GEN-TL-02 Adherence with the National Electrical Safety Code and grounding practices PRE-TL-01 Meeting with Public Utility Commission (OPUC) OPR-TL-02 Submission of compliance updates to OPUC
OAR 340-035-0035 Noise Control Regulations	The Noise Control Regulations require that the construction and operation of the facility meet certain noise standards. As discussed in Section 7.2.1 below, for the proposed changes, IPC has adequately characterized the potential noise impacts, and IPC demonstrates that the existing Site Certificate conditions requiring IPC to avoid, minimize, and mitigate impacts will adequately address any such potential impacts related to the Proposed Site Boundary Additions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with OAR 340-035-0035. • IPC addresses this standard in more detail in Section 7.2.1 below. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-NC-01 Implementation of Noise Exceedance Mitigation Plans GEN-NC-02 Implementation of a noise complaint response system CON-NC-01 Implementation of design measures and construction techniques OPR-NC-01 Adherence to the ambient antidegradation standard during infrequent or unusual foul weather events OPR-NC-02 Variance to compliance with the ambient antidegradation standard
Removal-Fill Permit OAR Chapter 141, Division 85	The Removal-Fill Rules require a permit from the Department of State Lands to remove material from, or to fill in, waters of the state. As discussed in Section 7.2.2 below, for the proposed changes, IPC has characterized the potential impacts to Waters of this State, and the existing Site Certificate conditions requiring IPC to obtain a permit and avoid, minimize, and mitigate impacts will adequately address any such potential impacts related to the Proposed Site Boundary Additions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the Proposed Site Boundary Additions, subject to the related Site Certificate conditions, comply with the Removal-Fill Regulations. • IPC addresses this standard in more detail in Section 7.2.2 below. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	PRE-RF-01 Submission of updated wetland delineation reports GEN-RF-01 Implementation of final Site Rehabilitation Plan GEN-RF-02 Implementation of final Compensatory Wetland and Non-Wetland Mitigation Plan PRE-RF-02 Provide copy of Joint Permit Application GEN-RF-03 Compliance with General and Special Conditions GEN-RF-04 Compliance with Removal-Fill Conditions and procedures

Standard or Other Permit	Compliance	Related Site Certificate Conditions
Fish Passage Plan Approval OAR Chapter 635, Division 412	The Fish Passage Rules require approval of fish passage plans for any new artificial obstructions, or substantial modifications to existing obstructions, affecting native fish streams. As part of the Proposed Site Boundary Additions, IPC is not proposing any new artificial obstructions, or substantial modifications to existing obstructions, on any waters. Therefore, the Council's existing findings, analysis, and conclusions in its final order regarding fish passage, and the related Site Certificate conditions, are adequate to ensure the Proposed Site Boundary Additions comply with the Fish Passage Rules. • IPC does not address this standard in more detail in this RFA 1. • In relation to this standard, IPC is not proposing any new conditions or changes to existing conditions.	GEN-FP-01 Implementation of final Fish Passage Plan
Public Land Action Permit	None of the proposed changes in RFA 1 occur on non-federal public lands, and therefore, no Public Land Action Permit is required.	N/A
Morrow County Land Use Permit – Land Use Decision (Utility Facility; EFU Zone)	 In Morrow County, all of the proposed site boundary changes in RFA 1 occur in the EFU zone. As discussed in Section 7.1.3 below, the Proposed Site Boundary Additions will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Morrow County EFU Zone requirements. IPC addresses the Morrow County EFU Zone requirements in more detail in Section 7.1.3.1 below. In relation to the Morrow County EFU Zone requirements, IPC is not proposing any new conditions or changes to existing conditions. 	GEN-LU-01 Submission of Morrow County permits, aggregate supplier identities, and riparian impact consultation
Morrow County Land Use Permit – Zoning Permit (Utility Facility; General Industrial Zone)	None of the Proposed Site Boundary Additions occur in the Morrow County General Industrial zone.	GEN-LU-01 Submission of Morrow County permits, aggregate supplier identities, and riparian impact consultation
Morrow County Land Use Permit – Zoning Permit (Utility Facility; Port Industrial Zone)	None of the Proposed Site Boundary Additions occur in the Morrow County Port Industrial zone.	N/A

Standard or Other Permit	Compliance	Related Site Certificate Conditions
Umatilla County Land Use Permit – Land Use Decision and Zoning Permit (Utility Facility; EFU Zone)	 In Umatilla County, portions of the Proposed Site Boundary Additions occur in the EFU zone. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Umatilla County EFU Zone requirements. IPC addresses the Umatilla County EFU Zone requirements in more detail in Section 7.1.3 below. In relation to the Umatilla County EFU Zone requirements, IPC is not proposing any new conditions or changes to existing conditions. 	GEN-LU-03 Submission of Umatilla County permits and Air Containment Permit
Umatilla County Land Use Permit – Conditional Use Permit (Helipads; EFU Zone)	None of the Proposed Site Boundary Additions involve helipads.	GEN-LU-03 Submission of Umatilla County permits and Air Containment Permit
Umatilla County Land Use Permit – Conditional Use Permit and Land Use Decision (Utility Facility; Grazing-Farm Zone/Goal 4 Forestlands)	 In Umatilla County, portions of the transmission line Proposed Site Boundary Additions occur in the Grazing Farm zone. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Umatilla County Grazing-Farm Zone requirements. IPC addresses the Umatilla County Grazing-Farm Zone requirements in more detail in Section 7.1.3 below. In relation to the Umatilla County Grazing-Farm Zone requirements, IPC is not proposing any new conditions or changes to existing conditions. 	GEN-LU-03 Submission of Umatilla County permits and Air Containment Permit GEN-LU-12 Limitations of right-of-way within Goal 4 forest lands
Umatilla County Land Use Permit – Exception to Goal 4 (Access Roads; Helipads; Grazing-Farm Zone/Goal 4 Forestlands)	In Umatilla County, certain access roads in Proposed Site Boundary Additions occur in the Grazing-Farm zone and Goal 4 forest lands. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 support a Goal 4 exception, if the Council deems necessary. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, warrant a Goal 4 exception in the Umatilla County Grazing-Farm Zone. • IPC addresses the Umatilla County Grazing-Farm Zone Goal 4 exception requirements in more detail in Section 7.1.3 below. • In relation to the Umatilla County Grazing-Farm Zone Goal 4 exception requirements, IPC is not proposing any new conditions or changes to existing conditions.	GEN-LU-03 Submission of Umatilla County permits and Air Containment Permit GEN-LU-12 Limitations of right-of-way within Goal 4 forest lands
Umatilla County Land Use Permit – Conditional Use Permit and Land Use Decision (Helipads; Grazing-Farm Zone)	None of the Proposed Site Boundary Additions involve helipads.	GEN-LU-03 Submission of Umatilla County permits and Air Containment Permit

Standard or Other Permit	Compliance	Related Site Certificate Conditions
Umatilla County Land Use Permit – Conditional Use Permit (Access Roads; Grazing-Farm Zone)	In Umatilla County, portions of the access road Proposed Site Boundary Additions occur in the Grazing Farm zone. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Umatilla County Grazing-Farm Zone requirements. • IPC addresses the Umatilla County Grazing-Farm Zone requirements in more detail in Section 7.1.3 below. • In relation to the Umatilla County Grazing-Farm Zone requirements, IPC is not proposing any new conditions or changes to existing conditions.	GEN-LU-03 Submission of Umatilla County permits and Air Containment Permit
Umatilla County Land Use Permit – Conditional Use Permit (Utility Facility; Light Industrial Zone)	None of the Proposed Site Boundary Additions occur in the Umatilla County Light Industrial zone.	GEN-LU-03 Submission of Umatilla County permits and Air Containment Permit
Umatilla County Land Use Permit – Conditional Use Permit (Batch Plant; Light Industrial Zone)	None of the Proposed Site Boundary Additions occur in the Umatilla County Light Industrial zone.	GEN-LU-03 Submission of Umatilla County permits and Air Containment Permit
Umatilla County Land Use Permit – Conditional Use Permit (Multi-Use Area; Rural Tourist Commercial Zone)	None of the Proposed Site Boundary Additions occur in the Umatilla County Rural Tourist Commercial zone.	GEN-LU-03 Submission of Umatilla County permits and Air Containment Permit
Union County Land Use Permit – Land Use Decision (Utility Facility; EFU Zone)	None of the Proposed Site Boundary Additions occur in the Union County EFU zone.	GEN-LU-05 Submission of Union County permits
Union County Land Use Permit – Conditional Use Permit and Land Use Decision (Helipads; EFU Zone)	None of the Proposed Site Boundary Additions involve helipads.	GEN-LU-05 Submission of Union County permits
Union County Land Use Permit – Conditional Use Permit and Land Use Decision (Concrete Batch Plants; EFU Zone)	None of the Proposed Site Boundary Additions involve concrete batch plants.	GEN-LU-05 Submission of Union County permits
Union County Land Use Permit – Land Use Decision (Utility Facility; Agriculture-Grazing Zone)	In Union County, portions of the Proposed Site Boundary Additions occur in the Agriculture-Grazing zone. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Union County Agriculture-Grazing Zone requirements.	GEN-LU-05 Submission of Union County permits
	 IPC addresses the Union County Agriculture-Grazing Zone requirements in more detail in Section 7.1.3 below. In relation to the Union County Agriculture-Grazing Zone requirements, IPC is not proposing any new conditions or changes to existing conditions. 	

Standard or Other Permit Union County Land Use Permit – Land Use Decision (Predominant Use Determination; Timber-Grazing Zone)	In Union County, portions of the Proposed Site Boundary Additions occur in the Timber-Grazing zone. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Union County Timber-Grazing Zone requirements. • IPC addresses the Union County Timber-Grazing Zone requirements in more detail in Section 7.1.3.3 below. • In relation to the Union County Timber-Grazing Zone requirements, IPC is not proposing any new conditions or changes to existing conditions.	Related Site Certificate Conditions GEN-LU-05 Submission of Union County permits
Union County Land Use Permit – Land Use Decision (Utility Facility; Timber-Grazing Zone, Predominantly Farmland Parcels)	 In Union County, portions of the Proposed Site Boundary Additions occur in the Timber-Grazing zone, predominantly farmland parcels. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Union County Timber-Grazing Zone, predominantly farmland, requirements. IPC addresses the Union County Timber-Grazing Zone, predominantly farmland, requirements in more detail in Section 7.1.3.3 below. In relation to the Union County Timber-Grazing Zone, predominantly farmland, requirements, IPC is not proposing any new conditions or changes to existing conditions. 	GEN-LU-05 Submission of Union County permits
Union County Land Use Permit – Conditional Use Permit (Utility Facility; Timber-Grazing Zone, Predominantly Forestland Parcels)	 In Union County, portions of the Proposed Site Boundary Additions occur in the Union County Timber-Grazing zone, predominantly forestland parcels. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Union County Timber-Grazing Zone, predominantly forestland, requirements. IPC addresses the Union County Timber-Grazing Zone, predominantly forestland, requirements in more detail in Section 7.1.3 below. In relation to the Union County Timber-Grazing Zone, predominantly forestland, requirements, IPC is not proposing any new conditions or changes to existing conditions. 	GEN-LU-05 Submission of Union County permits

Standard or Other Permit Union County Land Use Permit – Exception to Goal 4 (Transmission Line Right-of-Way Width; Timber-Grazing Zone, Predominantly Forestland Parcels)	In Union County, portions of the Proposed Site Boundary Additions occur in the Timber-Grazing zone and Goal 4 forest lands. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 support a Goal 4 exception, if the Council deems necessary. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, warrant a Goal 4 exception in the Union County Timber-Grazing Zone. • IPC addresses the Union County Timber-Grazing Zone Goal 4 exception requirements in more detail in Section 7.1.3 below. • In relation to the Union County Timber-Grazing Zone exception requirements, IPC is not proposing any new conditions or changes to existing conditions.	Related Site Certificate Conditions GEN-LU-05 Submission of Union County permits
Union County Land Use Permit – Conditional Use Permit (Access Roads; Timber-Grazing Zone, Predominantly Forestland Parcels)	 In Union County, portions of the access road Proposed Site Boundary Additions occur in the Union County Timber-Grazing zone, predominantly forestland parcels. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the access road proposed changes, subject to the related Site Certificate conditions, comply with the Union County Timber-Grazing Zone, predominantly forestland, requirements. IPC addresses the Union County Timber-Grazing Zone, predominantly forestland, requirements in more detail in Section 7.1.3 below. In relation to the Union County Timber-Grazing Zone, predominantly forestland, requirements, IPC is not proposing any new conditions or changes to existing conditions. 	GEN-LU-05 Submission of Union County permits
Baker County Land Use Permit – Land Use Decision (Utility Facility; EFU Zone)	 In Baker County, portions of the Proposed Site Boundary Additions occur in the Baker County EFU zone. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Baker County EFU Zone requirements. IPC addresses the Baker County EFU Zone requirements in more detail in Section 7.1.3 below. In relation to the Baker County EFU Zone requirements, IPC is not proposing any new conditions or changes to existing conditions. 	GEN-LU-07 Submission of Baker County permits
Baker County Land Use Permit – Conditional Use Permit (Rural Service Area Zone)	None of the Proposed Site Boundary Additions occur in the Baker County Rural Service Area zone.	GEN-LU-07 Submission of Baker County permits

Standard or Other Permit Baker County Land Use Permit – Land Use Decision (Utility Facility; EFU and ERU Zones)	In Baker County, portions of the Proposed Site Boundary Additions occur in the Baker County EFU-ERU zones. As discussed in Section 7.1.3 below, the proposed changes in RFA 1 will comply with the relevant county code provisions. Therefore, IPC has demonstrated with the information provided in this RFA 1 that the proposed changes, subject to the related Site Certificate conditions, comply with the Baker County EFU-ERU Zone requirements. • IPC addresses the Baker County EFU-ERU Zone requirements in more detail in Section 7.1.3 below. • In relation to the Baker County EFU-ERU Zone requirements, IPC is not proposing any new conditions or changes to existing conditions.	Related Site Certificate Conditions GEN-LU-07 Submission of Baker County permits
Baker County Land Use Permit – Conditional Use Permit (Helipads; EFU and ERU Zones)	None of the Proposed Site Boundary Additions involve helipads.	GEN-LU-07 Submission of Baker County permits
City of North Powder – Conditional Use Permit (Multi-Use Area; Commercial Interchange Zone)	None of the Proposed Site Boundary Additions occur in the City of North Powder.	NA
City of Huntington – Land Use Decision (Multi-Use Area; Commercial Industrial Zone)	None of the Proposed Site Boundary Additions occur in the City of North Huntington.	NA
City of Huntington – Land Use Decision/Temporary Use Permit (Multi-Use Area; Commercial Residential Zone)	None of the Proposed Site Boundary Additions occur in the City of North Huntington.	NA

7.1.1 Structural Standard - OAR 345-022-0020

7.1 Division 22 Standards Discussed in Detail

The Structural Standard generally requires the Council to evaluate whether the Certificate Holder has adequately characterized the potential seismic, geological, and soil hazards within the site boundary, and that the Certificate Holder can design, engineer, and construct the Project to avoid dangers to human safety from these hazards.

For the Proposed Site Boundary Additions, IPC employed the same methods used in the ASC to characterize the seismic risk of the site. As demonstrated in Figure 7-1, the Little Juniper Canyon Alternative (Map 1) and True Blue Gulch Alternative (Maps 2-4) will be constructed through mapped landslide features. Figure 7-2 characterizes the geological features associated with the Access Road Changes. IPC's engineers will review aerial imagery, and light detection and ranging (or LiDAR) data prior to final design and will use it to identify and assess landslide features, as possible. IPC's engineers will include the potential areas of soil instabilities in the site-specific geotechnical scope of work. Site-specific geotechnical design will consider the most recent version of the International Building Code (IBC 2018) to address the seismic hazards of the Proposed Site Boundary Additions, similar to the evaluation performed in Attachment H-1 of the Final Order.

Prior to the development of final engineering design, based on limited subsurface explorations liquefaction susceptibility will be evaluated at the geotechnical boring locations. Additional evaluation of liquefaction also may be needed as the final alignment and tower locations are chosen. The geotechnical engineer may recommend additional exploration and/or analysis as applicable to assess liquefaction hazards in the geotechnical design report for the transmission line. For locations where liquefaction poses a risk, an assessment of susceptibility may be made to determine if lateral spreading would be an additional hazard.

While seismic activity in the Project area generally could lead to the settling of sediment and exacerbate potential subsidence associated with groundwater withdrawal in more populous regions, no historical cases of subsidence in the specific areas of the Proposed Site Boundary Additions have been identified by IPC, and the majority of the sites have a low susceptibility to subsidence. At this time, there are no specific locations where subsidence studies will be performed. However, if subsidence-prone areas are identified during the Phase 2 geotechnical investigation, the transmission line will be designed and located to avoid subsidence hazards.

As noted above, the Certificate Holder has and will continue to condition compliance adequately to characterize the seismic, geological and soils hazards and can design, engineer, and construct the Proposed Site Boundary Additions to avoid dangers to human safety and the environment. Therefore, based on the information provided in this RFA 1 and the application of the relevant Site Certificate conditions, IPC has demonstrated that the Proposed Site Boundary Additions comply with the Structural Standard.

7.1.2 Soil Protection - OAR 345-022-0022

The Soil Protection Standard requires the Council to find that, after taking mitigation into account, the design, construction, and operation of a facility will not likely result in a significant adverse impact to soils. Exhibit I of the ASC identified the soil conditions and land uses in accordance with the submittal requirements in OAR 345-021-0010 (1)(I) paragraphs (A) through (E). The following applies a similar analysis to the Proposed Site Boundary Additions.

7.1.2.1 Background Review

IPC identified the properties of soils throughout the RFA 1 site boundary using literature-derived soil properties and land cover types. The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) maintains the State Soil Geographic Database (STATSGO; NRCS 2011), which presents general soil properties for the entire United States. STATSGO data are used to characterize soil erosion and soil reclamation properties.

The U.S. Geological Survey (USGS) maintains the National Elevation Dataset (NED) with nationwide coverage of detailed elevation information compiled from multiple sources. The NED data were used for the slope analysis presented in this RFA 1.

7.1.2.2 Surveys

Site-specific geotechnical investigations are ongoing for all of the Proposed Site Boundary Additions and are not used to inform the analysis in RFA 1. Detailed information relating to the scope of the geotechnical investigation is available in Attachment H-1 of the Final Order. The investigation includes drilling of exploration borings and collection of soil samples for laboratory analysis of soil properties.

7.1.2.3 Findings

Figure 7-3 and Figure 7-4 are mapbooks of the STATSGO soil mapping units contained within the proposed site boundary changes. Attachment 7-1 is a table displaying the STATSGO soil properties by soil mapping units contained within the Proposed Site Boundary Additions. Table 7.1-1 summarizes the STATSGO data at the highest soil taxonomic level, soil order.

Table 7.1-1. Soil Orders within the Site Boundary of RFA 1

	Soil Order (acres)						
County	Aridisols	Mollisols	Andisols	Entisols			
Morrow	36.7	103.8	_	_			
Umatilla	_	71.3	_	_			
Union	_	36.7	_	_			
Baker	1	597.8	_	50.5			
Malheur	72.6	66.5	_	_			
RFA 1 Total	109.4	876.1	_	50.5			

Source: STATSGO

Current land uses that may require or depend on productive soils were evaluated by identifying high value farmland soils data and land cover type data. High value farmland soils data are shown in Table 7.1-2 to identify lands that may include current land uses that require or depend on productive soils within the Proposed Site Boundary Additions. The high value farmland soils data do not provide a qualitative description of actual current land use but may be representative of current agricultural land uses within the proposed site boundary changes. For purposes of this analysis, IPC assumes that high value farmland soils are actively used for agricultural purposes and depend on the presence of productive soils. Similarly, IPC assumes that land cover types identified as agriculture (cultivated crops and pasture/hay) and forest/woodland also require productive soils. For estimates on the amount of the Proposed Site

Boundary Additions in agriculture and forest/woodland, see the habitat mapping performed in Section 7.1.5.

Table 7.1-2. High Value Farmland Soils within Site Boundary of RFA 1

County	Site Boundary (acres)	High Value Farmland Soils (acres) ¹
Morrow	140.6	73.8
Umatilla	71.3	59.4
Union	36.7	20.7
Baker	648.3	479.1
Malheur	139.1	7.9
RFA 1 Total	1,036.0	640.9

¹ Source: SSURGO data.

Impacts on soils from Project activities are discussed in the ASC in regard to how the Project may contribute to soil erosion, loss of reclamation potential, and the potential for chemical spills. RFA 1 does not describe these potential soil impacts but does identify the RFA 1 soil properties that indicate susceptibility to erosion and loss of reclamation potential. Impacts resulting from chemical spills will be mitigated per the Spill Prevention, Control, and Countermeasures Plan as required under condition GEN-SP-02.

Soil erosion factors are defined in Exhibit I of the ASC and include: soil K factor, wind erodibility, slope, and soil T factor. Table 7.1-3 shows the soil erosion factors for RFA 1 construction areas. Construction areas are inclusive of temporarily disturbed areas that will be reclaimed and areas that will maintain a permanent facility through operation of the Project.

Table 7.1-3. Erosion Factors in RFA 1 Construction Disturbance Area

	Construction Disturbance	Highly Wind Erodible ^{1,2}		Hi K Fac		Gre	ope ater 25% ⁵		ow ctor ^{1,4}
County	Area (acres)	Acres	%	Acres	%	Acres	%	Acres	%
Morrow	23.8	6.0	25.4%	20.2	84.7%	-	_	3.6	15.3%
Umatilla	11.1	_	_	11.1	100%	_	_	6.6	59.3%
Union	6.5	_	_	3.6	55.2%	_	_	2.6	40.2%
Baker	120.6	_	_	74.5	61.8%	25.6	21.2%	105.2	87.2%
Malheur	25.2	2.5	9.9%	5.8	23.0%	1.2	4.6%	21.6	85.4%
RFA 1 Total	187.2	8.6	4.6%	115.1	61.5%	26.8	14.3%	139.5	74.5%

¹Source: STATSGO data.

Soil reclamation factors are defined in Exhibit I of the ASC and include: soil compaction, stonyrocky soils, droughty soil, shallow bedrock, and hydric soils. Table 7.1-4 identifies the soil reclamation factors of soils in the Proposed Site Boundary Additions construction areas. The NRCS STATSGO soil properties were reviewed within the Proposed Site Boundary Additions. No soil was detected with the combination of fine grain size, and poor drainage characteristics that would result in classification as highly compactible. Therefore, no areas within the

²Highly wind erodible include STATSGO wind erodibility classes 1 through 4 (wind erosion greater than or equal to 86 tons per acre per year.

³High K factor defined as K factor greater than or equal to 0.37.

⁴Lot T factor defined as T factor less than or equal to 2 tons per acre per year.

⁵ Source: USGS National Elevation Dataset database.

construction disturbance area were identified as needing special considerations for soil compaction.

Table 7.1-4. Soil Reclamation Factors in RFA 1 Construction Disturbance Area

	Construction Disturbance	Stony/Rocky ^{1,2}		Droughty ^{1,3}		Shallow Bedrock ^{1,4}		Hydric Soil⁵	
County	Area (acres)	Acres	%	Acres	%	Acres	%	Acres	%
Morrow	23.8	3.6	15.3%	9.7	40.7%	17.6	74.0%	23.8	100%
Umatilla	11.1	4.5	40.7%	4.5	40.7%	11.1	100%	11.1	100%
Union	6.5	6.0	91.9%	6.0	91.9%	6.0	91.9%	3.1	48.3%
Baker	120.6	120.0	99.5%	120.0	99.5%	105.2	87.2%	120.6	100%
Malheur	25.2	17.5	69.4%	12.8	50.9%	16.6	65.8%	0.6	2.4%
RFA 1 Total	187.2	151.7	81.0%	153.0	81.7%	156.5	83.6%	159.2	52.5%

¹Source: STATSGO data.

Note: SSURGO and STATSGO databases did not contain any highly compactable soil within analysis area; therefore, highly compactable soil is not shown on this table.

7.1.2.4 Conclusion

The Proposed Site Boundary Additions occur in soil conditions that were previously characterized and evaluated in the ASC and do not affect the basis for the Council's previous findings of compliance with the Soil Protection Standard. Changes proposed in RFA 1 would adhere to all soil protection conditions identified in the Site Certificate, including: compliance with the NPDES 1200-C permit and Erosion and Sediment Control Plan (GEN-SP-01); development of a final Spill Prevention Control and Countermeasures Plan (GEN-SP-02 and GEN-SP-03); development of a final Blasting Plan (GEN-SP-04); and regular inspection of the as-built facility components for ongoing soil impacts (OPR-SP-01). Therefore, the Council may conclude that the Proposed Site Boundary Additions comply with the Soil Protection Standard.

7.1.3 Land Use – OAR 345-022-0030

Under OAR 345-021-0010(1)(k), an applicant must elect to address the Council's Land Use standard by obtaining local land use approvals directly from the relevant local governments under Oregon Revised Statutes (ORS) 469.504(1)(a), or by obtaining a Council determination under ORS 469.504(1)(b). In the ASC, IPC elected to have the Council make the land use determination for the Project under ORS 469.504(1)(b) and OAR 345-022-0030(2)(b). The ASC identified applicable substantive criteria from the following local governments: Morrow County, Umatilla County, Union County, Baker County, Malheur County, City of North Powder, and City of Huntington. The analysis area for potential land use impacts, as defined in the ASC, is the area within and extending half-mile from the site boundary. An assessment of applicable substantive criteria for RFA 1 follows with subsections 7.1.3.1 through 7.1.3.13 below.

² Stony rocky soil is defined as soil with at least 20 percent of soil particles with size greater than 2 mm.

³ Droughty soils are defined as soil with sandy loam or coarser texture, and drainage class of moderately to excessively well-drained.

⁴Shallow bedrock is defined as bedrock occurring within 51 inches of ground surface.

⁵ Source for hydric soil is SSURGO database and Oregon Wetland Database from the Oregon Spatial Data Library (2013).

Idaho Power Company

7.1.3.1 Morrow County Applicable Substantive Criteria and Comprehensive Plan

Section 5.2.3 details the proposed changes in Morrow County. The Council previously found that the Project would be consistent with applicable criteria of the MCZO and MCCP.4 There have been no substantive modifications to the Morrow County Zoning Ordinance (MCZO; Morrow County 2017) or to the Morrow County Comprehensive Plan (MCCP; Morrow County 1986) since the Certificate Holder submitted the ASC on September 28, 2018. Specifically, the Certificate Holder has reviewed and confirmed there have been no changes to the Agricultural, Natural Hazards, Utility Finding, and Goal 5 Resources policies of the Morrow County Comprehensive Plan that were addressed in the Council's Final Order on the ASC. Since September 28, 2018, Morrow County has amended the listing of proposed aggregate sites on the Morrow County Inventory of Natural Resources - Aggregate and Mineral Resources. None of the new mineral aggregate resources identified in the Significant Resource Overlay Map occur within the site boundary or within 0.5 mile of the area subject to RFA 1. As such, Morrow County's Inventory of Natural Resources has not changed in ways that would impact the Council's prior findings under the land use standard.

The proposed changes do not affect the findings provided in the Final Order and summarized in Table 7.1-5.

Table 7.1-5. Morrow County Applicable Substantive Criteria

Section/Subsection	Name	Proposed Changes						
Morrow County Zonir	Morrow County Zoning Ordinance (MCZO)							
Article 3 – Use Zones								
Section 3.010	Exclusive Farm Use (EFU) Zone	Applicable and complies. Portions of the Proposed Site Boundary Addition in Morrow County will occur within the EFU zone. Transmission lines that are necessary for public service are permitted in EFU lands under MCZO Section 3.010(D)(10), provided the towers are no greater than 200 feet in height. The proposed changes in RFA 1 are part of a transmission line project necessary for public service and do not include towers greater than 200 feet. Accessory uses are also permitted in EFU lands. MCZO 1.030 defines "accessory use" as "a use incidental and subordinate to the main use of the property and located on the same lot as the main use." Because the access roads will serve the transmission lines and will be located on the same lot as the transmission lines, the access roads are considered an accessory use to the transmission lines. Therefore, the portions of the Proposed Site Boundary Addition occurring in the EFU Zone are permitted outright under MCZO 3.010(D)(10).						

⁴ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 162-163 (September 2022)

Section/Subsection	Name	Proposed Changes
Subsection D	Use Standards	Applicable and complies.
		MCZO 3.010(D)(10) identifies utility
		facilities "necessary" for public service as a
		conditional use permitted on EFU zone
		land, subject to MCZO Article 6 Conditional
		Uses. The Council concluded the
		transmission line and associated access
		roads, modified existing roads, multi-use
		areas, temporary pulling and tensioning
		sites, and communication stations in the
		EFU zone are considered under the "utility
		facility necessary for public service" land
		use category. The Council previously
		found that the conditional use
		requirements beyond those that are
		consistent with ORS 215.275 are not
		applicable to proposed and alternative
		facility components because, as a utility
		facility necessary for public service under
		ORS 215.283(1)(c), the use is permitted
		subject only to the requirements of
		ORS 215.275 and the county cannot
		impose additional approval criteria.
		Therefore, the conditional use
		requirements of MCZO Article 6
		Conditional Uses and are not evaluated as
		applicable substantive criteria. The
		Council's previous determination that the
		ASC complies with Section 3.010(D) and
Section 3.070	Canaval Industrial (M.C.)	ORS 215.275 is applicable to RFA 1.
Section 3.070	General Industrial (M-G) Zone	Not applicable. The ASC included a
	Zone	portion of the transmission line and
		accessory uses within the M-G zone. The
		Proposed Site Boundary Additions are not within the M-G zone, so these standards
		do not affect RFA 1.
Subsection A	Uses Permitted Outright	Not applicable. The ASC included a
Subsection A	Oses i emilited Odingiit	portion of the transmission line and
		accessory uses within the M-G zone. The
		Proposed Site Boundary Additions are not
		within the M-G zone, so these standards
		do not affect RFA 1.
Subsection C	Use Limitations	Not applicable. The ASC included a
		portion of the transmission line and
		accessory uses within the M-G zone. The
		Proposed Site Boundary Additions are not
		within the M-G zone, so these standards
		do not affect RFA 1.
	l .	do not direct to 7. 1.

Section/Subsection	Name	Proposed Changes
Subsection D	Dimension	Not applicable. The ASC included a
	Requirements	portion of the transmission line and
		accessory uses within the M-G zone. The
		Proposed Site Boundary Additions are not
		within the M-G zone, so these standards
		do not affect RFA 1.
Subsection E	Transportation Impacts	Not applicable. The ASC included a
		portion of the transmission line and
		accessory uses within the M-G zone. The
		Proposed Site Boundary Additions are not
		within the M-G zone, so these standards
		do not affect RFA 1.
Section 3.073	Port Industrial (PI) Zone	Not applicable. The ASC included a
		portion of the transmission line and
		accessory uses within the PI zone. The
		Proposed Site Boundary Additions are not
		within the PI zone, so these standards do
		not affect RFA 1.
Subsection A	Uses Permitted Outright	Not applicable. The ASC included a
		portion of the transmission line and
		accessory uses within the PI zone. The
		Proposed Site Boundary Additions are not
		within the PI zone, so these standards do
		not affect RFA 1.
Subsection C	Use Limitations	Not applicable. The ASC included a
		portion of the transmission line and
		accessory uses within the PI zone. The
		Proposed Site Boundary Additions are not
		within the PI zone, so these standards do
		not affect RFA 1.
Subsection D	Dimensional Standards	Not applicable. The ASC included a
		portion of the transmission line and
		accessory uses within the PI zone. The
		Proposed Site Boundary Additions are not
		within the PI zone, so these standards do
	-	not affect RFA 1.
Subsection F	Transportation Impacts	Not applicable. The ASC included a
		portion of the transmission line and
		accessory uses within the PI zone. The
		Proposed Site Boundary Additions are not
		within the PI zone, so these standards do
Section 2 100	Flood Plain Overlay	not affect RFA 1.
Section 3.100	Flood Plain Overlay	Applicable and complies. Portions of the
	Zone	Proposed Site Boundary Additions fall
		within the 100-year flood plain along Little
		Juniper Creek, which is classified as a
		Special Flood Hazard Area (SFHA) in the
		Flood Plain Overlay Zone. MCZO
		Section 3.100(4.1-1) establishes that a

Section/Subsection	Name	Proposed Changes
		flood plain development permit is required for construction activities within a SFHA. GEN-LU-O1 requires the Certificate Holder to obtain, prior to construction of any phase or segment of the Project, a Flood Plain Development Permit for work in the Flood Plain Overlay zone. GEN-LU-O2 restricts structure placement within the SFHA, or requires adherence to MCZO requirements for anchoring and construction materials and methods. Because Site Certificate Conditions GEN-LU-O1 and GEN-LU-O2 will apply to the Proposed Site Boundary Additions and IPC will obtain a Flood Plain Development for the relevant portions of the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with Section 3.100.
Section 4.1-1	Development Permit	Applicable and complies. The Proposed Site Boundary Additions fall within the 100-year flood plain along Little Juniper Creek, which is classified as a SFHA in the Flood Plain Overlay Zone. GEN-LU-O1 requires the Certificate Holder to obtain, prior to construction of any phase or segment of the Project, a Flood Plain Development Permit for work in the Flood Plain Overlay zone. Because Site Certificate Conditions GEN-LU-O1 and GEN-LU-O2 will apply to the Proposed Site Boundary Additions and IPC will obtain a Flood Plain Development for the relevant portions of the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with Section 4.1-1.
Section 5.1-1	Anchoring	Applicable and complies. The Proposed Site Boundary Additions fall within the 100-year flood plain along Little Juniper Creek, which is classified as a SFHA. GEN-LU-O2 restricts structure placement within the SFHA, or requires adherence to MCZO requirements for anchoring and construction materials and methods. Because Site Certificate Condition GEN-LU-O2 will apply to the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with Section 5.1-1.

Section/Subsection	Name	Proposed Changes
Section 5.1-2	Construction Materials and Methods	Applicable and complies. The Proposed Site Boundary Additions fall within the 100-year flood plain along Little Juniper Creek, which classifies as SFHA. GEN-LU-O2 restricts structure placement within the SFHA, or requires adherence to MCZO requirements for anchoring and construction materials and methods. Because Site Certificate Condition GEN-LU-O2 will apply to the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with Section 5.1-2.
Section 3.200	Significant Resource (Goal 5) Sites	Applicable and complies. Morrow County established a Significant Resource Overlay Map identifying the location of designated Goal 5 resources. The County indicated in the original ASC that only those resources depicted on the 1986 Significant Resource Overlay Map were considered Goal 5 designated resources in Morrow County. On December 7, 2015, the County provided to IPC Geographic Information System data identifying the location of the Goal 5 designated resources in Morrow County under the 1986 Significant Resource Overlay Map and the MCCP. Figure K-22 of the original ASC depicts the 1986 Significant Resource Overlay Map information provided by Morrow County and shows the upper reach of Juniper Canyon, but not Little Juniper Canyon. There are no Goal 5 resources, as identified in the 1986 map, within the analysis area for RFA 1. Therefore, the Proposed Site Boundary Additions will comply with the County's Goal 5 standards in Section 3.200.
Section D	Review Criteria	Not applicable. There are no Goal 5 resources identified within the analysis area for RFA 1, so these standards do not affect RFA 1.
Section E	List of Conflicting Uses and Activities	Not applicable. There are no Goal 5 resources identified within the analysis area for RFA 1, so these standards do not affect RFA 1.

Section/Subsection	Effect of Proposed Change		
Morrow County Com	Morrow County Comprehensive Plan		
Agricultural Policy 1	The Proposed Site Boundary Additions do not affect consistency with Agricultural Policy 1. GEN-LU-11 requires the Certificate Holder to finalize, prior to construction, an Agricultural Land Assessment and Mitigation Plan, which implements mitigation measures and monitoring during construction. Therefore, the Council's previous findings, analysis, and conclusions that the Project would be consistent with MCCP Agricultural Policy 1 are equally applicable to RFA 1.		
Natural Hazards Element	The Proposed Site Boundary Additions do not affect consistency with the Natural Hazards Element. As described under Section 3.100, GEN-LU-O1 requires the Certificate Holder to obtain, prior to construction of any phase or segment of the Project, a Flood Plain Development Permit for work in the Flood Plain Overlay zone. GEN-LU-O2 restricts structure placement within the SFHA, or requires adherence to MCZO requirements for anchoring and construction materials and methods. Therefore, the Council's previous findings, analysis, and conclusions that the Project would be consistent with the MCCP Natural Hazards Element are equally applicable to RFA 1.		
Utility Finding C; Policy C	The Proposed Site Boundary Additions do not affect consistency with Utility Finding C; Policy C. The proposed site boundary changes do not impact the selection of the Longhorn Station site. Therefore, the Council's previous findings, analysis, and conclusions that the Project would be consistent with MCCP Utility Finding C; Policy C are equally applicable to RFA 1.		
Goal 5 Resources	There are no new Goal 5 resources identified within the analysis area for RFA 1. The Council may find that no additional analysis is required to comply with the County's Goal 5 standards in Section 3.200(E) and the MCCP.		

7.1.3.2 Umatilla County Applicable Substantive Criteria and Comprehensive Plan

Section 5.2.4 details the portions of the Proposed Site Boundary Addition in Umatilla County. The Council previously concluded that the Project, including access roads, complied with the applicable substantive criteria of Umatilla County's comprehensive plan and development code. There have been no substantive modifications to the Umatilla County Development Ordinance (UCDO; Umatilla County 2022) or to the Umatilla County Comprehensive Plan (UCCP; Umatilla County 2022) since the Certificate Holder submitted the ASC on September 28, 2018. Specifically, the Certificate Holder has reviewed and confirmed there have been no changes to the Open Space, Scenic and Historic Areas, and Natural Resources and Public Facilities and Services Elements of the Umatilla County Comprehensive Plan that were identified in the Final Order for the ASC. Since September 28, 2018, Umatilla County has amended the previously reviewed Transportation Element. However, the change is not substantive (as described in Section 7.1.3.8). In addition, the UCDO has been updated in 2022, but the updates did not change or alter the criteria evaluated with the ASC.

⁵ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 168-186 (September 2022)

⁶ Boardman to Hemingway Transmission Line Application for Site Certificate - Proposed Order, p. 184-185 (September 2022)

Idaho Power Company

Table 7.1-6. Umatilla County Applicable Substantive Criteria

Section/Subsection	Name	Effect of Proposed Change
Umatilla County Develo	opment Code (UCDC)	
Exclusive Farm Use (E.	FU) Zone	
Section 152.059	Land Use Decisions	Applicable and complies. Portions of the Proposed Site Boundary Additions in Umatilla County will occur within the EFU zone. UCDC 152.059(C) establishes that utility facilities necessary for public service may be permitted in the EFU zone through a zoning permit under UCDC 152.025. The Council previously concluded the associated access roads, modified existing roads, multi-use areas, and communication stations in the EFU zone are considered under the "utility facility necessary for public service" land use category. Therefore, the portions of the Proposed Site Boundary Additions occurring within the County's EFU zone are permitting under Section 152.059.
Grazing Farm (GF) Zon		
Section 152.085	Permitted	Applicable and complies. Portions of the Proposed Site Boundary Additions in Umatilla County will occur within the GF zone. UCDC 152.085(R) identifies new utility facilities for public service, defined in UCDC 152.617(1)(C) as commercial utility facilities for the purpose of generating and distributing power for public use by sale, as a conditional use permitted on GF zoned land. The Council previously concluded that UCDC 152.085(R) does not apply to facility components located in GF land because it applies to commercial utility facilities for the purpose of generating and distributing power and is therefore not applicable to the non-energy generating facility (or specific non-generating facility components) in the GF zone. Therefore, the portions of the Proposed Site Boundary Additions occurring within the County's Grazing Farm zone are permitted under Section 152.085.
Light Industrial (LI) Zor		
Section 152.303	Conditional Uses Permitted	Not applicable. The ASC included one temporary multi-use area within Umatilla County's LI zone. The Proposed Site Boundary Additions are not within the LI

Section/Subsection	Name	Effect of Proposed Change
		zone, so these standards do not affect RFA 1.
Section 152.304	Limitations on Use	Not applicable. The Proposed Site Boundary Additions are not within the LI zone, so these standards do not affect RFA 1.
Section 152.306	Dimensional Standards	Not applicable. The Proposed Site Boundary Additions are not within the LI zone, so these standards do not affect RFA 1.
Rural Tourist Commerc	cial (RTC) Zone	
Section 152.283	Conditional Uses Permitted	Not applicable. The ASC included a portion of a temporary multi-use area within Umatilla County's RTC zone. The Proposed Site Boundary Additions are not within the RTC zone, so these standards do not affect RFA 1.
Section 152.284	Limitations on Use	Not applicable. The Proposed Site Boundary Additions are not within the RTC zone and do not impact the temporary multi-use area.
Section 152.286	Dimensional Standards; Setbacks	Not applicable. The Proposed Site Boundary Additions are not within the RTC zone and do not impact the temporary multi-use area.
General Provisions		
Section 152.010	Access to Buildings	Applicable and complies. UCDC 152.010 establishes general provisions for site and building access that is applicable to the temporary multiuse areas and communications stations in all zones. GEN-LU-04 dictates the terms necessary to comply with the UCDC 152.010 requirements. Because Site Certificate Condition GEN-LU-04 will apply to the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with UCDC 152.010.
Section 152.016	Riparian Vegetation	Applicable and complies. UCDC 152.016 establishes standards for permitted uses in all zones that result in maintenance, removal and replacement of riparian vegetation along streams, lakes and wetlands. The Council's previous determination that the ASC complies with Section 152.016 is applicable to RFA 1. GEN-LU-04 will ensure compliance with UCDC 152.016

Section/Subsection	Name	Effect of Proposed Change
0 11 150 017		requirements. Because Site Certificate Condition GEN-LU-04 will apply to the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with UCDC 152.016.
Section 152.017	Conditions for Development Proposals	Applicable and complies. UCDC 152.016 requires that a permitted uses in all zones not impose a significant change in trip generation within the local transportation system. The trip durations associated with the Proposed Site Boundary Additions are similar to those considered by the Council in the Final Order and are not likely to generate a significant increase in trip generation. The Council's previous determination that the ASC complies with Section 152.017 is applicable to RFA 1. PRE-PS-02 will ensure compliance with UCDC 152.017 requirements. Because the Proposed Site Boundary Additions will not generate significant increase in trip generation and Site Certificate Condition PRE-PS-02 will apply to the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with UCDC 152.017.
Section 152.439	Historical, Archeological or Cultural Site/Structure Overlay; Criteria for Review	establishes requirements for proposed uses in the Historical, Archeological or Cultural (HAC) Site/Structure Overlay zone. The Certificate Holder maintains the HAC Overlay zone is over 25 miles from the proposed site boundary and therefore does not apply to the proposed Project site. As detailed in this RFA 1 under Section 7.1.8, new surveys have occurred to determine the proposed amendment makes no changes that will alter the basis for the Council's earlier findings, or its conclusion that the Project will not likely result in an adverse impact to any historical, cultural and archaeological resources in the Analysis Area, and therefore the amendment request meets the requirement of the Historical, Cultural and Archaeological Resources Standard.

Section/Subsection	Name	Effect of Proposed Change
Section 152.456	Critical Winter Range	Not applicable. UCDC 152.458
	Overlay; Applicability	establishes requirements for specific uses in the Critical Winter Range (CWR) Overlay zone that would result in eventual placement of a dwelling, and administrative review of non-resource dwellings. The ASC demonstrated that UCDC 152.458 standards apply to dwellings, and because the Project does not include any dwellings, UCDC 152.458 does not apply to the Project.
		Even so, potential impacts to elk and deer winter range were evaluated under the Council's Fish and Wildlife Habitat standard. Section 7.1.5 of this RFA 1 evaluates potential impacts to elk and deer winter range and proposes mitigation that meet that standard.
Goal 5	Technical Report D-63	Applicable and complies. The Proposed Site Boundary Additions cross into medium density archaeological and McKay Creek waterfowl/furbearer Goal 5 resource areas that were previously identified with the original ASC. There are no new Goal 5 resources identified within the analysis area for RFA 1. The Certificate Holder stated in the original ASC that Umatilla County has not adopted any Goal 5 protection program for furbearers and hunted non-game wildlife, or Goal 5 fish streams. Nevertheless, impacts to streams and riparian vegetation would be minimized as evaluated under UCDC 152.286 and 152.306 and imposed under Condition GEN-LU-04, which requires a 100-foot setback from structures to the high water mark of any stream, lake or wetland;
		minimization of cleared vegetation; and, restoration and monitoring. ⁷ As evaluated in the Final Order, UCDC 152.435 through 152.443 are the only applicable provisions to HAC sites within the HAC Site/Structure Overlay Zone

⁷ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 184 (September 2022)

Section/Subsection	Name	Effect of Proposed Change
- Cotton Cubocotton	Tunio .	UCDC. UCDC 152.436 defines an HAC
		site as "any historic, archeological or
		cultural site or structure, or geographic
		area listed on the Umatilla County
		Register of Historic Landmarks or
		recognized as significant by the County
		Comprehensive Plan and Technical
		Report." Umatilla County has not
		identified any specific HAC sites or
		structures included in the Goal 5
		inventory within the analysis area. A
		complete assessment of protected areas,
		scenic resources, and historical
		resources follows below in Sections
		7.1.4, 7.1.7, and 7.1.8. Because Umatilla County has not adopted specific
		provisions for Goal 5 HAC sites, the
		Council found no additional analysis is
		required to comply with the County's Goal
		5 planning goals for historic resources.8
		p p m m m g g c m c c c m c c c m c c c m c c c m
		Therefore, the Council may find that no
		additional analysis is required to comply
		with the County's Goal 5 planning goals.
Umatilla County Comp		
Open Space, Scenic		ary Additions do not affect consistency
and Historic Areas, and		and Historic Areas, and Natural Resources
Natural Resources	Element - Finding 37; Policy 37. The Project would predominately be	
Element - Finding 37;		nd within Umatilla County which, based on
Policy 37		ered open space appropriate for energy
	facility use. The Council's previous determination that the Project would not significantly impact accepted farm practices remains	
		mplete assessment of protected areas,
		torical resources follows below in Sections
	7.1.4, 7.1.7, and 7.1.8.	torical resources follows below in ecotions
Public Facilities and		ary Additions do not affect consistency
Services Element -		Services Element - Finding 19; Policy 19.
Finding 19; Policy 19	Minimum separation distances for high-voltage transmission lines, as	
	established by the North American Electric Reliability Corporation	
	(NERC) and Western Electricity Coordinating Council (WECC),	
		Council's previous determination that the
	-	of using existing right-of-ways remains
	applicable to RFA 1.	

 $^{^{8}}$ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 184 (September 2022)

Section/Subsection	Name	Effect of Proposed Change
Transportation Element	The Proposed Site Boundary Additions do not affect consistency	
- Finding 20; Policy 20	with Transportation Element - Finding 20; Policy 20. Minimum	
	separation distances for high voltage transmission lines, as	
	established by NERC and WECC, remain a constraint. The	
	Certificate Holder worked extensively with local landowners in the	
	siting process and Umatilla County maintains the opportunity to	
	review recommendations consistent with the Transportation Element	
	Finding 20 and Policy 20.	·

7.1.3.3 Union County Applicable Substantive Criteria and Comprehensive Plan

Section 5.2.5 details the proposed changes in Union County (Figure 4-1, Maps 12 to 17). The Council previously concluded that the Project transmission line, including access roads, complied with the applicable substantive criteria of Union County's development ordinance. There have been no substantive modifications to the Union County Zoning, Partition, and Subdivision Ordinance (UCZPSO; Union County 2015) since the Certificate Holder submitted the ASC on September 28, 2018. The Certificate Holder identified slight differences (detailed below in Table 7.1-7) in criteria references when comparing the ASC and Final Order with UCZPSO available on the County website. However, the differences are not substantive, and the criteria evaluated with the ASC remains consistent with existing applicable criteria in the UCZPSO. As such, an analysis of the updated applicable criteria follows in Section 7.1.3.9.

Table 7.1-7. Union County Applicable Substantive Criteria

Section/Subsection	Name	Effect of Proposed Change
Union County Zoning, Partition, and Subdivision Ordinance (UCZPSO)		
Exclusive Farm Use(A-	1) Zone	
Section 2.03	Administrative Uses	Not applicable. Portions of the Proposed Site Boundary Additions occur within Union County's EFU A-1 zone. The Final Order listed utility facilities necessary for public service as an administrative use in the A-2 zone; however, the UCZPSO states in Article 2.04(11) that utility facilities necessary for public service are conditional uses with general review criteria. Compliance with the applicable conditional use standards of Article 2.04(11) is detailed under Section 7.1.3.9.
Agricultural-Grazing (A	-2) Zone	
Section 3.03	Administrative Uses	Not applicable. Portions of the Proposed Site Boundary Additions occur within the County's A-2 zone. The Final Order listed utility facilities necessary for public service as an administrative use in the A-2 zone, however the UCZPSO states in Article 3.04(11) that utility facilities necessary for

⁹ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 191-211 (September 2022)

Section/Subsection	Name	Effect of Proposed Change
		public service are conditional uses with general review criteria. The Council previously found the Project is a utility facility necessary for public service that would be a permitted use in the A-2 zone. As such, an analysis of the updated applicable criteria follows in Section 7.1.3.9.
Section 3.04	Conditional Uses	Applicable and complies. Article 2.04(11) and 3.04(11) state that utility facilities necessary for public service are conditional uses with general review criteria. As such, an analysis of the updated applicable criteria follows in Section 7.1.3.9.
Section 3.05	Use Standards	Applicable and complies. The use standards for a utility facility necessary for public service is listed under UCZPSO Section 3.05(15), as analyzed in Section 7.1.3.9
Section 3.07	Development Standards	Applicable and complies. The Final Order referenced UCZPSO Section 3.07 for development standards, but Section 3.07 speaks to dwellings associated with farm use. The current UCZPSO establishes development standards for uses permitted in the A-2 zone in Section 3.17. The numbering has changed, but the criteria is identical (see comparison in Section 7.1.3.8). No partitions are proposed subject to Section 3.17(1). The Council's previous determination that the ASC complies with Section 3.07 is applicable to RFA 1. GEN-LU-06 ensures compliance with setback requirements outlined in Section 3.17(2) and signage siting requirements outlined in Section 3.17(4). Therefore, the Council may rely on its previous findings and conditions, and the Project, as amended by RFA 1, will continue to comply with these standards.
Section 3.08	Development and Fire Siting Standards	Not applicable. There are no Development and Fire Siting Standards in Article 3.00 and Section 3.08 speaks to accessory farm dwellings. Development and Fire Siting Standards are listed in UCZPSO Section 5.08, which identifies fire siting standards for structures including requirements for placement of signs, specifying the location and size.

Section/Subsection	Name	Effect of Proposed Change
		GEN-LU-06 ensures compliance with these
		standards by requiring submission of Union
		County permits in accordance with UCZPSO
		Sections 3.08 and 5.08. Since there is no
		reference to signage in Section 3.08, the
		Certificate Holder assumes the Council
		intended to refer to the development
		standards of Section 3.17.
	Zone	
Section 5.03	Administrative Uses	Not applicable. Portions of the Proposed
		Site Boundary Additions will occur within the
		County's A-4 zone. However, the ASC listed
		utility facilities necessary for public service
		as an administrative use in the A-4 zone;
		however, the UCZPSO states in Article
		5.04(21) that new electric transmission lines
		with right-of-way widths up to 100 feet, as
		specified in ORS 772.210, are conditional
		uses with general review criteria. As such,
		an analysis of the updated applicable criteria
Section 5.04	Drodominantly	follows in Section 7.1.3.9.
Section 5.04	Predominantly Forestland	Applicable and complies. Article 5.04(21) states that new electric transmission lines
	Conditional Uses	with right-of-way widths up to 100 feet are
	Conditional Oses	conditional uses with general review criteria.
		This definition applies the Project. An
		analysis of the updated applicable criteria
		follows in Section 7.1.3.9.
Section 5.06	Minimum Parcel	Not applicable. The updated UCZPSO
3000011 0.00	Sizes	details minimum parcel sizes in Article 5.10.
	01203	The minimum parcel sizes remain
		unchanged; however, no partitions are
		proposed. The parcels to be used for siting
		of the proposed and alternative facility
		components within A-4 zoned land would not
		likely involve partitioning, however if partition
		is necessary, the Certificate Holder would
		work directly with Union County to obtain
		approval according to minimum parcel size
		standards.
Section 5.07	Siting Standards for	Not applicable. The Council previously
	Dwellings and	found that no additional limitations are
	Structures	warranted since the communication stations
		have been sited in a way to minimize any
		unnecessary cumulative impacts. The
		Proposed Site Boundary Additions do not
		involve communication stations or other
		structures, and therefore Section 5.07 does

Section/Subsection	Name	Effect of Proposed Change
		not apply to the Proposed Site Boundary Additions.
Section 5.08	Development and Fire Siting Standards	Applicable and complies. The applicable Development and Fire Siting Standards are listed in UCZPSO Section 5.08, which identifies fire siting standards for structures including requirements for placement of signs, specifying the location and size. These standards have not changed and the Council's previous determination that the ASC complies with Section 5.08 is applicable to RFA 1. GEN-LU-06 ensures compliance with these standards by requiring submission of Union County permits in accordance with UCZPSO Section 5.08. Because Site Certificate Condition GEN-LU-06 will apply to the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with UCZPSO 5.08.
Section 21.06	General Standards for Governing Conditional Uses	Applicable and complies. UCZPSO 21.06 applies to all conditional uses in Union County. These standards have not changed since the ASC was submitted. UCZPSO 21.06(1) requires that conditional uses meet the development standards relevant to uses permitted outright in the zone, including UCZPSO 5.06 (Minimum Parcel Size), UCZPSO 5.07 (Siting Standards for Dwellings and Structures), and UCZPSO 5.08 (Development and Fire Siting Standards), which would be satisfied based on applicant representations and compliance with GEN-LU-06. Because Site Certificate Condition GEN-LU-06 will apply to the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with UCZPSO 21.06.
Supplementary Provisi	ons	
Section 20.08	Riparian Zone Setbacks	Applicable and complies. The Proposed Site Boundary Additions do not change conditions that would alter the Council's previous determination that the ASC complies Section 20.08. These standards have not changed since the ASC was submitted. The Council imposed GEN-LU-06 to ensure the locations the Project will cross or be near Class I streams complies with the riparian area setback requirements of

Section/Subsection	Name	Effect of Proposed Change
		UCZPSO 20.08. Because Site Certificate Condition GEN-LU-06 will apply to the Proposed Site Boundary Additions, the Proposed Site Boundary Additions will comply with UCZPSO 20.08.
Section 20.09	Significant Goal 5 Resource Areas	Applicable and complies. The proposed site boundary changes cross into Big Game Winter Range Goal 5 resource areas that were previously identified with the original ASC. Union County indicated that its mapping is intended to be over-inclusive of possible habitat areas. 10 The standards of Section 20.09 have not changed since the ASC was submitted. In the original ASC, the Certificate Holder evaluated the economic, social, energy, and environmental criteria to demonstrate compliance with Union County's Goal 5 Resources Comprehensive Plan Element implemented through UCZPSO 20.09 Based on the Certificate Holder's detailed evaluation, the Council found the Project complies with UCZPSO 20.09.11
		The Proposed Site Boundary Additions would generally be in proximity to the approved site boundary, be constructed of the same materials and components previously described in Exhibit B of the ASC, and would occur in similar habitat types, topography, and land uses to those previously considered. As depicted on Figure 4-2, the Certificate Holder has attempted to use existing roads and to limit the development of new roads in Big Game Winter Range overlay areas. These efforts have resulted in the development of a proposed access road system to support the construction of the transmission line that substantially relies on the system of publicly maintained roads as well as unimproved roads on public and private lands. Therefore, the previous evaluation remains consistent with the Proposed Site Boundary Additions, and the Council may rely on its previous

¹⁰ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 207

⁽September 2022)

11 Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 211 (September 2022)

Section/Subsection	Name	Effect of Proposed Change
		findings and conditions that the Project complies with the County's Goal 5 planning goals.

7.1.3.4 Baker County Applicable Substantive Criteria and Comprehensive Plan

Section 5.2.6 details the proposed changes in Baker County. The Council previously concluded that the Project complied with the applicable substantive criteria of Baker County's development ordinance. The Baker County Zoning and Subdivision Ordinance (BCZSO; Baker County 2020) has been updated since the Certificate Holder submitted the ASC on September 28, 2018. However, the updates (detailed in Table 7.1-8) are not substantive and criteria evaluated with the ASC remains consistent with existing applicable criteria in the BCZSO, which has been amended to clarify and reorganize standards. The amended standards mirror what was previously evaluated with Exhibit K of the ASC. There have been no identified updates to the Baker County Comprehensive Plan since the ASC was submitted on September 28, 2018.

Table 7.1-8. Baker County Applicable Substantive Criteria

Section/Subsection	Name	Effect of Proposed Change
Baker County Zoning and Subdivision Ordinance (BCZSO)		
Article 3: Uses Zones		
Section 301 Exclusive	Farm Use Zone	
Subsection 301.02	Conditional Uses	Not applicable. Portions of the Proposed Site Boundary Additions occur within Baker County's EFU zone. Section 301 establishes that "major utility facilities as defined in Section 108(B)" and their accessory uses (including roads) are conditional uses within Baker County's EFU zone, subject to BCZSO 301.05, 301.06 and Article 6 of the ordinance. The BCZO has been amended and Section 301 has been renumbered as Chapter 410, which authorizes "utility facilities necessary for public service" as a Type II administrative decision as analyzed in Section 7.1.3.9.
Section 305 Rural Ser	vice Area	
Subsection 305.02	Conditional Uses	Applicable and complies. Portions of the Proposed Site Boundary Additions occur within Baker County's Rural Service Area (RSA) zone. The Project and its related and supporting facilities (including access roads) are considered a major utility facility for purposes of BCZSO 150.03 (formerly Section 108(B)). As stated in the ASC, the BCZSO indicates Project features in the RSA Zone are permitted conditional uses. Due to the limited potential impacts

¹² Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 216-227 (September 2022)

Tor the boardman to Heming	•	
Section/Subsection	Name	Effect of Proposed Change
		resulting during construction and operation of facility components within RSA zoned land, the Council found that the facility would satisfy the standards granting a conditional use. The BCZSO has been amended, but standards addressed in the ASC for conditional uses are not substantially different from the amended BCZSO Conditional Use approval criteria in the newly adopted Chapter 210.04(A)(1-6).
Article 4: Supplemen		Anniinable and complied The DOZOO
Section 401	Setbacks and Frontage Road Requirements Flood Plain District	Applicable and complies. The BCZSO has been amended and Section 301 has been renumbered as Chapter 340 Development Standards (Setback Requirements) for All Zones. A comparison of these chapters follows below in Section 7.1.3.8.
Section 412	Historic/Cultural and Natural Area Protection Procedure	Applicable and complies. The BCZSO has been amended and Section 301 has been renumbered as Chapter 710. A comparison of these chapters follows below in Section 7.1.3.8.
Section 410	Flood Plain Provisions	Not applicable. Section 410 Flood Plain Provisions was removed during the update to BCZSO. A new section, Chapter 630 Floodplain Development Zone was adopted for floodplain management. The Proposed Site Boundary Additions are not within the floodplain development zone and is therefore not applicable to RFA 1.
Article 6: Conditiona	l Uses	
Section 602	Standards for Granting a Conditional Use	Applicable and complies. As stated above, utility facilities necessary for public service are permitted in the EFU zone as an administrative permit, therefore the standards for granting a conditional use are not applicable to RFA 1. However, the conditional use standards remain applicable for the portions of the Project within the RSA and Recreation Residential (RR-2) zones in Baker County. The standards addressed in the ASC for conditional uses remain largely the same as
		the amended BCZSO Conditional Use approval criteria in Chapter 210.04(A)(1-6). The chapter has been renumbered, but the criteria is consistent with the language

Name	Effect of Proposed Change
	previously addressed in the previous
	BCZSO Section 602. A comparison of
	these chapters follows below in Section
	7.1.3.8.
As described in the ASC	, the proposed facility and site boundary
would be located within E	Baker County's Big Game Overlay zone and
could potentially impact s	several scenic resources protected under the
Baker County Comprehe	nsive Plan Goal 5 Resources element.
Portions of the Proposed Site Boundary Additions also occur within	
the Big Game Overlay. In ASC Exhibit K, the applicant evaluated	
Goal 5 resources to confirm that the proposed facility would not result	
in significant adverse imp	pacts. The Final Order stated that Baker
County's land use regula	tions for the EFU zone are compatible with
big game habitat and do	not include any Goal 5 protection programs
applicable to permitted up	ses in the EFU zone. To minimize potential
impacts to riparian veget	ation, the Council imposed GEN-LU-07.
	h GEN-LU-07 and because the facility is
•	e, the Council found the proposed use would
•	unty's Goal 5 planning goals for protecting
	nplete assessment of protected areas and
	below in Sections 7.1.4 and 7.1.7.
	rehensive Plan As described in the ASC, would be located within E could potentially impact in Baker County Compreher Portions of the Proposed the Big Game Overlay. In Goal 5 resources to confining significant adverse impacts and use regulated big game habitat and do applicable to permitted use impacts to riparian veget. Based on compliance with permitted in the EFU zon be consistent with the cobig game habitat. 13 A cortical according to the ASC.

7.1.3.5 Malheur County Applicable Substantive Criteria and Comprehensive Plan

Section 5.2.7 details the Proposed Site Boundary Additions in Malheur County. The Council previously concluded that the Project complied with the applicable substantive criteria of Malheur County's development ordinance. ¹⁴ The Malheur County Code (MCC; Malheur County 2021) has been updated since the Certificate Holder submitted the ASC on September 28, 2018. However, the updates to the MCC did not change the criteria evaluated with the ASC. There have been no identified updates to the Malheur County Comprehensive Plan since the ASC was submitted on September 28, 2018.

Table 7.1-9. Malheur County Applicable Substantive Criteria

Section/Subsection	Name	Effect of Proposed Change
Malheur County Code (M	MCC)	
Exclusive Farm use and	Exclusive Range Us	e
MCC 6-3A-2	Permitted Uses	Applicable and complies. Portions of the Proposed Site Boundary Additions occur within Malheur County's EFU zone. The Project is a transmission line necessary for public service, which is permitted outright in EFU lands, provided the towers are no greater than 200 feet in height. The proposed site boundary changes do not affect compliance with standards of the EFU

¹³ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 225 (September 2022)

¹⁴ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 229-236 (September 2022)

Section/Subsection	Name	Effect of Proposed Change
Section/Subsection	Name	Zone. As described in this RFA 1, the Council concluded the transmission line and associated access roads, modified existing roads, multi-use areas, temporary pulling and tensioning sites, and communication stations in the EFU zone are considered under the "utility facility necessary for public service" land use category. The Proposed Site Boundary Additions occur within the County's EFU zone and the Council's previous determination that the ASC complies with MCC 6-3A-2 is applicable to RFA 1. GEN-LU-08 requires the Certificate Holder to obtain applicable permits from Malheur County prior to construction (including a zoning permit for components in the EFU zone). Therefore, the Council may rely on its previous findings and conditions, and the Project, as amended by RFA 1, will
He are Industrial Hea		continue to comply with these standards.
Heavy Industrial Use MCC 6-31-4	Performance	Applicable and complies A portion of the
	Standards	Applicable and complies. A portion of the Proposed Site Boundary Additions is within the Heavy Industrial Use zone, where "utility facilities" are allowed as a conditional use. As described in this RFA 1, the Council concluded the transmission line and associated access roads are considered under the "utility facility necessary for public service" land use category. GEN-LU-08 requires the Certificate Holder to obtain applicable permits from Malheur County prior to construction (including a zoning permit for development of facility components in the Heavy Industrial (C-12) zone). Therefore, the Council may rely on its previous findings and conditions, and the Project, as amended by RFA 1, will continue to comply with these standards.
Flood Plain Management MCC 6-3K-3	It Zone Flood Plain	Applicable and complies. Under MCC 6-
WICC 0-SIK-S	Development Standards	3K-3, any development within the 100-year flood plain requires compliance with MCC Title 5, Chapter 2, the Federal Insurance Administration requirements, and the standards of the underlying primary zone. The Certificate Holder stated in the original ASC that it does not anticipate that any permanent Project features will be located

Section/Subsection	Name	Effect of Proposed Change
		with the 100-year flood plain in Malheur
		County. A portion of the Proposed Site
		Boundary Additions, specifically existing
		road improvements along the Malheur River,
		is within a Malheur County SFHA. However,
		these existing road improvements are not
		considered "permanent construction." MCC
		Chapter 2 Flood Control states "permanent
		construction does not include land
		preparation, such as clearing, grading and
		filling; nor does it include the installation of
		streets and/or walkways. Further, GEN-LU-
		08 requires the Certificate Holder to provide
		applicable permits approved by Malheur
		County prior to construction (including flood
		plain development permits for each location
		where development could occur within a regulatory floodplain). Therefore, the Council
		may rely on its previous findings and
		conditions, and the Project, as amended by
		RFA 1, will continue to comply with these
		standards.
MCC 5-2-5-1; 5-2-5-2	Flood Hazard	Applicable and complies. GEN-LU-08
	Reduction	requires the Certificate Holder to provide
		applicable permits approved by Malheur
		County prior to construction (including flood
		plain development permits for each location
		where development could occur within a
		regulatory floodplain). Therefore, the Council
		may rely on its previous findings and
		conditions, and the Project, as amended by
		RFA 1, will continue to comply with these
Malla and Committee Com	 	standards.
Malheur County Compre		aundan, abangaa da not affaat aanaistana.
Goal 3 Agricultural Lands, Policies 2, 7, 8		oundary changes do not affect consistency cy 1. GEN-LU-11 requires the Certificate
and 9	_	or to construction, an Agricultural Land
		igation Plan, which implements mitigation
		oring during construction. Therefore, the
		etermination that the Project would be
		P Agricultural Lands Policies 2, 7, 8, and 9
	remains applicable to	

Idaho Power Company

7.1.3.6 City of North Powder Applicable Substantive Criteria and Comprehensive Plan

The Council previously concluded that the Project complied with the applicable substantive criteria of the City of North Powder's comprehensive plan and development ordinance. ¹⁵ None of the Proposed Site Boundary Additions occur within the City of North Powder, and therefore the Council may find that no additional analysis is required to comply with the standards outlined in Table 7.1.3-6.

7.1.3.7 City of Huntington Applicable Substantive Criteria and Comprehensive Plan

The Final Order described how the multi-use area within the City of Huntington would be located within both the Commercial Industrial (CI) Zone and Commercial Residential (CR) Zone, as represented in ASC Exhibit K Figure K-53, City of Huntington Zoning and Proposed Multi Use Area. In ASC Exhibit K Section 6.9.2.1., the Certificate Holder describes that, in a June 2, 2016 email, the City of Huntington indicated that because the multi-use area would be a temporary use, no provisions of the City of Huntington Zoning Ordinance (CHZO) would apply and no City permits would be required. None of the Proposed Site Boundary Additions occur within the City of Huntington, and therefore the Council may find that no additional analysis is required.

7.1.3.8 Updated Applicable Substantive Criteria

Table 7.1-10 shows a comparison between the substantive criteria evaluated in the ASC against the updated version of the current substantive criteria.

Table 7.1-10. Comparison of Updated Applicable Substantive Criteria and Archived Applicable Substantive Criteria Previously Analyzed with the ASC

Updated Applicable Criteria	
Umatilla County Comprehensive Plan	
Transportation Element Finding 18 and	
Policy 18	
Finding 18. Major transmission lines (fuel,	
power and communication) traverse the	
County. Additional expansion proposed, and	
additional new lines or pipelines could be	
proposed through the County.	
Policy 18. The County will review right-of-	
way acquisitions and proposals for	
transmission lines and pipelines so as to	
minimize adverse impacts on the community.	
finition of "major transmission lines" as	
"fuel, power, and communication" lines.	
Finding 18 still applies to the Project, including the Proposed Site Boundary Additions,	
the definition change, Umatilla County's	
ave not changed in ways that would impact the	
dard.	
Union County (UPZPSO) 3.17	
Development Standards	

¹⁵ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 239-241(September 2022)

¹⁶ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 242 (September 2022)

Archived Applicable Criteria

Any proposed division of land included within the A-2 Zone resulting in the creation of one or more parcels of land shall be reviewed and approved or disapproved by the County (ORS 215.263).

Setbacks from property lines or road rightsof-way shall be a minimum of 20-feet front and rear yards and 10-feet side yards. Animal shelters shall not be located closer than 100 feet to an R-1 or R-2 Zone. Signs shall be limited to the following: a. All off-premise signs within view of any State Highway shall be regulated by State regulation under ORS Chapter 377 and receive building permit approval.

- b. All on-premise signs shall meet the Oregon Administrative Rule regulations for on-premise signs which have the following standards:
- A. Maximum total sign area for one business is 8% of building area plus utilized parking area, or 2,000 square feet, whichever is less. B. Display area maximum is 825 square feet for each face of any one sign, or half the total allowable sign area, whichever is less.
- C. Businesses which have no buildings located on the premises or have buildings and parking area allowing a sign area of less than 250 square feet may erect and maintain on-premises signs with the total allowable area of 250 square feet, 125 square feet maximum for any one face of a sign.
- D. Maximum height of freestanding signs adjacent to interstate highways is 65 feet, for all other highways is 35 feet, measured from the highway surface or the premises grade, whichever is higher to the top of the sign.
- E. All on-premise signs within view or 660 feet of any State Highway shall obtain permit approval from the Permit Unit, Oregon State Highway Division. No sign shall be moving, revolving or flashing, and all lighting shall be directed away from residential use or zones, and shall not be located so as to detract from a motorists vision except for emergency purposes.

Updated Applicable Criteria

- Any proposed division of land included within the A-2 Zone resulting in the creation of one or more parcels of land shall be reviewed and approved or disapproved by the County (ORS 215.263).
- Setbacks from property lines or road rights-of-way shall be a minimum of 20-feet front and rear yards and 10-feet side vards.
- Animal shelters shall not be located closer than 100 feet to an R-1 or R-2 Zone.
- Signs shall be limited to the following:
- A. All off-premise signs within view of any State Highway shall be regulated by State regulation under ORS Chapter 377 and receive building permit approval.
- B. All on premise signs shall meet the Oregon Administrative Rule regulations for on premise signs which have the following standards:
- (1) Maximum total sign area for one business is 8% of building area plus utilized parking area, or 2,000 square feet, whichever is less.
- (2) Display area maximum is 825 square feet for each face of any one sign, or half the total allowable sign area, whichever is less.
- (3) Businesses which have no buildings located on the premises or have buildings and parking area allowing a sign area of less than 250 square feet may erect and maintain on-premises signs with the total allowable area of 250 square feet, 125 square feet maximum for any one face of a sign.
- (4) Maximum height of freestanding signs adjacent to interstate highways is 65 feet, for all other highways is 35 feet, measured from the highway surface or the premises grade, whichever is higher to the top of the sign.
- C. All on premise signs within view or 660 feet of any State Highway shall obtain permit approval from the Permit Unit, Oregon State Highway Division. No sign shall be moving, revolving or flashing, and all lighting shall be directed away from residential use or zones, and shall not be located so as to detract from a motorist vision except for emergency purposes.

Archived Applicable Criteria

Updated Applicable Criteria

<u>Response:</u> The side-by-side comparison of these applicable criteria in the UCZPSO demonstrate that the only changes are in the numbering and lettering of the standard. The text is identical and therefore the intent remains the same. The Council may find that there are no substantive changes to the applicable criteria previously addressed with the ASC.

Baker County (BCZSO) Section 602 Standards for Granting a Conditional Use

- A. The proposal will be consistent with the Comprehensive Plan and objectives of this Zoning and Subdivision Ordinance and other applicable policies of the County.
- B. Taking into account location, size, design and operating characteristics, the proposal will have a minimal adverse impact on the (1) livability, (2) value, and (3) appropriate development of abutting properties and the surrounding area compared to the impact of development that is permitted outright.
- C. The location and design of the site and structures for the proposal will be as attractive as the nature of the use and its setting warrant.
- D. The proposal will preserve assets of particular interest to the community.

Baker County (BCZSO) Chapter 210 Conditional Uses Approval Criteria

- 1. The proposal will be consistent with the Comprehensive Plan and objectives of this Ordinance and other applicable policies of the County.
- 2. Taking into account location, size, design and operating characteristics, the proposal will have a minimal adverse impact on the (1) livability, (2) value, and (3) appropriate development of abutting properties and the surrounding area compared to the impact of development that is permitted outright.
- 3. All required public facilities have adequate capacity to serve the proposal.
- 4. The proposal will not result in emissions that damage the air or water quality of the area. Documentation is required to demonstrate that required state and federal discharge permits have been obtained.
- 5. The location and design of the site and structures for the proposal will be as attractive as the nature of the use and its setting warrant.
- 6. The proposal will preserve assets of particular interest to the community.

Response: The side-by-side comparison of these applicable criteria in the BCZSO demonstrate that the only changes are to include the new provision that "3. All required public facilities have adequate capacity to serve the proposal" and "4. The proposal will not result in emissions that damage the air or water quality of the area. Documentation is required to demonstrate that required state and federal discharge permits have been obtained." Site Certificate Condition GEN-LU-07 requires the Certificate Holder to obtain applicable permits required by Baker County ordinances. If after commencement of construction the Certificate Holder determines additional County-approved permits are required, the Certificate Holder will provide to the department a copy of those additional permits. In addition, Site Certificate Condition PRE-PS-02 was imposed to address public services criteria. PRE-PS-02 requires the Certificate Holder to submit a Transportation and Traffic Plan for review and approval by the Department in consultation with the affected county. The condition also requires that, through county-issued road-related permits, the Certificate Holder execute a formally binding agreement with the county for use of and potential impacts to roads during construction activities. With respect to new provision 4, the Proposed Site Boundary Additions will not result in any air or water quality impacts that the Council did not previously consider and analyze in the Final Order, Therefore, the Council may find the Project complies with the current standard.

Archived Applicable Criteria
BCZSO Section 401 Setbacks and
Frontage Road Requirements Flood Plain
District

A. APPLICATION

These requirements shall apply to all structures except for adjustments permitted in Section 402. See also Section 407(B).

B. STANDARDS

- 1) The minimum land width at the front building lines shall be 220 feet.
- 2) No part of a structure shall be constructed or maintained closer than 60 feet to the center line of a road or street, or 30 feet from any right-of-way in excess of 60 feet.
- 3) No part of a building or other structure, except for a sign, shall be constructed or maintained closer than 10 feet to any property line.
- 4) No part of a building or other structure requiring a building permit or farm use affidavit or a road to access such development, shall be constructed within 50 feet of a naturally occurring riparian area, bog, marsh or waterway.

Updated Applicable Criteria BCZSO Chapter 340 Development Standards (Setback Requirements)

A. Applicability.

These requirements shall apply to all structures except for adjustments permitted in Section 340.03 and Livestock Concentration Limitations in Section 510.05.

- B. Standards.
- 1. Minimum road frontage shall be 220 feet per parcel, unless the subject property is:
 - a. Currently accessed or proposed to be accessed from a dead-end road, in which case 60 feet of road frontage shall be required: or
 - b. Accessed by an easement granted before 2005, in which the width of the existing easement shall suffice; or
 - c. A parcel or lot on the radius of a road or facing the circular end of a cul-de-sac, in which case no less than 30 feet of road frontage shall be required upon said road, measured on the arc of the right-of-way. Such frontage shall be subject to the standards set forth in Chapter 340.
- 2. No part of a structure shall be constructed or maintained closer than 60 feet to the centerline of a road or street, or 30 feet from any right-of-way in excess of 60 feet.
- 3. No part of a building or other structure, except for a sign, shall be constructed or maintained closer than 10 feet to any property line.
- 4. If any part of a structure and/or development is proposed within a jurisdictional wetland, as described in Section 660.03, notification shall be provided by the Baker County Planning Department to the Department of State Lands, as required by ORS 196.795-990. The applicant/property owner shall be responsible for obtaining all necessary permits for the proposed structure and/or development from the Department of State Lands.

Response: The amended text in BCZSO Chapter 340 is generally the same as previously written in the archived version of BCZSO analyzed with the ASC. The updates add clarity, but do not change the intent of the setback restrictions, which remain the same for the Project.

Archived Applicable Criteria

Updated Applicable Criteria

BCZSO Chapter 150 defines "building" as "a structure built for the support, shelter or enclosure of persons, animals, goods, chattel, or property of any kind."

- Access roads: The Project access roads will not be built to support, shelter, or enclose
 anything. Therefore, the access roads are not considered buildings, and the yard
 setback requirements of BCZSO 401(B)(1) do not apply to the relevant access roads.
- <u>Transmission Line Towers</u>: The Project transmission towers will not be built to support, shelter, or enclose anything. Therefore, the transmission towers are not considered buildings, and the yard setback requirements of BCZSO 340 (B)(1) do not apply to the relevant towers.
- <u>Light-Duty Fly Yards</u>: There will be no light-duty fly yards in the proposed Baker County alternatives. Therefore, the yard setback requirements of BCZSO 340(B)(1) do not apply to the relevant towers.
- <u>Multi-Use Areas</u>: There will be no multi-use areas in the proposed Baker County alternatives. Therefore, the yard setback requirements of BCZSO 340(B)(1) are not applicable.
- <u>Communication Stations</u>: There will be no communication stations in the proposed Baker County alternatives. Therefore, the yard setback requirements of BCZSO 340(B)(1) are not applicable.

GEN-LU-07 requires the Certificate Holder to provide applicable permits approved by Baker County prior to construction. In addition, CON-LU-01 ensures the Certificate Holder complies with applicable setback distances and other requirements in Baker County. Therefore, the Council may rely on its previous findings and conditions, and the Proposed Site Boundary Additions will continue to comply with these standards.

BCZSO Section 412 Historic/Cultural and Natural Area Protection Procedure

This Section shall not apply to sites designated as 3A or 3B sites, pursuant to OAR 660-16-010 (1) and (2), respectively. Major alteration or destruction of a Natural Area designated as 2A or 3C shall first require an ESEE analysis, justification, and Plan Amendment.

A permit shall be required to destroy or make major alteration to a historic/cultural/natural site or structure inventoried as significant in the County Comprehensive Plan. Upon receipt of an application for said permit, the Planning Department shall institute a 30-day hold. During that time various actions will be initiated by the County depending upon the nature of the threatened resource. All of the inventoried natural sites, historic sites and the cultural sites identified with one, two or three stars will be subject to a public hearing. Notice of the proposed change and public hearing will be provided to the general public, the State Historic Preservation Office, the

BCZSO Chapter 710 Historic, Cultural, and Natural Resources Protection

710.02 Applicability. This Section shall not apply to sites designated as 3A or 3B sites, pursuant to OAR 660-016-0010(1) and OAR 660-016-0010(2), respectively. Major alteration or destruction of a Natural Area designated as 2A or 3C shall first require an ESEE (economic, social, environmental and energy) analysis, justification, and subsequent Plan Amendment application.

710.03 Permits Required

A. A permit shall be required to destroy or make major alteration to a historic/cultural/natural site or structure inventoried as significant in the County Comprehensive Plan. Upon receipt of an application for said permit, the Planning Department shall institute a 30-day hold. During that time various actions will be initiated by the County depending upon the nature of the threatened resource. All of the inventoried natural sites, historic sites and the cultural sites identified with one, two or three

Archived Applicable Criteria

State Natural Heritage Advisory Council, the State Department of Fish and Wildlife and/or affected local historical, cultural, or governmental entities. The opportunity to educate, persuade, pay for, and/or require the preservation of a significant resource will be provided by the County. At the hearing before the Planning Commission a review will be conducted to determine:

- A. If the change will destroy the integrity of the resource.
- B. If the proposal can be modified to eliminate its destructive aspects.
- C. If any agency or individual is willing to compensate the resource owner for the protection of the resource.
- D. If the resource can be moved to another location.
- If, after this review, it is determined by the County that the integrity of a significant historic/cultural structure or townsite or a Natural Area resource is threatened, the following criteria will be applied to decide whether to allow, allow with conditions, or disallow the proposed change.

FOR SIGNIFICANT HISTORIC/CULTURAL STRUCTURES AND TOWNSITES

- A. The historic/cultural structure or townsite constitutes a hazard to the safety of the public occupants and cannot reasonably be repaired; or
- B. The retention of the historic/cultural structure or townsite would cause financial hardship to the owner which is not offset by public interest in the structure's/townsite's preservation; or
- C. The improvement project is of substantial benefit to the County and cannot be reasonably located elsewhere, and overrides the public's interest in the preservation of the historic/cultural structure or townsite; or
- D. Major exterior alteration shall, to the extent possible, be consistent with the historic/cultural character of the structure.

FOR SIGNIFICANT NATURAL AREAS

A. The existence of a site report: The site's relative significance is indicated by the

Updated Applicable Criteria

stars will be subject to a public hearing. Notice of the proposed change and public hearing will be provided to the general public, the State Historic Preservation Office, the State Natural Heritage Advisory Council, the State Department of Fish and Wildlife and/or affected local historical, cultural, or governmental entities. The opportunity to educate, persuade, pay for, and/or require the preservation of a significant resource will be provided by the County. At the hearing before the Planning Commission a review will be conducted to determine:

- 1. If the change will destroy the integrity of the resource.
- 2. If the proposal can be modified to eliminate its destructive aspects.
- 3. If any agency or individual is willing to compensate the resource owner for the protection of the resource.
- 4. If the resource can be moved to another location.
- B. If, after this review, it is determined by the County that the integrity of a significant historic/cultural structure or townsite or a natural area resource is threatened, the following criteria will be applied to decide whether to allow, allow with conditions, or disallow the proposed change:
- 1. For significant historic/cultural structures and townsites.
- a. The historic/cultural structure or townsite constitutes a hazard to the safety of the public occupants and cannot reasonably be repaired; or
- b. The retention of the historic/cultural structure or townsite would cause financial hardship to the owner which is not offset by public interest in the structure's/townsite's preservation; or
- c. The improvement project is of substantial benefit to the County and cannot be reasonably located elsewhere, and overrides the public's interest in the preservation of the historic/cultural structure or townsite; or

Archived Applicable Criteria

existence of a site report indicating a field survey with one or more elements verified.

- B. Number of elements: The site is elevated to a higher priority if it contains a diversity of natural elements.
- C. Past use of land: The degree to which man's activities have already impacted an area is a significant factor in determining the value of protecting the resource.
- D. Abundance and quality of the same resource elsewhere on the County's inventory: In reviewing such comparative information the County will be able to make its decision knowing the relative significance of the resource in question.
- E. Financial impact: A determination that the retention of the natural area would cause financial hardship to the owner not offset by public interest in the site's preservation would be a determining factor in the County's decision.
- F. Public benefit from the proposed change: A finding that the change is of substantial benefit to the County and cannot be accommodated feasibly elsewhere on the applicant's property would be a significant factor in the County's decision.

FOR RESOURCES ON FEDERALLY MANAGED LANDS

The findings and conclusions of Baker County relative to a proposed alteration or demolition of a significant cultural/ historic/natural site/structure shall be forwarded to the appropriate federal agency as a recommendation.

FOR RESOURCES NOT INVENTORIED OR DESIGNATED AS 1B

For resources of unknown significance or resources not on the inventory, a local review will be conducted by BLM and USFS personnel with the consent of their supervisors, Oregon Department of Fish and Wildlife, State and/or college historians and local museum and historical society members to evaluate the resource's comparative worth and make a recommendation as to whether a full public hearing is warranted.

Updated Applicable Criteria

- d. Major exterior alteration shall, to the extent possible, be consistent with the historic/cultural character of the structure.
- 2. For significant natural areas.
- a. The Existence of a Site Report. The site's relative significance is indicated by the existence of a site report indicating a field survey with one or more elements verified.
- b. Number of Elements. The site is elevated to a higher priority if it contains a diversity of natural elements.
- c. Past Use of Land. The degree to which human activities have already impacted an area is a significant factor in determining the value of protecting the resource.
- d. Abundance and Quality of the Same Resource Elsewhere on the County's Inventory. In reviewing such comparative information, the County will be able to make its decision knowing the relative significance of the resource in question.
- e. Financial Impact. A determination that the retention of the natural area would cause financial hardship to the owner not offset by public interest in the site's preservation would be a determining factor in the County's decision.
- f. Public Benefit from the Proposed Change. A finding that the change is of substantial benefit to the County and cannot be accommodated feasibly elsewhere on the applicant's property would be a significant factor in the County's decision.
- 3. For Resources on Federally Managed Lands. The findings and conclusions of Baker County relative to a proposed alteration or demolition of a significant cultural/ historic/natural site/structure shall be forwarded to the appropriate federal agency as a recommendation.
- 4. For Resources Not Inventoried or Designated as 1B. For resources of unknown significance or resources not on the inventory, a local review will be conducted by BLM and USFS personnel, Oregon Department of Fish and Wildlife, State and/or college historians, and local museum and

Request for Amendment #1
for the Boardman to Hemingway Transmission Line

Archived Applicable Criteria	Updated Applicable Criteria
	historical society members to evaluate the
	resource's comparative worth and make a recommendation as to whether a full public hearing is warranted.

Response: The amended text in BCZSO Chapter 710 is generally the same as previously written in the archived version of BCZSO analyzed with the ASC. The updates are renumbered and add clarity, but do not change the intent of the Historic, Cultural, and Natural Resources Protection standards, which remain the same for the Project. The Council previously found there are no resources of unknown significance, or resources not on the inventory which are located within the Analysis Area of the proposed transmission line. As detailed in this RFA 1 under Section 7.1.8, new surveys have occurred to determine the proposed amendment makes no changes that will alter the basis for the Council's earlier findings, or its conclusion that the Project will not likely result in an adverse impact to any historical, cultural and archaeological resources in the Analysis Area, and therefore the amendment request meets the requirement of the Historical, Cultural and Archaeological Resources Standard.

7.1.3.9 New Applicable Substantive Criteria

The following section addresses new applicable substantive criteria that have been added to county land use plans since the ASC was prepared.

Union County

3.04 Conditional Uses with General Review Criteria

In the A-2 Zone, the following uses and their accessory buildings and uses are permitted subject to county review under Article 24.03 Quasi-Judicial land use decision and the specific standards for the use set forth in Section 3.05, as well as the general standards for the zone and the applicable standards in Article 21.00 (Conditional Uses).

11. Utility facilities necessary for public service, including associated transmission lines as defined in Section 1.08 and wetland waste treatment systems, but not including commercial facilities for the purpose of generating electrical power for public use by sale or transmission towers over 200 feet in height as provided in Subsection 3.05.15

3.05 Use Standards

- A utility facility that is necessary for public service 15.
 - A utility facility is necessary for public service if the facility must be sited in the Α. exclusive farm use zone in order to provide the service. To demonstrate that a utility facility is necessary, an applicant must show that reasonable alternatives have been considered and that the facility must be sited in an exclusive farm use zone due to one or more of the following factors:
 - (1) Technical and engineering feasibility;
 - (2) The proposed facility is locationally-dependent. A utility facility is locationally-dependent if it must cross land in one or more areas zoned for exclusive farm use in order to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;

- (3) Lack of available urban and non-resource lands;
- (4) Availability of existing rights of way;
- (5) Public health and safety; and
- (6) Other requirements of state and federal agencies.
- B. Costs associated with any of the factors listed in subparagraph A. of this paragraph may be considered, but cost alone may not be the only consideration in determining that a utility facility is necessary for public service. Land costs shall not be included when considering alternative locations for substantially similar utility facilities and the siting of utility facilities that are not substantially similar.
- C. The owner of a utility facility approved under paragraph A shall be responsible for restoring, as nearly as possible, to its former condition any agricultural land and associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility. Nothing in this paragraph shall prevent the owner of the utility facility from requiring a bond or other security from a contractor or otherwise imposing on a contractor the responsibility for restoration.
- D. The county shall impose clear and objective conditions on an 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 surrounding farmlands.
- E. Utility facilities necessary for public service may include on-site and off-site facilities for temporary workforce housing for workers constructing a utility facility. Such facilities must be removed or converted to an allowed use under the A-1 Zone or other statute or rule when project construction is complete. Off-site facilities allowed under this paragraph are subject to Section 2.06 Conditional Use Review Criteria. Temporary workforce housing facilities not included in the initial approval may be considered through a minor amendment request. A minor amendment request shall have no effect on the original approval.

Response: As described in the ASC Exhibit K, proposed facility components within Union County's A-2 zone would include up to 6.1 miles of 500-kV transmission line and ancillary facilities, which based on 2001 and 2005 court decisions (see *Cox v. Polk County* and *Save our Rural Or. V. Energy Facility Siting Council,* respectively) the Certificate Holder maintains should be considered under the "utility facility necessary for public service." The Council previously found the Project is a utility facility necessary for public service that would be a permitted use in the A-2 zone. The proposed site boundary changes occur within the A-2 zone, which under the current standards are subject to county review under Section 3.05, as well as the applicable standards of Article 21.00 (Conditional Uses).

The standards of Section 3.05(15) mirror the standards of ORS 215.275, which the Certificate Holder went beyond what is required to demonstrate compliance with and included a county-specific alternatives analysis previously evaluated with the ASC. The proposed Union County site boundary changes, which are limited to access road design updates along the Approved Route, will be constructed of the same materials and components previously described in Exhibit B of the ASC, and would occur in similar habitat types, topography, and land uses to those previously considered. As such, the Council's previous determination that the ASC

complies with ORS 215.275 is applicable to RFA 1. GEN-LU-05 condition requires submission of Union County permits in accordance with UCZPSO. Therefore, the Council may rely on its previous findings and conditions, and the Proposed Site Boundary Additions will comply with these standards.

5.04 Conditional Uses with General Review Criteria

In the A-4 Zone predominantly farmland lots and parcels shall comply with Section 5.06 Administrative Uses and predominantly forest land parcels may authorize the following uses and activities and their accessory buildings and uses subject to county review and the specific standards set forth in Article 21.00, as well as the general provision set forth by this ordinance.

21. New electric transmission lines with right of way widths of up to 100 feet as specified in ORS 772.210. New distribution lines (e.g., gas, oil, geothermal, telephone, fiber optic cable) with rights-of-way of 50 feet or less in width.

. . .

5.06 Conditional Use Review Criteria

A use authorized by Section 5.04 of this zone may be allowed provided the following requirements or their equivalent are met. These requirements are designed to make the use compatible with forest operations and agriculture and to conserve values found on forest lands.

- The proposed use will not force a significant change in, or significantly increase the cost of, accepted farming or forest practices on agriculture or forest lands.
- The proposed use will not significantly increase fire hazard or significantly increase fire suppression costs or significantly increase risks to fire suppression personnel.
- A written statement recorded with the deed or written contract with the county or its
 equivalent is obtained from the land owner that recognizes the rights of adjacent and
 nearby land owners to conduct forest operations consistent with the Forest Practices
 Act and Rules for uses authorized in OAR 6660-006-0025 Subsection 5(c)

Response: Article 5.04(21) states that new electric transmission lines with right-of-way widths up to 100 feet are conditional uses with general review criteria. This definition applies the Project. As described in RFA 1, the Proposed Site Boundary Additions within Union County's A-4 zone would include access road design updates along the Approved Route in open rangeland (Figure 4-2, Maps 28 to 41). A summary of proposed road changes are outlined in Table 5.2-9. As such, the Proposed Site Boundary Additions are subject to county review under Section 5.06, as well as the applicable standards of Article 21.00 (Conditional Uses). The Conditional Use Review Criteria of Section 5.06 mirror OAR 660-006-0025(4)(q), which was evaluated in under OAR 660-006-0025(5) Uses Authorized In Forest Zones.

As stated in the ASC, while OAR 660-006-0025(4)(q) expressly refers only to transmission lines with up to a 100-foot right-of-way, the Oregon Supreme Court has concluded that the use category defined in OAR 660-006-0025(4)(q) also includes new electric transmission lines with right-of-ways greater than 100 feet because of that provision's specific reference to ORS 772.210 (regarding condemnation) (see *Save Our Rural Oregon v. EFSC*, 339 Or. 353, 375-76 (2005) [concerning the EFSC application of the COB Energy Facility LLC, and hereinafter referred to as COB]). ORS 772.210 relates to "Rights of Ways for Public Uses" and public utility condemnation authority. The Council imposed GEN-LU-12 to allow transmission line right-of-way in Goal 4 forest lands to no wider than 300 feet and found the proposed facility would not result in significant adverse impact to accepted forest practices nor result in a significant increase in the cost of accepted forest practices within the surrounding area.

To evaluate the significance of the removal of land from timber harvest potential, the Certificate Holder assessed the quantity of forest land lost compared to total forest land available (791,000 acres of Union County forested acres), resulting in approximately 530 acres lost (0.07 percent) in Union County. The Council found the proposed facility would not result in significant adverse impacts to accepted forest practices nor result in a significant increase in the cost of accepted forest practices within the surrounding area. Table 5.2-6 quantifies the acres of land disturbed during construction and operation in Union County, where 2.9 acres of land would be permanently converted to operations as a result of the Proposed Site Boundary Additions in Union County. This impact is a de minimus percentage of the total forest land available in Union County and the inability to use the land for forest purposes over the life of the facility is not significant. Therefore, the Council may rely on its previous findings and conditions, and the Proposed Site Boundary Additions will comply with these standards.

Baker County

410.03 Uses Permitted Through a Type II Procedure.

In the EFU Zone, the following uses and their accessory uses may be permitted when authorized in accordance with the provisions of Section 115.06.

E. Utility Facilities

- 2. Utility facilities necessary for public service, including associated transmission lines as defined in ORS 469.300 and wetland waste treatment systems, but not including commercial facilities for the purpose of generating electrical power for public use by sale or transmission towers over 200 feet high. To demonstrate that a utility facility is necessary, as described in ORS 215.283(1)(c), an applicant must:]
 - a. Show that reasonable alternatives have been considered and that the facility must be sited in an Exclusive Farm Use Zone due to one or more of the following factors:
 - i. Technical and engineering feasibility;
 - ii. The proposed facility is locationally-dependent. A utility facility is locationally-dependent if it must cross land in one or more areas zoned for exclusive farm use in order to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;
 - iii. Lack of available urban and non-resource lands:
 - iv. Availability of existing rights-of-way;
 - v. Public health and safety;
 - vi. Other requirements of state and federal agencies
- b. Costs associated with any of the factors listed in Section 410.03(D)(1)(a) may be considered; however, cost alone may not be the only consideration in determining that a utility facility is necessary for public service. Land costs shall not be included when considering alternative locations for substantially similar utility facilities. The Land Conservation and Development Commission shall

¹⁷ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 266 (September 2022)

¹⁸ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 270 (September 2022)

- determine by rule how land costs may be considered when evaluating the siting of utility facilities that are not substantially similar.
- c. The owner of a utility facility approved under this Section shall be responsible for restoring, as nearly as possible, to its former condition any agricultural land and associated improvements that are damaged or otherwise disturbed by the siting, maintenance, repair or reconstruction of the facility. Nothing in this Section shall prevent the owner of the utility facility from requiring a bond or other security from a contractor or otherwise imposing on a contractor the responsibility for restoration.
- d. The governing body of the county or its designee shall impose clear and objective conditions 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.
- e. The provisions of subsections (2) to (5) of this Section do not apply to interstate natural gas pipelines and associated facilities authorized by and subject to regulation by the Federal Energy Regulatory Commission.

. . .

410.05 Standards for Certain Uses in the EFU Zone

- B. As specified above, certain uses in the EFU Zone shall demonstrate that the following criteria area met:
 - 1. The use will not force a significant change in accepted farming practices on surrounding lands devoted to farm or forest use; and
 - 2. The use will not significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.

Response: The Certificate Holder established in the ASC and throughout this RFA 1 that the Project classifies as a facility necessary for public service. The criteria for conditional uses previously evaluated in the ASC establish a higher level of review (Type III) than what is required for administrative uses (Type II). In Baker County, a Type II administrative permit application for utility facilities necessary for public service must demonstrate compliance with BCZSO 410.03(E)(2), which mirror the standards of ORS 215.275 evaluated in the ASC. The ASC also addressed OAR 660-006-0025(5)(a)-(b), which mirror BCZSO Chapter 410.05(B)(1)-(2), to demonstrate the Project will not force a significant change in, or significantly increase the cost of, accepted farming practices in the areas surrounding the Project in forest lands. The Council previously determined that the Project satisfied the requirements of ORS 215.275 19 and OAR 660-006-0025. 20 The proposed changes to the site boundary would generally be in proximity to the approved site boundary, be constructed of the same materials and components previously described in Exhibit B of the ASC, and would occur in similar habitat types, topography, and land uses to those previously considered. The proposed site boundary changes do not change conditions that would alter the Council's previous determination that the ASC complies Section ORS 215.275 or OAR 660-006-0025, and therefore, the Council may

¹⁹ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 244-259 (September 2022)

²⁰ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 261-272 (September 2022)

conclude that RFA 1 complies with the applicable standards of BCZSO Chapter 410 Exclusive Farm Use Zone.

Chapter 510 Residential Zones

510.03 Recreation Residential Zone (RR-2).

- C. Uses Permitted Through a Type III Procedure. In the RR-2 Zone, the following uses may be permitted when authorized in accordance with the provisions of Section 115.07. These uses shall also require a Conditional Use Permit as described in Chapter 210.
 - 2. Uses
 - a. Major utility facilities as defined in Chapter 150.

Response: The definition of major utility facility in Chapter 150 includes power transmission lines, which indicates an electrical transmission line project would be considered a conditional use in the RR-2 zone. Facility components within 0.5-mile of the RR-2 zone include an accessory use to the proposed utility facility, including new access roads. The Council previously found the Project satisfied the BCZSO conditional use approval standards.²¹ The BCZSO has been amended, but standards addressed in the ASC for conditional uses are not substantially different from the amended BCZSO Conditional Use approval criteria in the newly adopted Chapter 210.04(A)(1-6). Existing Site Certificate Conditions ensure compliance with the standard. The Council imposed Site Certificate Condition PRE-PS-02, which requires the Certificate Holder to submit a Transportation and Traffic Plan for review and approval by the Department in consultation with the affected county. The condition also requires that, through county-issued road-related permits, the Certificate Holder execute a formally binding agreement with the county for use of and potential impacts to roads during construction activities. In addition, Site Certificate Condition GEN-LU-07 requires the Certificate Holder to obtain applicable permits required by Baker County ordinances. If after commencement of construction the Certificate Holder determines additional County-approved permits are required, the Certificate Holder will provide to the department a copy of those additional permits. Moreover, the substantially modified roads would provide road improvements that would support livability, value, and access within the area. The Certificate Holder has not identified any "assets of particular interest to the community" that would be impacted by the location of the proposed roads. Due to the limited potential impacts resulting during construction and operation of facility components within 0.5 mile of RR-2 zoned land, RFA 1 satisfies BCZSO Chapter 210.04.(A)(1-6) approval standards.

7.1.3.10 Directly Applicable Statutes and Administrative Rules

ORS 215.283 and ORS 215.275

The Council previously determined that the Project satisfied the requirements of ORS 215.283 and ORS 215.275. The provisions of ORS 215.283 and ORS 215.275 have not changed since the original ASC was submitted on September 28, 2018. The Certificate Holder demonstrated the Project is permitted outright in Goal 3 EFU lands because it is a utility facility necessary for public service under ORS 215.283(1)(c)(A) and ORS 215.275. In compliance with ORS 215.275, IPC will both minimize impacts to accepted farming practices, and mitigate

²¹ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 218 (September 2022)

²² Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 244-259 (September 2022)

temporary and permanent impacts where necessary, in accordance with the measures outlined in the Agricultural Lands Assessment provided in the original ASC (Attachment K-1 of the Final Order on the ASC). The Proposed Site Boundary Additions would generally be in proximity to the approved site boundary, be constructed of the same materials and components previously described in Exhibit B of the ASC, and would occur in similar habitat types, topography, and land uses to those previously considered. GEN-LU-11 requires the Certificate Holder to finalize, prior to construction, an Agricultural Land Assessment and Mitigation Plan, which implements mitigation measures and monitoring during construction. Therefore, the previous evaluation remains consistent with the Proposed Site Boundary Additions, and the Council may rely on its previous findings and conditions that the Project complies with ORS 215.283 and ORS 215.275.

ORS 215.276

The Council previously determined that the Project satisfied the requirements of ORS 215.283 and ORS 215.276 based upon inclusion of the notification requirements with the Agricultural Assessment and Mitigation Plan (Attachment K-1 of the Final Order on the ASC, imposed in Site Certificate Condition GEN-LU-11), the Project satisfies the requirements of ORS 215.276. The provisions of ORS 215.276 have not changed since the original ASC was submitted on September 28, 2018, and the Certificate Holder does not propose any changes to Land Use GEN-LU-11. The Proposed Site Boundary Additions would generally be in proximity to the approved site boundary, be constructed of the same materials and components previously described in Exhibit B of the ASC, and would occur in similar habitat types, topography, and land uses to those previously considered. Therefore, the previous evaluation remains consistent with the Proposed Site Boundary Additions, and the Council may rely on its previous findings and conditions that the Project complies with the ORS 215.276.

OAR 660-006-0025 (Forest Zone Requirements)

Exhibit K of the ASC demonstrated that the Project will not force significant changes in farm practices or cause significant increases in the costs of accepted farm practices on surrounding lands devoted to farm use. The Council previously determined that the Project satisfied the requirements of OAR 660-006-0025.24 The Proposed Site Boundary Additions within Union County's A-4 zone would include access road design updates along the Approved Route in open rangeland (Figure 4-2, Maps 28 to 41). As such, the proposed site boundary changes are subject to county review under OAR 660-006-0025(4)(q), which was evaluated under OAR 660-006-0025(5) Uses Authorized In Forest Zones. As stated above, approximately 2.9 acres of land (0.0004 percent) would be permanently converted to operations as a result of site boundary changes within Union County. This impact is a de minimus percentage of the total forest land available in Union County and the inability to use the land for forest purposes over the life of the facility is not significant. In addition, IPC has prepared a Wildfire Mitigation Plan (Attachment 7-7) that has been filed with the Public Utility Commission of Oregon in compliance with OAR chapter 860, division 300. This plan would apply to the entire Project, including the proposed changes in RFA 1. Therefore, the Council may conclude that the Proposed Site Boundary Additions will not significantly increase fire hazard or significantly increase fire suppression costs or significantly increase risks to fire suppression personnel, as the Project is subject to a wildfire protection plan approved by the Public Utility Commission. Therefore, the previous evaluation remains consistent with the Proposed Site Boundary Additions, and the Council may

²³ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 260-261 (September 2022)

²⁴ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 261-272 (September 2022)

rely on its previous findings that the Project complies with the Forest Zone requirements of OAR 660-006-0025.

7.1.3.11 Statewide Planning Goals

The Council previously determined that the Project satisfied the applicable criteria of OAR 345-022-0030, which implements ORS 469.504(1)(b). The ASC described each of the 19 statewide planning goals and detailed how the Project complies with each goal. The proposed change with RFA 1 involve several site boundary changes across the entire span of the Project. The Proposed Site Boundary Additions would generally be in proximity to the approved site boundary, be constructed of the same materials and components previously described in Exhibit B of the ASC, and would occur in similar habitat types, topography, and land uses to those previously considered. Therefore, the changes proposed in RFA 1 will not create significant new impacts affecting those resources and interests protected by the Council's siting standards and the Council can find that the Proposed Site Boundary Additions will comply with the statewide planning goals adopted by the Land Conservation and Development Commission.

7.1.3.12 Goal 4 Exception

The Council previously determined that the Project satisfied the applicable criteria of OAR 345-022-0030, which implements ORS 469.504(1)(b). ²⁶ The Proposed Site Boundary Additions do not affect the Council's previous finding that an exception to Goal 4 is justified. As described in the assessment of applicable local land use criteria, the Council previously imposed several conditions (GEN-LU-12) that would limit the right-of-way in Goal 4 forest lands to no wider than 300 feet. The Proposed Site Boundary Additions on forest lands are limited to access road design updates along the Approved Route and permanent impacts represent a de minimus percentage of the total forest land available in Union County. The existing conditions imposed by the Council to minimize potential impacts to forest practices will apply to the Proposed Site Boundary Additions. Therefore, the Council may conclude that the Proposed Site Boundary Additions, do not affect the Council's previous finding that an exception to Goal 4 is justified.

7.1.3.13 Federal Land Management Plans

National Environmental Policy Act (NEPA) review for the Project will include an evaluation of the Project's consistency with the applicable federal land management plans, which, per ORS 469.370(13), requires the Council to review the application, to the extent feasible, in a manner that is consistent with and does not duplicate review under NEPA. In the ASC Exhibit K, the Certificate Holder provided an evaluation of compliance with Federal Land Management Plans including Wallowa-Whitman National Forest Land and Resource Management Plan, Bureau of Land Management (BLM) Vale District Resource Management Plan, BLM Baker Resource Management Plan, BLM Southeastern Oregon Resource Management Plan, and Sage-Grouse Amendments to Resource Management Plans. The Wallowa-Whitman National Forest Land and Resource Management Plan was recently amended after the Final Record of Decision (USFS 2018) was issued to authorize the Project and related actions on National Forest System lands managed by the Wallowa-Whitman National Forest. In January 2021, BLM issued a record of decision approving amendments to its resource management plans in Oregon to provide certain conservation measures for Greater sage-grouse. The ASC's Exhibit K noted the Project was exempt from the new conservation measures set forth in prior

²⁵ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 272-280 (September 2022)

²⁶ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 280-287 (September 2022)

amendments; instead, conservation measures for sage-grouse were analyzed through the Project's NEPA process (see Oregon Greater Sage-Grouse Approved Resource Management Plan Amendment). The Proposed Site Boundary Additions would generally be in proximity to the approved site boundary, be constructed of the same materials and components previously described in Exhibit B of the ASC, and would occur in similar habitat types, topography, and land uses to those previously considered. Therefore, the previous evaluation remains consistent with the Proposed Site Boundary Additions, and the Council may rely on its previous findings that the Project complies with the applicable Federal Land Management Plans.

In conclusion, the Proposed Site Boundary Additions will comply with Land Use conditions previously imposed on the Project (see Table 1). For the reasons discussed above, the Proposed Site Boundary Additions will comply with the Land Use Standard.

7.1.4 Protected Areas - OAR 345-022-0040

The Council previously concluded that the Project complies with the Protected Areas Standard.²⁷ The updated Protected Areas Standard requires the Council to find that the design. construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to a protected area designated on or before the date the ASC or request for amendment was determined to be complete under OAR 345-015-0190 or 345-027-0363, as defined by OAR 345-022-0040. Per Exhibit L of the ASC, there were 80 defined protected areas within the previously defined 20-mile analysis area. Based on the Certificate Holder's review of protected areas listed in the updated OAR 345-001-0010(49), there are eight new protected areas located within 20 miles of the proposed updated site boundary (analysis area) that were not previously addressed (see Figure 7-5, and Attachment 7-2, Table 1). Additionally, 11 previously identified protected areas (Eagle Creek [Recreational], Minam River [Wild], The Minam Scenic Waterway, North Fork John Day River [Recreational], North Fork John Day River [Wild], Cold Springs National Wildlife Refuge, McNary National Wildlife Refuge, Hat Rock State Park, Columbia Basin – Power City Wildlife Area, Bridge Creek Wildlife Area, and Eastern Oregon Agricultural Research Station) are not within the RFA 1 analysis area. A total of 77 protected areas occur within the RFA 1 analysis area. Note that this analysis does not address the previously approved site boundary and solely addresses the proposed site boundary changes in RFA 1.

The significance of impacts on protected areas from water use and wastewater, traffic, noise, visual viewshed alteration, and other impacts are disclosed in Exhibit L and the changes proposed by RFA 1 will not contribute any additional significant impacts to those already considered²⁸ (see Figure 7-6 and Attachment 7-2, Tables 1 and 2 for a full description). All newly identified protected areas within the RFA 1 analysis area will not serve as sources for water or experience any kind of wastewater disposal impacts due to continued proper wastewater containment; any traffic impacts from construction will be short term and operational impacts will be negligible due to infrequent maintenance and inspections required at the Project; all eight of the new protected areas are outside of the previously determined maximum distance of one-half of a mile to experience construction noise impacts, and noise impacts from operations will be intermittent (due to infrequent maintenance and inspections) or otherwise indistinguishable from existing background noise; and six of the eight new protected areas are outside of the previously determined maximum distance of 5 miles for non-forested areas and

²⁷ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 326 (September 2022)

²⁸ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 296-325 (September 2022)

10 miles for forested areas to receive visual impacts²⁹ (see Figure 7-6 and Attachment 7-2, Table 2).

Additionally, the proximity of a majority of the previously identified protected areas to the RFA 1 analysis area either remained the same as previously described in the ASC or increased, thus the impacts will be less than or equal to what was previously approved (Attachment 7-1, Tables 1 and 2). For the 13 protected areas that decreased in proximity to the Project, the distances changed by a maximum of 2.3 miles and minimum of 0.1 miles, with 10 of the 13 protected areas decreasing by 0.4 miles or less, thus impacts were found to be similar to what was previously approved for these areas. Twelve of the 13 previously identified protected areas that decreased in proximity to the analysis area are closest in proximity to road design changes proposed by RFA 1 as opposed to the proposed three route realignments, The Lindsay Prairie Preserve/State Natural Heritage Area is the only previously identified protected area (that decreased in proximity to the analysis area) that is closest in proximity to one of the proposed three route realignments proposed by RFA 1, specifically the Little Juniper Canyon Alternative. It is determined that even with the proposed changes, water use and wastewater impacts, traffic impacts, noise impacts, and visual impacts will remain comparable to what was previously approved.³⁰ See Attachment 7-2, Tables 1 and 2 for a full assessment of impacts at each protected area. Continued implementation of the following Site Certificate Conditions will ensure that impacts to protected areas will be minimized: GEN-PA-01 (Ladd Marsh Wildlife Area agency coordination), GEN-PA-02 (avoidance of Ladd Marsh Wildlife Area if Morgan Lake alternative route is chosen), GEN-SR-03 (National Historic Oregon Trail Interpretive Center

²⁹ The Glass Hill Preserve/State Natural Heritage Area and the Boardman Research Natural Area are less than 5 miles from portions of the Proposed Site Boundary Additions; however, visual impacts are anticipated to be less than significant due to a combination of factors, including the presence of existing power infrastructure (e.g., 69-kilovolt Bonneville Power Administration transmission line, wind and solar renewable energy facilities), views of the Proposed Site Boundary Additions are from mostly neutral or elevated vantage points, the localization of impacts, no management for scenic quality, and public access is not permitted. The public is excluded from the Boardman Research Natural Area (per personal communication between Kristen Gulick, Tetra Tech and Kelly Wallis, The Nature Conservancy, July 18, 2022) and likely excluded from the Glass Hill Preserve/State Natural Heritage Area (per personal communication between Kristen Gulick, Tetra Tech, and Lindsey Wise, Oregon State University, Institute for Natural Resources, July 13, 2022). Some medium intensity visual impacts could occur at the Glass Hill Preserve/State Natural Heritage Area due to the structures introducing moderate visual contrast and appearing co-dominant with the landscape and existing infrastructure; note that the closest Proposed Site Boundary Alterations as proposed by RFA 1 are related to access road changes as opposed to the three route realignments, which will present no additional/minimal visual impacts to what was approved in the ASC. See Attachment 7-2, Table 2 for the full visual analysis. Note that both protected areas are closest/crossed in proximity to originally approved, unchanged portions of the site boundary as opposed to the site boundary realignments proposed by RFA 1 (see Figure 7-5). The Glass Hill Preserve/State Natural Heritage Area was added post submittal of the ASC, listed under the updated OAR 345-001-0010(49)(I). Alternative routes were studied as part of the ASC and in compliance with the updated OAR 345-022-0040(2)(a), the approved Morgan Lake Alternative route that passes through the Glass Hill Preserve/State Natural Heritage Area was ultimately selected as the least impact option. The Boardman Research Natural Area was present prior to submittal of the ASC and was added to this analysis as a result of updates to the previous OAR 345-022-0040(1)(o) and new OAR 345-001-0010(49)(i), which previously excluded the protected area from analysis due to management by the Department of Defense and not BLM. Alternative routes were studied as part of the ASC and in compliance with the updated OAR 345-022-0040(2)(a), the approved West of Bombing Range Road Alternative 1 route that passes adjacent to the Boardman Research Natural Area was ultimately selected as the least impact option. See Attachment 7-2, Table 1 for the full impact analysis.

³⁰ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 296-325 (September 2022)

visual impact reduction), GEN-SR-04 (Birch Creek Area of Critical Environmental Concern visual impact reduction), GEN-HC-01 (Oregon Trail/National Historic Trail resource impact avoidance), GEN-HC-02 (implementation of Historic Properties Management Plan), PRE-PS-02 (traffic management and control measure implementation), and GEN-PS-01 (controlled helicopter use within 2 miles of the protected or recreation areas).

Note that contact information for the applicable land management agencies as well as reference to individual subsections under OAR 345-001-0010(49) have been added for each identified protected area per updates to OAR 345-021-0010(I)(A) (see Attachment 7-2, Table 1).

The Proposed Site Boundary Additions do not alter the basis for the Council's previous findings, or its conclusion that the Project will not likely result in a significant adverse impact to any Protected Areas in the analysis area. Therefore, the Proposed Site Boundary Additions meet the requirement of the Protected Areas Standard.

7.1.5 Fish and Wildlife Habitat - OAR 345-022-0060

The Council's Fish and Wildlife Habitat Standard requires the Council to find that the design, construction, and operation of a facility is consistent with the Oregon Department of Fish and Wildlife's (ODFW) habitat mitigation goals and standards, as set forth in OAR 635-415-0025. The Council previously found that the Project complies with the Fish and Wildlife Habitat Standard. The following describes the Certificate Holder's review of the effects on fish and wildlife habitat from the Proposed Site Boundary Additions and any additional information required to comply with the Fish and Wildlife Habitat Standard.

7.1.5.1 Background Review

IPC reviewed ODFW's current list of sensitive species (ODFW 2021a), updated databases from the Oregon Biodiversity Information Center (ORBIC 2021), U.S. Forest Service and BLM (USFS 2022; BLM 2022), and StreamNet (2021) to inform which state sensitive species have the potential to occur in or near the proposed changes. IPC also reviewed existing landcover data (USGS 2011) to determine the habitat types that occur in the proposed changes.

7.1.5.2 Surveys

IPC has performed biological surveys on the Proposed Site Boundary Additions following the protocols presented in Attachment P1-2 of Exhibit P1 of the ASC and per the Site Certificate conditions PRE-FW-01 and PRE-FW-02. Table 7.1-11 includes a list of surveys, the proposed changes at which the surveys are being performed, and the current status of those surveys.

Washington ground squirrel (WAGS; *Urocitellus washingtoni*), pygmy rabbit (*Brachylagus idahoensis*), great gray owl (*Strix nebulosa*) and flammulated owl (*Psiloscops flammeolus*), and northern goshawk (*Accipiter gentilis*) and American three-toed woodpecker (*Picoides dorsalis*) surveys have been partially completed for the Proposed Site Boundary Additions. Terrestrial visual encounter surveys, rare plant surveys, noxious weed surveys, and wetland surveys of the proposed changes are also partially completed. Most surveys are considered ongoing due to right of entry; however, surveys will be completed on all proposed changes prior to construction. Survey findings are incorporated in this RFA 1 where available.

Table 7.1-11. Biological Resources Surveys

Survey Type	Survey Location	Status
Washington ground squirrel	Little Juniper Canyon Alternative, Approved Route access road changes in Morrow County	Ongoing (Attachment 7-3)
Terrestrial Visual Encounter Survey	All proposed changes.	Ongoing
Pygmy Rabbit	Durbin Quarry Alternative, Approved Route access road changes in Baker County	Ongoing (Attachment 7-4)
Rare Plants	All proposed changes.	Ongoing
Noxious Weeds	All proposed changes.	Ongoing
Great Gray Owl and Flammulated Owl	Approved Route access road changes in Union County	Ongoing
Northern Goshawk and American Three-toed Woodpecker	Approved Route access road changes in Union County	Ongoing
Raptor Nest	All proposed changes.	IPC will perform pre- construction raptor nest surveys during the breeding season prior to scheduled construction (anticipated in 2023).
Wetland	All proposed changes.	Ongoing

7.1.5.3 Findings

IPC has performed habitat categorization per OAR 635-415-0025 by using an existing landcover dataset (USGS 2011) as the basis for habitat mapping within the site boundary of the proposed changes. IPC also used the findings of the WAGS surveys and ODFW elk and mule deer winter range designations to inform the habitat categorization. The habitat categorization followed the process described in Attachment P1-1 of the ASC.

A single WAGS colony was identified within the survey area associated with the Little Juniper Canyon Alternative in Morrow County. No Category 1 WAGS habitat occurs within the proposed site boundary changes. Category 2 WAGS habitat (within 1.5 kilometers of colony boundary) is included in the habitat categorization of the site boundary of the proposed changes. No pygmy rabbits or their sign were observed during surveys. No owl, goshawk, or woodpecker nests were identified during surveys. Raptor nest surveys will be performed during the breeding season prior to construction.

Mule deer winter range and elk winter range are both considered Category 2 habitat. Two of the three proposed alternatives are in mule deer and elk winter range: True Blue Gulch and Durbin Quarry. Several of the Approved Route access road changes occur in elk and mule deer winter range in Umatilla, Union, Baker, and Malheur counties.

Table 7.1-12 shows the habitat categorization for the proposed changes. Figure 7-7 and Figure 7-8 contain maps showing the habitat categorization for the site boundary of the proposed changes.

Table 7.1-12. Habitat Categorization of RFA 1 Site Boundary

		Habitat Category							
Proposed Change	1	2	3	5	6	Total			
Little Juniper Canyon	78.7								
Agriculture / Developed					35.8	34.6			
Shrubland		42.8				42.7			
True Blue Gulch Alter	rnative					422.8			
Bare Ground		8.2				8.2			
Forest / Woodland		116.6				116.6			
Grassland		18.3				18.3			
Riparian Vegetation		2.5				2.5			
Shrubland		277.0				277.0			
Durbin Quarry Altern	ative					130.0			
Agriculture / Developed					1.4	1.4			
Grassland		9.3				9.3			
Shrubland		119.3				119.3			
Approved Route Acc	ess Road Ch	anges				404.5			
Agriculture / Developed					58.1	58.1			
Bare Ground		10.5	0.6			11.1			
Forest / Woodland		9.6	37.4			47.0			
Grassland		70.6	1.7			72.3			
Open Water		3.2				3.2			
Riparian Vegetation		0.2	0.5			0.7			
Shrubland		178.9	33.2			212.2			

Review of the most recent ODFW sensitive species list and species occurrence datasets would not warrant any changes to the previously prepared Table P1-5 in Exhibit P1 of the ASC that indicates which sensitive species are likely to occur near the Project. The discussion of the nature and duration of potential impacts to fish and wildlife in Exhibit P1 of the ASC is applicable to the Proposed Site Boundary Additions.

Quantification of acreages of temporary and permanent impacts by habitat type and category of the proposed changes are included in Table 7.1-13 and will be incorporated in the final habitat mitigation plan.

Table 7.1-13. Temporary and Permanent Impact Calculations

	Habitat Category							
Proposed	2		3		5			3
Change	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm
Little Juniper Cany	on Alterna	tive						
Agriculture /								
Developed								
Shrubland	6.6 1.6						7.4	0.9
Subtotal	6.6	6.6 1.6					7.4	0.9
True Blue Gulch A	Iternative							
Forest / Woodland	0.6	0.0						
Grassland	8.7	1.7						
Riparian Vegetation	ation 3.1 0.9							
Shrubland	58.4 12.5						·	·
Subtotal	70.8	15.1					·	

	Habitat Category							
Proposed	2		3	3			()
Change	Temp	Perm	Temp	Perm	Temp	Perm	Temp	Perm
Durbin Quarry Alte	rnative							
Agriculture / Developed							0.5	
Grassland	1.8	0.4						
Shrubland	28.9	3.7						
Subtotal	30.7	4.1					0.5	
Approved Route A	ccess Road	d Changes	5					
Agriculture / Developed							9.1	5.3
Bare Ground	2.0	0.9	0.1	0.1				
Forest / Woodland	1.5	1.3	6.6	2.6				
Grassland	12.6	6.6	0.2	0.2				
Open Water	1.0	0.5						
Riparian Vegetation	0.0	0.0						
Shrubland	32.6	16.3	5.6	2.7				
Subtotal	2.0	0.9	0.1	0.1			9.1	5.3
Grand Total	157.7	46.4	12.5	5.5			17.0	6.2

The Durbin Quarry Alternative and several Approved Route access road changes occur in greater sage-grouse (*Centrocercus urophasianus*) habitat. Greater sage-grouse habitat designations are defined in Exhibit P-2 of the ASC. The Durbin Quarry Alternative and some Approved Route access road changes in Baker County occur in Core Area and Low Density habitat. The types of impacts on sage-grouse and their habitat associated with the changes proposed in RFA 1 would be similar to those discussed in Exhibit P-2 of the ASC.

The proposed changes that occur in elk winter range would result in the types of impacts discussed in Exhibit P-3 of the ASC.

7.1.5.4 Conclusion

Ground-disturbing activities will be avoided in WAGS Category 1 habitat (within 785 feet of the colony boundary) per condition CON-TE-01. Similarly, ground-disturbing activities will not occur in elk or mule deer winter range from December 1 to March 31 per condition CON-FW-01 (with exceptions) and ground disturbing activities will not occur within the seasonal restriction areas associated with active raptor nests per condition CON-FW-04 (with exceptions). Acreages of temporary and permanent impacts by habitat type and category will be incorporated in the final habitat mitigation plan per condition GEN-FW-04. All work will be performed in accordance with the draft Reclamation and Revegetation Plan (Attachment P1-3 of the Final Order), draft Vegetation Management Plan (Attachment P1-4 of the Final Order), and draft Noxious Weed Plan (Attachment P1-5 of the Final Order), which will be finalized prior to construction per conditions GEN-FW-01, GEN-FW-02, and GEN-FW-03.

The Proposed Site Boundary Additions that occur in greater sage-grouse habitat would be evaluated in a final Sage-Grouse Habitat Mitigation Plan prior to construction per condition PRE-FW-03.

The Proposed Site Boundary Additions that occur in elk habitat would be evaluated with the rest of the Project in a final Habitat Mitigation Plan.

The Proposed Site Boundary Additions that would require fish passage consideration would be addressed in a final Fish Passage Plan in consultation with ODFW per condition GEN-FP-01.

Therefore, based on the information provided and the conditions imposed on the Project, the Council may conclude that the Proposed Site Boundary Additions will comply with the Fish and Wildlife Habitat standard.

7.1.6 Threatened and Endangered Species – OAR 345-022-0070

The Council previously found the Certificate Holder has demonstrated an ability to construct, operate, and retire the Project in compliance with Council standards and conditions of the Site Certificate, including the Threatened and Endangered Species Standard (OAR 345-022-0070). The Certificate Holder's assessment of the Project's compliance with the Threatened and Endangered Species Standard was included as Exhibit Q of the ASC. The following describes the Certificate Holder's review of the effects on threatened and endangered species from the Proposed Site Boundary Additions.

7.1.6.1 Background Review

IPC reviewed ODFW's Threatened, Endangered, and Candidate Fish and Wildlife Species list (ODFW 2021b) and ODA's Threatened, Endangered, and Candidate Plant Species list (ODA 2022) to determine which species are currently listed under the Oregon Endangered Species Act (ORS 496.171 – 496.192). Additionally, IPC reviewed updated databases from the Oregon Biodiversity Information Center (ORBIC 2022), U.S. Forest Service and BLM (USFS 2022; BLM 2022), and StreamNet (2022) to inform which Threatened and Endangered species have the potential to occur in or near the proposed changes.

Species with the potential to occur in or near the proposed changes include WAGS, Snake River Chinook Salmon (Spring/Summer; *Oncorhynchus tshawytscha*), and several threatened and endangered plant species listed in Table 7.1-14. The background review did not identify any threatened or endangered species associated with RFA 1 that were not previously addressed in the ASC.

Several known occurrences of WAGS tracked by the Oregon Biodiversity Information Center overlap the Little Juniper Canyon Alternative and four proposed changes to the Approved Route access roads in Morrow County. The occurrences which overlap the Little Juniper Canyon Alternative and three of the proposed changes to the Approved Route access roads are historical and were last observed in 1987 (prior to IPC's observations nearby but non-overlapping the Little Juniper Canyon Alternative in 2022). The occurrence overlapping the fourth proposed change to the Approved Route access roads was last observed in 2011 (however IPC surveyed the entirety of this proposed change to site boundary in 2022 and did not find any active colonies).

Several known occurrences of threatened and endangered plant species overlap the changes proposed in RFA 1. Snake River goldenweed (*Pyrrocoma radiata*) is an endangered plant species, and two known occurrences overlap the Durbin Quarry Alternative and two additional proposed changes to other access roads in Baker County (ORBIC 2022; BLM 2022). One occurrence of Lawrence's milkvetch (*Astragalus collinus* var. *laurentii*) overlaps four of the proposed changes to other access roads in Morrow County; however, this occurrence was last observed in 1976 (ORBIC 2022).

Additionally, numerous other known occurrences of threatened and endangered plant species overlap the analysis area (site boundary buffered by a half-mile) with the changes proposed in

RFA 1 including Snake River goldenweed, Lawrence's milkvetch, and Cronquist's stickseed (*Hackelia cronquistii*). Several other plant species have recorded observations under 5 miles from the analysis area and are presented below in Table 7.1-14.

No streams bearing Snake River Chinook salmon (Spring/Summer) overlap the proposed changes to the site boundary. The only record of Snake River Chinook salmon (Spring/Summer) that overlaps the analysis area occurs in the Grande Ronde River about a third of mile from a proposed change to an access road in Union County.

Table 7.1-14. State Listed Threated and Endangered Species Potentially Present within the Analysis Area

Туре	Species	Location	Counties	State Status	Justification
Wildlif e	Washington ground squirrel (<i>Urocitellus</i> washingtoni)	Little Juniper Canyon Alternative	Morrow	Endangered	Known records in analysis area
Fish	Snake River Spring/Summe r Chinook Salmon (Oncorhynchu s tshawytscha)	Approved Route access road changes in Union County	Union	Threatened	Nearest record is within the analysis area
Plant	Lawrence's milkvetch (Astragalus collinus var. laurentii)	Little Juniper Canyon Alternative; Approved Route access road changes in Morrow and Umatilla Counties	Morrow, Umatilla	Threatened	Habitat occurs within analysis area; nearest occurrence overlaps analysis area
Plant	Mulford's milkvetch (Astragalus mulfordiae)	Approved Route access road changes in Malheur County	Malheur	Endangered	Nearest occurrence is within 5 miles of the analysis area
Plant	Smooth mentzelia (<i>Mentzelia</i> <i>mollis</i>)	Approved Route access road changes in Malheur County	Malheur	Endangered	Nearest occurrence is within 5 miles of the analysis area
Plant	Cronquist's stickseed (Hackelia cronquistii)	Durbin Quarry Alternative; Approved Route access road changes in Baker and Malheur Counties	Baker, Malheur	Threatened	Known occurrence within analysis area
Plant	Oregon semaphore grass (<i>Pleuropogon</i> oregonus)	Approved Route access road changes in Union County	Union	Threatened	Nearest occurrence is within 5 miles of the analysis area

Туре	Species	Location	Counties	State Status	Justification
Plant	Snake River goldenweed (<i>Pyrrocoma</i> radiata)	Durbin Quarry Alternative; True Blue Gulch Alternative; Approved Route access road changes in Baker and Malheur Counties	Baker, Malheur	Endangered	Known occurrence within the analysis area
Plant	Howell's spectacular thelypody (<i>Thelypodium</i> howellii ssp.	Approved Route access road changes in Baker and Union Counties	Baker, Union	Endangered	Nearest occurrence is within 5 miles of the analysis area

7.1.6.2 Surveys

spectabilis)

IPC performed surveys for WAGS within a 1,000-foot buffer of the site boundary in suitable habitat (survey area) in the Little Juniper Canyon Alternative and numerous proposed changes to other access roads in Morrow County in April and May 2022 (Attachment 7-3). A 1,000-foot buffer on the site boundary was surveyed because ODFW recommends a 785-foot buffer in continuous suitable habitat around WAGS colonies as an avoidance area for energy development projects. Small portions of the survey area were not able to be fully surveyed due to right of entry on some private lands and because the proposed changes to the site boundary for the RFA 1 were finalized after the competition of the 2022 field season.

Threatened and endangered plant species surveys have been completed at the Little Juniper Canyon Alternative. The Durbin Quarry Alternative is about 90 percent surveyed and the True Blue Gulch Alternative has yet to be surveyed. About 20 percent of the Approved Route access road changes spread throughout Baker, Malheur, Morrow, Union and Umatilla counites have been surveyed. Threatened and endangered plant species surveys will be completed prior to construction. Table 7.1-15 summarizes the surveys performed for threatened and endangered species.

Steelhead salmon, rainbow (redband) trout, and Snake River Spring/Summer Chinook Salmon are the only salmonids known to inhabit the streams within the analysis areas. No streams or rivers (Grande Ronde River) bearing Snake River Spring/Summer Chinook will be affected by the proposed changes to the site boundary in Union County. Fish presence was previously determined in the Fish Habitat and Stream Crossing Assessment Summary Report (Attachment P1-7B of the ASC). IPC will update the fish presence determinations for the Project as part of preparing a final Fish Passage Plan per condition GEN-FP-01.

Table 7.1-15. Status and Results of Surveys by Proposed Change

Section	Type	Status	Results	County
Little Juniper Canyon Alternative	Washington ground squirrels	Partially Complete	Found within the survey area; 785-foot buffer of colony does not overlap project features	Morrow
Approved Route access road changes in Morrow County	Washington ground squirrels	Partially Complete	No Washington ground squirrels found; full results not yet available.	Morrow

Section	Туре	Status	Results	County
Little Juniper Canyon Alternative	Threatened and endangered (T&E) plant species	Complete	No T&E plant species found	Morrow
Durbin Quarry (ODOT) Alternative	T&E plant species	Partially Complete (90%)	Snake River goldenweed population observed by IPC in 2022 overlaps the pulling and tensioning area.	Baker
True Blue Gulch Alternative	T&E plant species	Incomplete	No T&E plant species found; full results not yet available	Baker
Approved Route access road changes in Baker County	T&E plant species	Incomplete	No T&E plant species found; full results not yet available	Baker
Approved Route access road changes in Malheur County	T&E plant species	Incomplete	No T&E plant species found; full results not yet available	Malheur
Approved Route access road changes in Morrow County	T&E plant species	Incomplete	No T&E plant species found; full results not yet available	Morrow
Approved Route access road changes in Umatilla County	T&E plant species	Incomplete	No T&E plant species found; full results not yet available	Umatilla
Approved Route access road changes in Union County	T&E plant species	Incomplete	No T&E plant species found; full results not yet available	Union

7.1.6.3 Findings

One WAGS colony was found within the survey area associated with the Little Juniper Canyon Alternative in Morrow County. The colony is located more than 785 feet outside of the proposed site boundary (no Category 1 habitat within the site boundary).

One populations of Snake River goldenweed was found within the site boundary associated with the Durbin Quarry Alternative. This population is located within and expands beyond a planned pulling and tensioning area.

7.1.6.4 Conclusion

As previously stated in the Fish and Wildlife Habitat section above, ground-disturbing activities will be avoided in WAGS Category 1 habitat (within 785 feet of the colony boundary) per condition CON-TE-01.

Per condition CON-TE-02, the population of Snake River goldenweed which overlaps the pulling and tension area associated with the Durbin Quarry Alternative will be avoided by micrositing (by a 33-foot buffer) the road corridor. If avoidance is not possible, temporary construction mats will be installed over soils where the threatened or endangered plant species have been

observed and where construction vehicles will be operated. The same approach will be followed if threatened or endangered plant are identified during ongoing surveys prior to construction.

All previously imposed Council conditions for threatened and endangered species apply to RFA 1. There will be no changes to the conditions, and the proposed changes to the Project do not affect the Certificate Holder's ability to comply with any of the other previously imposed Site Certificate conditions for threatened and endangered species. Therefore, for the reasons discussed above and subject to the Site Certificate conditions, the Proposed Site Boundary Additions will comply with the Council's Threatened and Endangered Species Standard.

7.1.7 Scenic Resources – OAR 345-022-0080

The Council previously concluded that the Project complies with the Scenic Resources Standard. OAR 345-022-0080 requires the Council to determine that the design, construction, and operation of the proposed Project will not have a "significant adverse impact" to any significant or important scenic resources and values in the analysis area. The previous scenic resource analysis for the ASC (Exhibit R) found 47 applicable federal and local land use management plans or development codes within the 10-mile analysis area of the Project. Based on the Certificate Holder's review of applicable land use plans, 23 of the 47 plans or codes have been updated or replaced by a new plan since the ASC (Baker County 2016, Benton County 2022, City of Hermiston 2014, City of Baker 2020, City of Island City 2022, City of Ione 2009, City of Irrigon 2014, 2017, City of La Grande 2013, City of Pendleton 2022, City of Stanfield 2017, City of Umatilla 2013, City of Vale 2014, CTUIR 2018, Morrow County 2017, 2019, ODFW 2017, 2018, 2022, OPRD 2019, Umatilla County 2022, Union County 2021, Washington County 2020). The updates did not identify additional scenic resources or include provisions that will warrant changes to the previous analyses of scenic resources. See Attachment 7-5, Table 1 for a description of the plans and codes and any updates. See Figure 7-9 for the locations of the identified scenic resources.

Additionally, the proximity of a majority of the previously identified scenic resources to the RFA 1 analysis area either remained the same as previously described in the ASC or increased, thus the impacts will be less than or equal to what was previously approved (Attachment 7-5, Table 2). For the one scenic resource that decreased in proximity to the Project (SR B5), the distances changed by approximately 0.1 mile, thus impacts were found to be similar to what was previously approved for these areas (Attachment 7-5, Table 2).

The Certificate Holder completed a comparative zone of visual influence (ZVI) analysis, presenting any change in visibility of the approved transmission line route compared to the proposed changes. For the vast majority of the proposed changes, there will be no change to the visibility of the transmission line. There are small, scattered amounts of decreased visibility and even smaller, scattered amounts of increased visibility. The impacts associated with these changes in visibility were found to be similar to what was previously approved for these areas (Attachment 7-5, Table 2).

Continued implementation of the following Site Certificate conditions will ensure that impacts to scenic resources will be minimized: GEN-PA-02 (avoidance of Ladd Marsh Wildlife Area if Morgan Lake alternative route is chosen), GEN-SR-01 (use of dull-galvanized steel), GEN-SR-02 (Union County visual impact reduction), GEN-SR-03 (National Historic Oregon Trail Interpretive Center visual impact reduction), and GEN-SR-04 (Birch Creek Area of Critical Environmental Concern [ACEC]).

Therefore, the Proposed Site Boundary Additions do not alter the basis for the Council's prior findings that the Project complies with the Scenic Resources Standard.

7.1.8 Historical, Cultural and Archaeological Resources – OAR 345-022-0090

The Council previously concluded that the Project complies with the Historical, Cultural and Archaeological Resources Standard. OAR 345-022-0090 requires the Council to determine that the design, construction, and operation of the proposed Project will not have a significant adverse impact on historic, cultural, or archaeological resources that have been listed on, or will likely be listed on the National Register of Historic Places (NRHP); for a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and for a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).

The previous historic, cultural, and archaeological resource analysis for the ASC (Exhibit S) is summarized in the Proposed Order, particularly in Tables HCA-2, -3, -4, -6, and -7. These tables identify 29 avoided/not impacted segments/resources associated with the Oregon Trail, 10 potentially indirectly impacted segments/resources associated with the Oregon Trail, three (3) indirectly impacted Historic Properties of Religious and Cultural Significance to Indian Tribes, 104 potentially impacted resources, and 23 inventoried resources subject to the standards in OAR 345-022-0090.

7.1.8.1 Background Review

IPC has completed record searches to identify previously recorded archaeological and historic sites within the site boundary of all proposed changes and that might be encountered during the course of the Project surveys. Research was conducted at the Oregon State Historic Preservation Office (SHPO), Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Tribal Historic Preservation Office, U.S. Department of Agriculture, Forest Service (USFS), and BLM offices to identify previous cultural resource surveys and previously recorded cultural resources within the Analysis Area. Oregon SHPO databases consulted include Oregon Archaeological Records Remote Access and Oregon Historic Sites Database. Data were collected for both archaeological and historic sites and included site location, age, type, ownership, NRHP status, and a brief description of site attributes. Additional sources of information included the Oregon Historic Trails website (http://www.oregonhistorictrailsfund.org), USGS Mineral Resource Data System, General Land Office plats, early USGS and state maps, other historic maps and aerial photographs, ethnographic literature, and historical contexts.

7.1.8.2 Surveys

Cultural resource field surveys were performed consistent with applicable survey protocol plans and situated within the site boundary of all proposed changes. These include a cultural resources pedestrian survey of the direct analysis area and surveys in support of the Visual Assessment of Historic Properties within the Visual Assessment analysis area. These preconstruction surveys are ongoing and have identified resources subject to the Standards in OAR-345-022-0090 and they are listed in Table 7.1-16. Reports on these identified resources are forthcoming.

The Certificate Holder also completed a comparative ZVI analysis, presenting any change in visibility of the approved transmission line route compared to the proposed re-route within the Visual Assessment Analysis Area. For the vast majority of the re-route, there will be no change to the visibility of the transmission line. There are small, scattered amounts of decreased visibility and even smaller, scattered amounts of increased visibility. The impacts associated with these changes in visibility were found to be similar to what was previously approved for resources located in these areas. Outside of site boundary, no additional resources were identified for field analysis within the Visual Assessment analysis area.

Table 7.1-16. Potentially Impacted Resources

Resource		Generalized Resource	NRHP		Project	Land	Applicable EFSC	Impact	Management
Number	County	Description/ Resource Type	Recommendation	Project Route	Component	Ownership	Standard	Avoided?	Comments
Oregon National Historic Trail Route	Umatilla, Union, Baker	Historic Trail	Eligible	Approved Route Access Road Changes	New Road, Primitive	PV	a) Potential Historic Property;	No – No significant physical and visual/auditory impact. No intact NHT segments at road change locations	If avoidance not possible, testing/segment eligibility evaluation/consultation needed.
Sand Hollow Battleground	Morrow/ Umatilla	HPRCSIT	Eligible	Approved Route Access Road Changes	New Road, Bladed, Primitive	BLM, DOD, PV	a) Potential Historic Property	No – potential significant physical and visual/auditory impacts	If avoidance not possible, testing (metal detecting)/ continued consultation needed.
Sisupa	Morrow	HPRCSIT	Eligible	Approved Route Access Road Changes	New Road, Bladed, Primitive	DOD, PV	a) Potential Historic Property	No – potential significant physical and visual/auditory impacts	If avoidance not possible, continued consultation needed.
4B2H-EK-07	Baker	Historic: Water Conveyance (Smith Ditch)	Unevaluated	Approved Route Access Road Changes	Existing Road, Substantial Modification, 21- 70% Improvements	PV	a) Potential Historic Property;	No – Physical and visual/auditory impacts not significant.	Use of existing canal access road will not physically alter ditch. No further management.
7B2H-DM-ISO-22	Baker	Precontact: Isolated Find - Debitage	Unevaluated	Durbin Quarry (ODOT) Alternative	Route Centerline, New Road, Bladed	BLM	a) Potential Historic Property;	Yes	Flag/Avoid
7B2H-BB-ISO-04	Baker	Precontact: Isolated Find - Debitage	Unevaluated	Durbin Quarry (ODOT) Alternative	Route Centerline, New Road, Bladed	PV	a) Potential Historic Property; b) Archaeological site on private lands	Yes	Flag/Avoid
35BA01570/ 4B2H-EK-27	Baker	Historic Road	Not Eligible	Durbin Quarry (ODOT) Alternative	New Road, Bladed	BLM, PV	b) Archaeological site on private land.	No	No further management
35BA01571/ 4B2H-EK-28	Baker	Historic Water Conveyance	Not Eligible	Durbin Quarry (ODOT) Alternative	New Road, Bladed	BLM, PV	a) Potential Historic Property; b) Archaeological site on private lands	Yes	No further management
35BA01564/ 4B2H-EK-30	Baker	Historic Water Conveyance	Not Eligible	Durbin Quarry (ODOT) Alternative	New Road, Bladed	BLM	None - Archaeological site not eligible for NRHP. Federal land.	Yes	No further management

Resource		Generalized Resource	NRHP		Project	Land	Applicable EFSC	Impact	Management
Number	County	Description/ Resource Type	Recommendation	Project Route	Component	Ownership	Standard	Avoided?	Comments
8B2H-DM-23	Baker	Multi-component: Precontact: Lithic/Tool Scatter; Historic mine	Unevaluated	True Blue Gulch Alternative	Existing Road, Substantial Modification 71- 100% improvements, New Road, Bladed	BLM	a) Potential Historic Property	No – Potential significant physical impact for new road. No significant physical impact for existing road with mitigation.	If avoidance not possible, testing/ eligibility evaluation needed for new road. Gravel will be placed over existing road through site to protect resource from physical impacts of existing road use.
8B2H-DM-24	Baker	Precontact: Lithic/Tool Scatter	Unevaluated	True Blue Gulch Alternative	Existing Road, Substantial Modification 71- 100% improvements	PV	a) Potential Historic Property; b) Archaeological site on private lands	No – physical impact not significant with mitigation.	If avoidance not possible, gravel will be placed over existing road through site to protect resource from physical impacts of existing road use.
8B2H-DM-25	Baker	Precontact: Lithic/Tool Scatter	Unevaluated	True Blue Gulch Alternative	Existing Road, Substantial Modification 71- 100% improvements	PV	a) Potential Historic Property; b) Archaeological site on private lands	No – physical impact not significant with mitigation.	If avoidance not possible, gravel will be placed over existing road through site to protect resource from physical impacts of existing road use.
8B2H-DM-26	Baker	Precontact: Lithic scatter	Unevaluated	True Blue Gulch Alternative	Existing Road, Substantial Modification 71- 100% improvements	PV	a) Potential Historic Property; b) Archaeological site on private lands	No – physical impact not significant with mitigation.	If avoidance not possible, gravel will be placed over existing road through site to protect resource from physical impacts of existing road use.
8B2H-DM-27	Baker	Precontact: Lithic/Tool Scatter	Unevaluated	True Blue Gulch Alternative	Existing Road, Substantial Modification 71- 100% improvements	PV	a) Potential Historic Property; b) Archaeological site on private lands	No – physical impact not significant with mitigation.	If avoidance not possible, gravel will be placed over existing road through site to protect resource from physical impacts of existing road use.

Resource		Generalized Resource	NRHP		Project	Land	Applicable EFSC	Impact	Management
Number	County	Description/ Resource Type	Recommendation	Project Route	Component	Ownership	Standard	Avoided?	Comments
8B2H-DM-20	Baker	Precontact: Lithic/Tool Scatter	Unevaluated	True Blue Gulch	Existing Road, Substantial Modification, 71- 100% Improvements	PV	a) Potential Historic Property; b) Archaeological site on private lands	No – physical impact not significant with mitigation.	If avoidance not possible, gravel will be placed over existing road through site to protect resource from physical impacts of existing road use.
35BA1585 (6B2H-SA-14)	Baker	Precontact: Lithic Scatter	Unevaluated	Approved Route Access Road Changes	Existing Road, Substantial Modification, 21- 70% Improvements	PV	a) Potential Historic Property; b) Archaeological site on private lands	No – physical impact not significant with mitigation.	If avoidance not possible, gravel will be placed over existing road through site to protect resource from physical impacts of existing road use.
4B2H-EK-17	Baker	Historic Water Conveyance	Unevaluated	Approved Route Access Road Changes	Existing Road, No Improvements Permitted	PV	a) Potential Historic Property; b) Archaeological site on private lands	Yes	No features of site in existing road. No improvements of existing road permitted within 30 meters of site.
NRCS2011- T11S-R42E- S23/01	Baker	Precontact: Isolated Find: Debitage	Unevaluated	Approved Route Access Road Changes	New Road, Bladed	PV	a)Potential Historic Property; b) Archaeological site on private lands	No – potential physical impact	Flag/Avoid. Boundary Probe.
02S3600E07002	Union	Historic	Not Eligible	Approved Route Access Road Changes	Existing Road, Substantial Modification, 71- 100% Improvements	USFS, State of Oregon	None - Archaeological site not eligible for NRHP. Federal land.	No – physical impact not significant.	No further management
8B2H-AB-01.2	Malheur	Historic: South Canal Segment	Unevaluated (No status listed)	Approved Route Access Road Changes	Existing Road, Substantial Modification, 21- 70% Improvements	PV	a) Potential Historic Property	Yes	No further management
8B2H-JS-05	Malheur	Historic: Canal	Unevaluated (No Status listed)	Approved Route Access Road Changes	Existing Road, Substantial Modification, 21- 70% Improvements	PV	a) Potential Historic Property	Yes	No further management
8B2H-DM-51	Malheur	Multicomponent: Lithic Scatter and Refuse Scatter	Unevaluated	Approved Route Access Road Changes	New Road, Bladed	BLM, PV	a) Potential Historic Property; b) Archaeological site on private lands	No – potential physical impact	If avoidance not possible, testing/ eligibility evaluation needed.

Resource		Generalized Resource	NRHP		Project	Land	Applicable EFSC	Impact	Management
Number	County	Description/ Resource Type	Recommendation	Project Route	Component	Ownership	Standard	Avoided?	Comments
8B2H-ND-04	Malheur	Precontact: Lithic Scatter	Unevaluated	Approved Route Access Road Changes	New Road, Bladed	BLM	a) Potential Historic Property	No – potential physical impact	If avoidance not possible, testing/ eligibility evaluation needed.
35ML1674 (B2H- SA-33)	Malheur	Historic: Water Conveyance (Vines Ditch)	Eligible	Approved Route Access Road Changes	Existing Road, Substantial Modification, 71- 100% Improvements	BLM, PV	a) Potential Historic Property; b) Archaeological site on private lands	No – physical impact not significant with mitigation. Visual/ auditory impacts not significant	If avoidance not possible, gravel will be placed over existing road through site to protect resource from physical impacts of existing road use.
35ML1675 (B2H- SA-32)	Malheur	Historic: Railroad	Eligible	Approved Route Access Road Changes	Existing Road, Substantial Modification, 21- 70% Improvements	PV	a) Potential Historic Property; b) Archaeological site on private lands	No – physical impact not significant with mitigation. Visual/ auditory impacts not significant	If avoidance not possible, gravel will be placed over existing road through site to protect resource from physical impacts of existing road use.
35ML1678 (B2H- BS-77)	Malheur	Precontact: Lithic/Tool Scatter	Eligible	Approved Route Access Road Changes	New Road, Bladed	BLM	a) Potential Historic Property	No – potential physical impact	If avoidance not possible, testing/eligibility evaluation needed.
35ML2203 (B2H- SA-39)	Malheur	Historic: Water Conveyance	Eligible	Approved Route Access Road Changes	Existing Road, No Improvements Permitted	PV	a) Potential Historic Property; b) Archaeological site on private lands	Yes	No improvements of existing road permitted within 30 meters of site.
4B2H-EK-47	Malheur	Historic: Water Conveyance (Vale Oregon Main Canal Segment)	Unevaluated	Approved Route Access Road Changes	New Road, Primitive	PV	a) Potential Historic Property	Yes	No further management.

L | Canal Segment) | Changes | Changes |

BLM = Bureau of Land Management; EFSC = Energy Facility Siting Council; HPMP = Historic Properties Management Plan; HPRCSIT = Historic Property of Religious and Cultural Significance to Indian Tribes; NRHP = National Register of Historic Places; ODOT = Oregon Department of Transportation; PV = Private

7.1.8.3 *Findings*

For those resources subject to the Council's standards, the Historic Properties Management Plan (HPMP) will include the final impact analysis and mitigation proposals for Historic, Cultural, and Archaeological Resources based upon the field surveys and in coordination with the lead federal agencies. The impact analysis and mitigation obligations will be rectified based on the boundary probing, testing, evaluation, and final NRHP eligibility determinations for the sites listed in Table 7.1-16 and will be made by the lead federal agencies in consultation with the Oregon SHPO and consistent with the Programmatic Agreement (PA), for Section 106 compliance. The preconstruction surveys will be included in reports submitted to the Oregon SHPO and EFSC and the NRHP eligibility, effects to resources, and mitigation will be resolved prior to construction consistent with the Site Certificate Conditions.

7.1.8.4 Conclusion

Continued implementation of the following Site Certificate Conditions will ensure that impacts to historic, cultural, and archaeological resources will be minimized: GEN-HC-01 (avoid direct impacts to Oregon Trail/National Historic Trail resources), GEN-HC-02 (prepare HPMP prior to construction (by phase or segment), and CON-HC-01 (completion of a final Cultural Resources Report within three years of construction completion).

The proposed amendment makes no changes that will alter the basis for the Council's earlier findings, or its conclusion that the Project will not likely result in an adverse impact to any historical, cultural and archaeological resources in the Analysis Area, and therefore the Proposed Site Boundary Additions meet the requirement of the Historical, Cultural and Archaeological Resources Standard.

7.1.9 Recreation - OAR 345-022-0100

The Council previously concluded that the Project complies with the Recreation Standard.³¹ The updated Recreation Standard requires the Council to find that the design, construction, and operation of a facility, taking into account mitigation, will not likely result in significant, adverse impacts to important recreational opportunities, as defined by OAR 345-022-0100. Therefore, the Council's Recreation Standard applies to only those recreation areas that the Council deems important. Per Exhibit T of the ASC, there were 26 defined recreations areas within the previously defined 2-mile analysis area, 21 of which were determined to be important recreation areas. Based on the Certificate Holder's review of recreation areas, there is one new recreation area, the Glass Hill Preserve/State Natural Heritage Area, located within 2-miles of the proposed site boundary changes (analysis area) that was not previously addressed (see Figure 7-11, and Attachment 7-6, Tables 1 and 2), and in turn it is determined to be an important recreation area. Additionally, 10 previously identified recreation areas (Powder River [Scenic] and ACEC, Umatilla National Wildlife Refuge, Oregon Trail ACEC National Historic Oregon Trail Interpretive Center Parcel, Columbia Basin - Coyote Springs Wildlife Area, Ladd March Wildlife Area/State Natural Heritage Area, Blue Mountain Crossing Day-Use/Sno-Park, Spring Creek Campground, Virtue Flat Special Recreation Management Area, Blue Mountain Century Scenic Bikeway, and Grand Tour Scenic Bikeway) are not within the RFA 1 analysis area. A total of 17 defined recreation areas and 14 important recreation areas occur within the RFA 1 analysis area. Note that this analysis does not address the previously approved portions of the site boundary and solely addresses the proposed site boundary changes in RFA 1.

³¹ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 568 (September 2022)

The significance of impacts on important recreation areas from direct or indirect loss of recreational opportunity, traffic, noise, visual viewshed alteration, and other impacts are disclosed in Exhibit T and the changes proposed by RFA 1 will not contribute any additional significant impacts to those already considered³² (see Figure 7-11 and Attachment 7-6, Tables 1 and 2 for a full description). No loss of opportunity is anticipated for the newly identified recreation area, the Glass Hill Preserve/State Natural Heritage Area, due to the probability of no public access³³, otherwise, less than significant, temporary intermittent access delays during construction, and no long-term loss of opportunity: Any traffic impacts from construction experienced at the Glass Hill Preserve/State Natural Heritage Area, will be short term or negligible due to probable lack of public access, and operational impacts will remain negligible due to infrequent maintenance and inspections required at the Project; construction noise impacts will be temporary in duration and episodic, and minimal due to the location of where the recreation site is crossed or negligible due to probable lack of public access, and operational noise impacts will be intermittent (due to infrequent maintenance and inspections) or otherwise indistinguishable from existing background noise; and visual impacts will be range from medium intensity (i.e., structures will introduce moderate visual contrast and appear co-dominant with the landscape and existing infrastructure), to less than significant due to the probable lack of public access, views of the Project being from mostly neutral or elevated vantage points, the localization of impacts, and no management for scenic quality (see Figure 7-12 and Attachment 7-6, Tables 1 and 2).

Additionally, the proximity of a majority of the previously identified recreation areas to the RFA 1 analysis area either remained the same as previously described in the ASC or increased, thus the impacts will be less than or equal to what was previously approved (Attachment 7-6, Table 1). For the two recreation areas that decreased in proximity to the Project, the Farewell Bend State Recreation Area and the Lindsay Prairie Preserve/State Natural Heritage Area, the distances decreased by 0.2 and 0.3 miles, respectively; thus, impacts were found to be similar to what was previously approved for these areas. The Farewell Bend State Recreation Area is closest in proximity to road design changes proposed by RFA 1 as opposed to the proposed three route realignments. Alternatively, the Lindsay Prairie Preserve/State Natural Heritage Area is closest in proximity to one of the proposed three route realignments proposed by RFA 1. specifically the Little Juniper Canyon Alternative. It is determined that even with the proposed changes, the loss of opportunity, traffic impacts, noise impacts, and visual impacts will remain comparable to what was previously approved.³⁴ See Attachment 7-6, Tables 1 and 2 for a full assessment of impacts at each recreation area. Continued implementation of the following Site Certificate Conditions will ensure that impacts to recreation areas will be minimized: GEN-RC-01 (Morgan Lake Park visual impact reduction), GEN-SR-03 (National Historic Oregon Trail Interpretive Center visual impact reduction), GEN-SR-04 (Birch Creek Area of Critical Environmental Concern visual impact reduction), GEN-HC-02 (implementation of Historic Properties Management Plan), PRE-PS-02 (traffic management and control measure implementation), and GEN-PS-01 (controlled helicopter use within two-miles of protected or recreation areas).

The changes proposed in RFA 1 do not alter the basis for the Council's earlier findings, or its conclusion that the Project will not likely result in a significant adverse impact to any Recreation

³² Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 546-568 (September 2022)

³³ Information on access obtained through a personal communication between Kristen Gulick, Tetra Tech, and Lindsey Wise, Oregon State University, Institute for Natural Resources, July 13, 2022.

³⁴ Boardman to Hemingway Transmission Line Application for Site Certificate - Final Order, p. 546-568 (September 2022).

Areas in the analysis area. Therefore, the Proposed Site Boundary Additions meet the requirement of the Recreation Areas Standard.

7.1.10 Wildfire Prevention and Risk Mitigation – OAR 345-022-0115

OAR 345-022-115 Wildfire Prevention and Risk Mitigation

- (1) To issue a site certificate, the Council must find that:
- (a) The applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources, by identifying:
- (A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years. including but not limited to topography, vegetation, existing infrastructure, and climate;
- (B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;
- (C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;
- (D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and firesensitive wildlife habitat; and
- (E) All data sources and methods used to model and identify risks and areas under paragraphs (A) through (D) of this subsection.
- (b) That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan approved by the Council. The Wildfire Mitigation Plan must, at a minimum:
- (A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;
- (B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section:
- (C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;
- (D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and
- (E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.
- (2) The Council may issue a site certificate without making the findings under section (1) if it finds that the facility is subject to a Wildfire Protection Plan that has been approved in compliance with OAR chapter 860, division 300.

(3) This Standard does not apply to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 on or before the effective date of this rule.

IPC has prepared a Wildfire Mitigation Plan (Attachment 7-7) that has been filed with the Public Utility Commission of Oregon in compliance with OAR chapter 860, division 300. This plan would apply to the entire Project, including the proposed changes in RFA 1. Therefore, the Council may conclude that the Proposed Site Boundary Additions comply with OAR 345-022-0115(2) as they are subject to a wildfire protection plan approved by the Public Utility Commission.

7.2 Other Standards and Laws

7.2.1 Noise Control Regulations – OAR 340-035-0035

The Project Order requires an analysis of the Project's compliance with the Oregon Noise Regulations at OAR 340-035-0035.³⁵

7.2.1.1 Methods

OAR 345-021-0010(1)(x)(B): An analysis of the proposed facility's compliance with the applicable noise regulations in OAR 340-035-0035, including a discussion and justification of the methods and assumptions used in the analysis.

To demonstrate compliance with the Oregon Department of Environmental Quality (ODEQ) Noise Rules, IPC conducted an acoustic analysis of the Proposed Site Boundary Additions using the same multistep process that was used in the ASC and approved by the Council in the Final Order.³⁶

7.2.1.2 Construction, Regular Maintenance, and Helicopter Noise

OAR 340-035-0035(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: . . . (g) Sounds that originate on construction sites. (h) Sounds created in construction or maintenance of capital equipment; . . . (h) Sounds created in . . . maintenance of capital 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;

The Council previously found that noise resulting from Project's construction activities, regular maintenance activities, and helicopter operations is exempt from the Oregon Noise Regulations at OAR 340-035-0035(1).³⁷ Because the Proposed Site Boundary Changes will involve the same construction, maintenance, and helicopter activities previously evaluated, the Council may

³⁵ Boardman to Hemingway Transmission Line Application for Site Certificate – Second Amended Project Order, p. 21 (July 2018); see also OAR 345-021-0010(1)(y)(B) (requiring the same).

³⁶ Boardman to Hemingway Transmission Line Application for Site Certificate – Final Order at pp. 673-76. ³⁷ Final Order at pp. 655-57. As described in the Final Order, the Department engaged its consultant, Golder Associates Inc. (Golder), to evaluate IPC's methodologies for conducting baseline surveys and identifying the frequency of foul weather. Golder found that IPC's methodologies were sound. See Final Order at p. 676.

rely on its previous findings that those activities are exempt from the relevant Oregon Noise Regulations.

7.2.1.3 Corona Noise

Maximum Allowable Noise Standard

OAR 340-035-0035(1)(b)(B)(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 . . . 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).

Under the maximum allowable noise standard, a new industrial or commercial noise source to be located on a previously unused site may not exceed the noise levels specified in Table 8 of the noise rules. The maximum allowable L₅₀ sound level standard relevant to the Project is 50 A-weighted decibels (dBA). The Council previously found that IPC sufficiently demonstrated that the maximum sound level resulting from corona noise in a "worse-case scenario" (that is, during foul weather) will be no greater than 46 dBA, and accordingly, the Council found that the Project would be in compliance with the maximum allowable sound level standard identified in OAR 340-035-0035(1)(b)(B)(i).³⁸ As shown in Table 7.2-1, the Proposed Site Boundary Additions will result in maximum sound levels no greater than 37 dBA, which is less than the 46 dBA previously considered by the Council. Thus, the Council may rely on its previous findings that the Project complies with maximum allowable noise standard in OAR 340-035-0035(1)(b)(B)(i) and Table 8.

Ambient Antidegradation Standard

OAR 340-035-0035(1)(b)(B)(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 . . . 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).

The ambient antidegradation standard under OAR 340-035-0035(1)(b)(B)(i) allows a maximum increase in ambient statistical noise of 10 dBA, as measured at an "appropriate measurement point" from noise generated from a new industrial source. "Appropriate measurement point" is defined in -0035(3)(B) as a point on the noise sensitive property (also referred to as noise-sensitive receptor [NSR]) nearest to the noise source. The Council previously found that foul weather corona noise from the Project may exceed the ambient antidegradation standard during low wind, late night (midnight to 5 a.m.) conditions. However, the Council granted the Project an exception and a variance to compliance with the ambient antidegradation standard with respect to corona noise, and found that the Project otherwise complies with the Noise Control Regulations. However, the Council granted the Project Regulations.

³⁸ Final Order at p. 679.

³⁹ Final Order at p. 679.

⁴⁰ Final Order at p. 699.

Potential Exceedances of the Ambient Antidegradation Standard

For the proposed site boundary changes, IPC used the same methods that the Council previously reviewed and approved, comparing baseline ambient sound levels to the modeled predicted future sound levels at potentially affected NSRs. For the baseline ambient sound levels, IPC relied on the baseline monitoring positions and related sound data previously reviewed and approved by the Council. IPC identified the potentially affected NSRs using the same approach previously reviewed and approved by the Council—that is, IPC analyzed (a) all NSRs within 1/2 mile of the transmission line; and (b) NSRs out to one mile in areas where the late-night baseline sound level was unusually low (i.e., less than 26 dBA). IPC then compared the ambient baseline sound levels with the predicted future sound levels at the potentially affected NSRs.

IPC identified two potentially affected NSRs: one NSR near the Little Juniper Canyon Alternative, one NSR related to the True Blue Gulch Alternative, and no NSRs related to the Durbin Quarry Alternative. 41 The results of the analysis indicate that during typical fair weather conditions, the Proposed Site Boundary Additions will comply with the ambient antidegradation standard. However, a potential increase of more than 10 dBA above the L_{50} baseline may occur at one of the NSRs during foul weather in low wind, late night conditions. Table 7.2-1 presents the foul weather analysis at the NSRs evaluated by IPC. Figures 7-13 and 7-14 show the orientation of the two NSRs in relation to the Proposed Site Boundary Additions.

Table 7.2-1. Summary of Acoustic Modeling Results for the Proposed Site Boundary Additions

NSR Number	Distance from NSR to Transmission Line (feet)	Nearest Milepost	Related Alternative	Associated Monitoring Point (MP)	Late Night Baseline Sound Pressure Level (dBA)	Predicted Future Sound Level (Foul Weather) (dBA)	Increase (dBA)
3	1,845	17.9	Little Juniper Canyon Alternative	MP05	27	35	+8
5010	2,698	174.2	True Blue Gulch Alternative	MP35	24	37	+13

⁴¹ For the Little Juniper Canyon Alternative, IPC identified the potentially affected NSRs within 1/2 mile of the Proposed Site Boundary Additions. For the True Blue Gulch Alternative, IPC identified the potentially affected NSRs within one mile, rather than 1/2 mile, of the Proposed Site Boundary Additions, because the ambient late night baseline sound level associated with the relevant monitoring point was less than 26 dBA.

Exception to Ambient Antidegradation Standard

OAR 340-035-0035(6): Exceptions: Upon written request from the owner or controller of an industrial or commercial noise source, the Department may authorize exceptions to section (1) of this rule, pursuant to rule 340-035-0010, for: (a) Unusual and/or infrequent events;

A potential increase of more than 10 dBA above the ambient baseline sound levels may occur at one of the potentially affected NSRs during infrequent periods representative of foul weather conditions. The Council previously granted the Project an exception from compliance with the ambient antidegradation standard due to unusual or infrequent foul weather events, as authorized under OAR 345-035-0035(6)(a), subject to the Noise Control Conditions described in the Final Order. Because the Project has already received an exception, IPC does not need to request a separate exception from the Council to address the exceedance related to the Proposed Site Boundary Additions.

In addition, or in the alternative, IPC notes that the same NSR exceedance identified here was previously considered by the Council as part of its decision to grant the Project an exception—NSR 5010 was one of the NSR exceedances presented in the ASC, 43 considered in the Final Order, 44 and contemplated in the Site Certificate Conditions. 45 Furthermore, the predicted noise impacts related to the Proposed Site Boundary Additions (+13 dBA) will be less than the predicted impact the Council approved in the Final Order (+17 dBA). 46 Indeed, IPC worked with the property owner of NSR 5010 to locate the Proposed Site Boundary Additions along the edge of their property, in part, to minimize the noise impacts; and the NSR property owner and IPC have mutually agreed that the Proposed Site Boundary Additions on their property are acceptable. Therefore, because the Council previously considered noise impacts to NSR 5010 as part of its decision to grant the Project an exception and the impacts under the Proposed Site Boundary Additions are less than those previously considered by the Council, the Council may rely on its previous findings and conclusions, which continue to support granting the Project an exception from compliance with the ambient antidegradation standard as it relates to NSR 5010 and the Proposed Site Boundary Additions.

Request for Variance to Ambient Antidegradation Standard

The Council previously granted the Project a variance from compliance with the ambient antidegradation standard under OAR 345-035-0100(1), finding strict compliance would be inappropriate due to conditions beyond IPC's control, special circumstances and physical conditions would render strict compliance unreasonable, and strict compliance would prohibit the Project from being built.⁴⁷ Because the Project has already received a variance, IPC does not need to request a separate variance from the Council to address the exceedance related to the Proposed Site Boundary Additions.

And similar to the discussion related to the exception, because the Council previously considered noise impacts to NSR 5010 as part of its decision to grant the Project a variance and the impacts under the Proposed Site Boundary Additions are less than those previously considered by the Council, the Council may rely on its previous findings and conclusions, which

⁴² See Final Order at p. 682.

⁴³ ASC, Exhibit X, Table X-5, Figure X-8, and at pp. X-33 and X-52.

⁴⁴ Final Order at Table NC-4 and at p. 692.

⁴⁵ Final Order, Attachment 1, Site Certificate at 40 (Noise Control Condition 1).

⁴⁶ See Final Order, Table NC-4.

⁴⁷ See Final Order at pp. 696-99.

continue to support granting the Project a variance from compliance with the ambient antidegradation standard as it relates to NSR 5010 and the Proposed Site Boundary Additions.

7.2.1.4 Quiet Areas

OAR 340-035-0035(1)(c): Quiet Areas. No person owning or controlling an industrial or commercial noise source located either within the boundaries of a quiet area or outside its boundaries shall cause or permit the operation of that noise source if the statistical noise levels generated by that source exceed the levels specified in Table 9 as measured within the quiet area and not less than 400 feet (122 meters) from the noise source.

There are no ODEQ-designated "quiet areas" within the Proposed Site Boundary Additions or within the vicinity of the Project. Therefore, the Project will be in compliance with OAR 340-035-0035(c).

7.2.1.5 Impulse Sound

OAR 340-035-0035(1)(d): Impulse Sound. Notwithstanding the noise rules in Tables 7 through 9, no person owning or controlling an industrial or commercial noise source shall cause or permit the operation of that noise source if an impulsive sound is emitted in air by that source which exceeds the sound pressure levels specified below, as measured at an appropriate measurement point, as specified in subsection (3)(b) of this rule: (A) Blasting. 98 dBC, slow response, between the hours of 7 a.m. and 10 p.m. and 93 dBC, slow response, between the hours of 10 p.m. and 7 a.m. (B) All Other Impulse Sounds. 100 dB, peak response, between the hours of 7 a.m. and 10 p.m. and 80 dB, peak response, between the hours of 10 p.m. and 7 a.m.

OAR 340-035-0035(1)(d) applies to blasting and other impulse sounds resulting from the "operation" of noise sources. Here, while the Project may include certain blasting or other impulse sounds, those sounds will occur during construction and not operation of the Project. Accordingly, the Project will be in compliance with OAR 340-035-0035(1)(d).

7.2.1.6 Measures to Reduce Noise Levels or Noise Impacts, or to Address Complaints

OAR 345-021-0010(1)(x)(C): Any measures the applicant proposes to reduce noise levels or noise impacts or to address public complaints about noise from the facility.

IPC is not proposing any changes to the Noise Control conditions set forth in the Final Order, which would apply to the Proposed Site Boundary Additions.⁴⁸

7.2.1.7 Monitoring

OAR 345-021-0010(1)(x)(D): Any measures the applicant proposes to monitor noise generated by operation of the facility.

IPC is not proposing any changes to the Noise Control conditions set forth in the Final Order, which would apply to the Proposed Site Boundary Additions.⁴⁹

⁴⁸ See Final Order, Attachment 1, Site Certificate at 40-44 (Noise Control Conditions 1 and 2).

⁴⁹ See Final Order, Attachment 1, Site Certificate at 40-44 (Noise Control Conditions 1 and 2).

7.2.1.8 List of Noise Sensitive Properties

OAR 345-021-0010(1)(x)(E): A list of the names and addresses of all owners of noise sensitive property, as defined in OAR 340-035-0015, within one mile of the proposed site boundary.

Per the Second Amended Project Order, the list of NSR owners must include all owners of NSRs within one-half mile, and not one mile, of the Site Boundary.⁵⁰ Refer to Exhibit F, Attachment F-1, for a list of the names and addresses of all owners of NSRs within one-half mile from the Proposed Site Boundary Additions.

7.2.2 Removal-Fill Law

The Oregon Removal-Fill Law (ORS 196.795 through ORS 196.990) and Oregon Department of State Lands regulations (OAR 141-085-0500 through OAR 141-085-0785) require a removal-fill permit if 50 cubic yards or more of material is removed, filled, or altered within many "waters of the state." For activities in ESH streams, State Scenic Waterways and compensatory mitigation sites, a permit is required for any amount of removal or fill.

As detailed in Exhibit J of the ASC, a removal-fill permit is required for the Project. The information provided in Section 5.3 of this RFA 1 will be incorporated into an updated wetland delineation report for the proposed changes per condition PRE-RF-01. An updated removal-fill permit is required prior to construction and IPC will comply with procedures in all removal-fill conditions included in the permit per conditions GEN-RF-03 and GEN-RF-04.

IPC will incorporate the changes proposed in RFA 1 in a revised Joint Permit Application per condition PRE-RF-02 including a final Site Rehabilitation Plan (condition GEN-RF-01) and final Compensatory Wetland and Non-Wetland Mitigation Plan (Condition GEN-RF-02).

Therefore, the Proposed Site Boundary Additions do not significantly alter the prior analysis and the Proposed Site Boundary Additions will comply with the Oregon Removal-Fill Law.

8.0 PROPERTY OWNERS OF RECORD - OAR 345-027-0360(1)(F)

OAR 345-027-0360(1)(f):A list of the names and mailing addresses of property owners, as described in this rule:

- (A) The list must include all owners of record, as shown on the most recent property tax assessment roll, of property located:
- (i) Within 100 feet of property which the subject of the request for amendment, where the subject property is wholly or in part within an urban growth boundary;
- (ii) Within 250 feet of property which is the subject of the request for amendment, where the subject property is outside an urban growth boundary and not within a farm or forest zone; or
- (iii) Within 500 feet of property which is the subject of the request for amendment, where the subject property is within a farm or forest zone; and
- (B) In addition to incorporating the list in the request for amendment, the applicant must submit the list to the Department in an electronic format acceptable to the Department.

⁵⁰ See Second Amended Project Order, Section III(x); Final Order at 673.

A property owner list applicable to this RFA 1 is provided in Attachment 8-1 and the notification area is shown on Figure 8-1.

9.0 CONCLUSION

Based on the information provided in this submittal, IPC has demonstrated that the Proposed Site Boundary Additions will comply with the requirements of the Oregon Energy Facility Site Statutes, ORS 469.300 to 469.520, with all other Oregon statutes and administrative rules applicable to the amendment of the Site Certificate that are within the Council's jurisdiction, and that the existing Site Certificate conditions ensure that the Facility will continue to comply with the applicable laws, standards, and rules. For these reasons, IPC respectfully requests approval of RFA 1.

10.0 REFERENCES

- Baker County. 2020. Baker County Zoning and Subdivision Ordinance.1984-June 2014. Last amended 2020.
- BLM (Bureau of Land Management). 2022. BLM GeoBOB Flora and Fauna Sites Polygon and Weed Infestation Locations. GIS Data. Received April 29, 2022.
- Malheur County. 2021. Malheur County Code. First adopted November 2, 1983. Last amended May 18, 2021.
- Morrow County. 2017. Morrow County Zoning Ordinance. First adopted 1980. Last amended March 6, 1985, amended and readopted in its entirety on November 7, 2001, with recent substantive amendments adopted on July 5, 2017 and October 31, 2017.
- Morrow County. 1986. Morrow County, Oregon Comprehensive Plan. Acknowledged by the LCDC January 30, 1986. Morrow County Planning Department. Heppner, Oregon.
- NRCS (Natural Resources Conservation Service). 2011. U.S. General Soil Map (STATSGO2). Available online at: http://soildatamart.nrcs.usda.gov (Accessed 08/2022).
- ODA (Oregon Department of Agriculture). 2022. About the Plants. Oregon's threatened, endangered, and candidate plants. Available online at: https://www.oregon.gov/oda/programs/PlantConservation/Pages/AboutPlants.aspx
- ODFW (Oregon Department of Fish and Wildlife). 2021a. Oregon Department of Fish and Wildlife Sensitive Species List. Available online at: https://www.dfw.state.or.us/wildlife/diversity/species/docs/Sensitive_Species_List.pdf
- ODFW. 2021b. Threatened, Endangered, and Candidate Fish and Wildlife Species in Oregon.

 October. Available online at:

 https://www.dfw.state.or.us/wildlife/diversity/species/docs/Threatened_and_Endangered_Species.pdf
- ORBIC (Oregon Biodiversity Information Center). 2022. Element Occurrence Polygons. GIS Data. Received February 17, 2022.
- StreamNet. 2022. Fish distribution data All species combined. Accessed May 2022. Available online at: https://www.streamnet.org/home/data-maps/gis-data-sets/

- Idaho Power Company
- Umatilla County. 2022. Umatilla County Comprehensive Plan. First adopted 1983. Last amended June 1, 2022. Available online at: https://umatillacounty.gov/fileadmin/user_upload/Planning/Umatilla_County_Comp_Plan_6-01-2022_Reduced.pdf
- Umatilla County. 2022. Umatilla County Development Code. First adopted 1983. Last amended June 1, 2022.
- Union County. 2015. Union County Zoning, Partition, and Subdivision Ordinance. First adopted November 2, 1983. Last amended 2015.
- USFS (U.S. Department of Agriculture, Forest Service). 2018. Record of Decision. Boardman to Hemingway Transmission Line Project and Forest Plan Amendments, Wallowa-Whitman National Forest, Union County, Oregon. November. Available online at: https://www.fs.usda.gov/project/?project=26709
- USFS. 2022. Invasive species; threatened and endangered and sensitive plants; and wildlife observations. Wallow-Whitman and Umatilla National Forests. GIS Data. Received March 04, 2022.
- USGS (U.S. Geological Survey). 2011. Gap Analysis Project (GAP). Land Cover Data for the State of Oregon. GIS data. Available online at: https://www.usgs.gov/programs/gap-analysis-project/science/land-cover-data-download

FIGURES

Exhibit 2.a.

Preliminary Request for Amendment 1 (RFA1) to the B2H Site Certificate, Attachment 6-1. Red-lined Site Certificate

Attachment 6-1. Red-lined Site Certificate

Page	3
i agc	v

OF THE STATE OF OREGON

Site Certificate for the Boardman to Hemingway Transmission Line

Issuance Date:

September 27, 2022

	Kreider/102a
	Page 4
	· ·
THIS PAGE INTENTIONALLY LEFT BLANK	

Table of Contents

1.0 Introduction and Site Certification	
2.0 Facility Location, Site Boundary and Micrositing Transmission	
3.0 Facility Description	
3.1 Facility Component Requirements	
3.2 Facility Routes and Components by County/City	11
Morrow County	11
Umatilla County	11
Union County	12
Baker County	13
Malheur County	14
City of North Powder	
City of Huntington	15
4.0 Facility Development	15
4.1 Construction	15
4.2 Operations and Maintenance	19
4.3 Retirement/Decommissioning	20
5.0 Site Certificate Conditions	20
5.1 Condition Format	20
5.2 General Conditions: Design, Construction and Operation	21
5.3 Pre-Construction Conditions	49
5.4 Constructions Conditions	58
5.5 Operational Conditions	62
5.6 Retirement Conditions	68
6.0 Successors and Assigns	69
7.0 Severability and Construction	69
8.0 Execution	69
List of Tables	
Table 1: Approved Route Structure Characteristics	
Table 2: Approved Alternative Route Structure Characteristics	
Table 3: Foundation Excavation Dimensions	
Table 4: Summary of Access Road Classifications	
Table 5: Approved Route Features – Morrow County	
Table 6: Approved Route Features – Umatilla County	
Table 7: Approved Route Features – Union County	
Table 8: Approved Route Features – Baker County	
Table 9: Approved Route Features – Malheur County	
Table 10: Site Boundary and Temporary/Permanent Disturbance	Areas by Facility Component 16

Attachments

Attachment A

Facility Location Mapsets (ASC Exhibit C)

Acronyms and Abbreviations

ASC Application for Site Certificate

C-12 Heavy Industrial

Certificate Holder Idaho Power Company

Council Oregon Energy Facility Siting Council

CWNWMP Compensatory Wetland and Non-Wetland Mitigation Plan

Department Oregon Department of Energy

DOGAMI Oregon Department of Geology and Mineral Industries

DSL Oregon Department of State Lands

EFU Exclusive Farm Use email electronic submission ERU Exclusive Range Use

ESCP Erosion Sediment Control Plan
FAA Federal Aviation Administration

facility Boardman to Hemingway Transmission Line Project

Final Order on the ASC Final Order on the Application for Site Certificate for the Boardman

to Hemingway Transmission Line Project

FΡ

Ft feet

FW Fish and Wildlife Habitat

GEN general condition

HC Historic, Cultural, and Archeological Resources

HMP Habitat Mitigation Plan

HPMP Historic Properties Management Plan

HQT Habitat Quantification Tool
JPA Joint Permit Application

LU Land Use

MCZO Morrow County zoning ordinances

MG General Industrial MUAs Multi-use areas

NC Noise Control Regulations

NOV Notice of Violation

NPDES National Pollutant Discharge Elimination System

NSR Noise Sensitive Receptor

NWSTF Naval Weapons Systems Training Facility

O&M Operations and Maintenance
OAR Oregon Administrative Rule
ODA Oregon Department of Aviation

ODFW Oregon Department of Fish and Wildlife

OE Organizational Expertise
ORS Oregon Revised Statute

PA Protected Area parent company IDACORP, Inc. PS Public Services

RC Recreation

RF Removal Fill Law

RT Retirement and Financial Assurance SHPO State Historic Preservation Office

SP Soil Protection

SPCC Plan Spill Prevention Control and Countermeasures Plan

SR Scenic Resources
SS Structural Standard
State State of Oregon

TE Threatened and Endangered species
TL Siting Standards for Transmission Lines

TMIP Transmission Maintenance and Inspection Plan

WAGS Washington ground squirrel

WM Waste Minimization

1.0 Introduction and Site Certification

This site certificate is a binding agreement between the State of Oregon (State), acting through the Energy Facility Siting Council (Council), and Idaho Power Company (certificate holder), which is a wholly owned subsidiary of IDACORP, Inc. (parent company). As authorized under Oregon Revised Statute (ORS) Chapter 469, the Council issues this site certificate authorizing the certificate holder to construct, operate and retire the Boardman to Hemingway Transmission Line Project (facility) within the below described approved corridor within Malheur, Baker, Union, Umatilla, and Morrow counties, subject to the conditions set forth herein.

Both the State and certificate holder must abide by local ordinances, state law and the rules of the Council in effect on the date this site certificate is executed. However, upon a clear showing of a significant threat to public health, safety, or the environment that requires application of later-adopted laws or rules, the Council may require compliance with such later-adopted laws or rules (ORS 469.401(2)).

The findings of fact, reasoning and conclusions of law underlying the terms and conditions of this site certificate are set forth in the following documents, incorporated herein by this reference: (a) the Final Order on the Application for Site Certificate for the Boardman to Hemingway Transmission Line Project issued on September 27, 2022 (hereafter, Final Order on the ASC). Any ambiguity will be clarified by reference to the following, in order of priority: (1) the Final Order on the ASC, and (2) the record of the proceedings that led to the Final Order on the ASC. This site certificate binds the State and all counties, cities and political subdivisions in Oregon as to the approval of the site and the construction, operation, and retirement of the facility as to matters that are addressed in and governed by this site certificate (ORS 469.401(3)). This site certificate does not address, and is not binding with respect to, matters that are not included in and governed by this site certificate, and such matters include, but are not limited to: employee health and safety; building code compliance; wage and hour or other labor regulations; local government fees and charges; other design or operational issues that do not relate to siting the facility (ORS 469.401(4)); and permits issued under statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council (ORS 469.503(3)).

Each affected state agency, county, city, and political subdivision in Oregon with authority to issue a permit, license, or other approval addressed in or governed by this site certificate, shall upon submission of the proper application and payment of the proper fees, but without hearings or other proceedings, issue such permit, license or other approval subject only to conditions set forth in this site certificate. In addition, each state agency or local government agency that issues a permit, license or other approval for this facility shall continue to exercise enforcement authority over such permit, license or other approval (ORS 469.401(3)). For those permits, licenses, or other approvals addressed in and

governed by this site certificate, the certificate holder shall comply with applicable state and federal laws adopted in the future to the extent that such compliance is required under the respective state agency statutes and rules (ORS 469.401(2)).

The certificate holder must construct, operate and retire the facility in accordance with all applicable rules as provided for in Oregon Administrative Rule (OAR) Chapter 345, Division 26. After issuance of this site certificate, the Council shall have continuing authority over the site and may inspect, or direct the Oregon Department of Energy (Department) to inspect, or request another state agency or local government to inspect, the site at any time in order to ensure that the facility is being operated consistently with the terms and conditions of this site certificate (ORS 469.430).

The obligation of the certificate holder to report information to the Department or the Council under the conditions listed in this site certificate is subject to the provisions of ORS 192.502 *et seq.* and ORS 469.560. To the extent permitted by law, the Department and the Council will not publicly disclose information that may be exempt from public disclosure if the certificate holder has clearly labeled such information and stated the basis for the exemption at the time of submitting the information to the Department or the Council. If the Council or the Department receives a request for the disclosure of the information, the Council or the Department, as appropriate, will make a reasonable attempt to notify the certificate holder and will refer the matter to the Attorney General for a determination of whether the exemption is applicable, pursuant to ORS 192.450.

The Council recognizes that many specific tasks related to the design, construction, operation and retirement of the facility will be undertaken by the certificate holder's agents or contractors. Nevertheless, the certificate holder is responsible for ensuring compliance with all provisions of the site certificate.

The duration of this site certificate shall be the life of the facility, subject to termination pursuant to OAR 345-027-0110 or the rules in effect on the date that termination is sought, or revocation under ORS 469.440 and OAR 345-029-0100 or the statutes and rules in effect on the date that revocation is ordered. The Council shall not change the conditions of this site certificate except as provided for in OAR Chapter 345, Division 27.

The definitions in ORS 469.300 and OAR 345-001-0010 apply to the terms used in this site certificate, except where otherwise stated, or where the context clearly indicates otherwise.

2.0 Facility Location, Site Boundary and Micrositing Transmission Line Corridors

The facility traverses five counties in Oregon including Morrow, Umatilla, Union, Baker and Malheur; and two cities including North Powder and Huntington, as presented in the mapsets included in Attachment A.

The approved site boundary contains approximately 23,041 24,000 acres. For the 500-kV transmission line, the site boundary is a 500-foot-wide area within which the transmission line, all transmission structures, and communication stations are approved to be located. The site boundary for the remaining facility features varies, based on the type of feature and use. The site boundary for the approved Longhorn Station is approximately 190 acres. The site boundary for access roads is either 100 or 200-feet in width, depending on the nature of the road.

The site boundary is equivalent to a micrositing transmission line corridor. A micrositing/transmission line corridor is a continuous area of land not to exceed 0.5-mile in width within which construction of facility components may occur, subject to site certificate conditions. The Council permits final siting flexibility within the approved micrositing transmission corridor because the certificate holder has demonstrated that requirements of all applicable standards have been satisfied by adequately evaluating the entire corridor and location of facility components anywhere within the corridor/site boundary.

3.0 Facility Description

The facility includes approximately 300 miles of electric transmission line, with approximately 272.8 miles located in Oregon and 23.8 miles in Idaho. The facility is approved to construct, operate and retire the following major components:

- Transmission Lines: The approved route consists of an approximately 270.8-mile-long single-circuit 500-kV electric transmission line, removal of 12 miles of existing 69-kV transmission line, rebuilding of 0.9 mile of a 230-kV transmission line, and rebuilding of 1.1 miles of an existing 138-kV transmission line into a new ROW. Seven Four approved alternative routes represent approximately 40.533.3 miles of transmission line.
- Longhorn Station: A 20-acre switching station, the Longhorn Station, is approved to be
 located near the Port of Morrow, Oregon. The switching station provides a combination
 of switching, protection, and control equipment arranged to provide circuit protection
 and system switching flexibility for the transfer of electric power; it does not
 incorporate step-down or step-up voltage equipment. The station connects the
 transmission line to other 500-kV transmission lines and the Pacific Northwest power
 market.

¹ B2HAPPDoc3-3 ASC 02a_Exhibit_B_Project Description_ASC 2018-09-28. Section 3.2.2.3 and 3.5.2.

² OAR 345-001-0010(7) and (32)

- Communication Stations: Ten communication station sites (and two alternative communication stations sites) each consisting of a communication shelter and related facilities. Each communication station site is less than 1/4-acre in size.
- Access Roads: The facility includes permanent access roads for the approved route, including 206.3 miles of new roads and 223.2 miles of existing roads requiring substantial modification. The approved alternative routes includes 30.2 miles of new roads and 22.7 miles of existing roads requiring substantial modification.
- Temporary Features used during Construction: The transmission line includes 30 temporary multi-use areas and 299 temporary pulling and tensioning sites, four of which have light-duty fly yards within the pulling and tensioning sites.

3.1 Facility Component Requirements

Transmission line structures for the approved route and approved alternatives routes shall be substantially similar to the structure type, number, height and disturbance areas presented in Tables 1 and 2 below. Transmission structure foundations shall be substantially similar to the depth and diameter presented in Table 3 below.

Table 1: Approved Route Structure Characteristics

Structure Type	Number of Structures	Height (ft)	Distance Between Structures (ft)	Construction Disturbance Area per Structure (ft)	Operational Disturbance Area per Structure (ft)
500-kV Single-Circuit Lattice Steel Structure	1,076	109-200	1,200-1,800	250 x 250	50 x 50
500-kV Single-Circuit Tubular Steel Pole H- Frame Structure (NWSTF Boardman area)	70	65-105	350-950	90 x 250 on NWSTF and 150 x 250 off NWSTF	40 x 10
Rebuild Single-Circuit 138-kV Wood H-Frame Structure	9	51-61	500-750	250 x 150	16.5 x 5
500-kV Single-Circuit Tubular Steel Pole H- Frame	6	65-105	450-900	250 x 250	40 x 10
Rebuild Single Circuit 230-kV Steel H-Frame Structure	5	57-75	400-1,200	250 x 100	25 x 5
500-kV Single-Circuit H-Frame	5	85-145	950-1650	250 x 250	40 x 10
230-kV Single-Circuit Tubular Steel 3-Pole Dead-end	4	61-66	NA	250 x 150	130 x 4
500-kV Single-Circuit Tubular Steel 3-Pole Dead-end	4	115	NA	250 x 250	90 x 10
500-kV Single Circuit Tubular Steel 3-Pole Dead-end (NWSTF Boardman area)	3	115	NA	90 x 250	90 x 10
500-kV Single-Circuit Tubular Steel 3-Pole Dead-end	3	75-90	NA	250 x 250	90 x 10
138-kV Single-Circuit 3-Pole Dead-end	3	51.5	NA	250 x 150	130 x 30

Table 2: Approved Alternative Route Structure Characteristics

Structure Type	Number of Structures	Height (ft)	Distance Between Structures (ft)	Construction Disturbance Area per Structure (ft)	Operational Disturbance Area per Structure (ft)
500-kV Single-Circuit Lattice Steel Structure	114	109-200	1,200-1,800	250 x 250	50 x 50
500-kV Single-Circuit Tubular Steel Pole H- Frame (NWSTF Boardman area)	33	90-100	550-1100	90 x 250 on NWSTF and 150 x 250 off NWSTF	40 x 10
500-kV Single-Circuit Tubular Steel Pole Y- Frame (NWSTF Boardman area)	8	85-95	575-980	Varies (0.4 acre)	8 x 8
500-kV Single-Circuit, H-Frame Dead-end (NWSTF Boardman area)	2	95-100	NA	90 x 250	50 x 10
500-kV Single-Circuit, 3-Pole Dead-end (NWSTF Boardman Area)	2	115	NA	90 x 250	90 x 10

Table 3: Foundation Excavation Dimensions

Structure Type	Number of Holes per Structure	Depth (feet)	Diameter (feet)	Concrete (cubic yards)
500-kV Single-Circuit 3-Pole Deadend	3	30	9	212
500-kV Single-Circuit H-Frame	2	25	8	93
500-kV Single-Circuit Lattice, Heavy Dead-end	4	30	6	126
500-kV Single-Circuit Lattice, Heavy Tangent	4	16	4	30
500-kV Single-Circuit Lattice, Light Tangent	4	16	4	30
500-kV Single-Circuit Lattice, Medium Dead-end	4	22	6	93
500-kV Single-Circuit Lattice, Small Angle	4	16	6	68
500-kV Single Circuit Y-Frame, Tangent	1	43	8	80
500-kV Single-Circuit H-Frame, Tangent	2	25	8	93
230-kV Single-Circuit 3-Pole Deadend, Guyed	3	12	4	NA
230-kV Single-Circuit H-Frame, Tangent	2	12	4	NA
138-kV Single-Circuit 3-Pole Deadend	3	9	4	NA
138-kV Single-Circuit H-Frame, Tangent	2	9	4	NA

Longhorn Switching Station

The Longhorn Switching Station is approved to include the following components:

- o 500-kV circuit breakers
- o high-voltage switches, bus supports
- o 125-135' transmission line termination structures
- o 500-kV series capacitor bank, and 500-kV shunt reactor
- o a control house for communications, control equipment, and a restroom facility
- o a new all-weather access road
- o fire protection systems with:
 - Automatic suppression systems such as fire sprinklers, foam, gaseous, explosion suppression, or other specialized extinguishing systems and appropriate alarms.
 - Adequate water supply, storage, and distribution systems for water-based extinguishing systems.

- Automatic fire detection, occupant warning, manual fire alarm, and fire alarm reporting systems combined with properly equipped and adequately trained fire departments.
- Fire barrier systems or combinations of physical separation and barriers for outdoor locations.

Communication Systems and Stations

Optical Ground Wire

Each 500-kV structure will have two lightning protection shield wires installed on the structure peaks.

Communication Station Sites

Each communication station site is approved to be 100' by 100' with a fenced area of 75' by 75'. Each communication station site is approved to include:

- a prefabricated concrete communications structure with dimensions of approximately
 11.5 feet by 32 feet by 12 feet tall on each site
- o a standby generator with a liquefied propane gas tank
- Two separate conduit (underground) or aerial cable routes with two-inch-diameter polyvinyl chloride buried three feet below the surface
- smoke detectors

Communication Station Distribution Lines

Distribution lines are approved to serve communication stations BA-02, and MA-01, MA-02, MA-03, as well as alternative a communication station in Malheur County.³

Related or Supporting Facilities (Permanent and Temporary)

Access Roads

Temporary, permanent and substantially modified access road classification and limits of disturbance are presented in the table below.

³ B2HAPPDoc3-3 ASC 02a_Exhibit_B_Project Description_ASC 2018-09-28, Section 3.3.4.

Table 4: Summary of Access Road Classifications

Access Road	Classification	Site Boundary	Construction Disturbance	Operations Disturbance	Road Prism or Profile Changes	Extent of Work
	Primitive	200 feet	16 feet	10 feet	Yes	Clearing of vegetation or obstructions. Create roads by direct vehicle travel.
New Roads	Bladed	200 feet	16–35 feet	14 feet	Yes	Clearing of vegetation or obstructions. Create roads by cutting/filling existing terrain.
Existing Roads -	Substantial Modification, 21-70% Improved	100 feet	16 feet	14 feet	Yes	Reconstruct portions of existing road to improve road function. Possible road prism widening, profile adjustments, horizontal curve adjustments, or material placement.
Substantial Modification	Substantial Modification, 71-100% Improved	100 feet	16–30 feet	14 feet	Yes	Reconstruct portions of existing road to improve road function. Possible road prism widening, profile adjustments, horizontal curve adjustments, or material placement.
Existing Roads - No Substantial Modification	No Substantial Modification, 0-20% Improved	NA ¹	NA ¹	NA ¹	No	Repair of existing road to maintain original road function. No betterment of existing road function or design.

¹ Existing roads with no substantial modifications are not included in the Site Boundary and do not have an operation or construction disturbance width assigned to them.

Source: B2HAPPDoc3-3 ASC 02a_Exhibit_B_Project Description_ASC 2018-09-28, Table B-12.

Temporary Multi-Use Areas

The facility is approved to construct temporary multi-use areas approximately every 15 miles along the ROW. The multi-use areas (MUAs) are temporary construction areas to serve as field offices; reporting locations for workers; parking space for vehicles and equipment; and sites for material delivery and storage, fabrication assembly of towers, cross arms and other hardware, concrete batch plants, and stations for equipment maintenance. Each MUA is approved to be approximately 30 acres in size. After construction is complete, MUAs shall be restored to preconstruction conditions in accordance with Condition OPR-GS-03 (General Standard of Review Condition 9), as discussed in applicable sections of this order.

Helicopter operations are approved at some multi-use areas. Helicopters will be used for delivery of construction laborers, equipment, and materials to structure sites; transmission structure placement; hardware installation; and wire stringing operations. Helicopters may also be used to support the construction and administration and management (either the certificate holder or the construction contractor or both).

Gasoline, diesel fuel, crankcase oil, lubricants, and cleaning solvents will be stored at MUAs. Diesel fuel tanks must be stored within secondary containment and each station must be equipped with a spill kit.

Temporary Pulling and Tensioning Sites and Light-Duty Fly Yards

The facility is approved to include up to 299 temporary pulling and tensioning sites, approximately every 1.5 to two miles along the ROW and at angle points greater than 30 degrees. Temporary pulling and tensioning sites are approved to be located on approximately five acres at each end of the wire section to accommodate required equipment.⁴ Equipment at pulling and tensioning sites is approved to include tractors and trailers with spooled reels that hold the conductors and trucks with the tensioning equipment.

Four pulling and tensioning sites are approved to include light-duty fly yards (within Umatilla, Baker and Malheur counties). All of the equipment and activities approved to occur at a multiuse area could also occur at a light-duty fly yard, except that oil, gas and explosive storage would not occur and no batch plants would be located at the light-duty fly yards within the pulling and tensioning sites. The light-duty fly yards are approved to be approximately five-acre sites spaced approximately 15 miles apart.

After construction is complete, the certificate holder shall restore temporary pulling and tensioning sites to pre-construction conditions in accordance with Condition OPR-GS-03 (General Standard of Review Condition 9).

⁴ B2HAPPDoc3-3 ASC 02a_Exhibit_B_Project Description_ASC 2018-09-28, Section 3.3.3.

3.2 Facility Routes and Components by County/City

Morrow County

The approved transmission line route crosses approximately 47.5 miles in Morrow County beginning at the Longhorn Station and includes various other components, as presented in Table 5, Approved Route Features – Morrow County below.

Table 5: Approved Route Features – Morrow County

Project Features	Number of Sites*		
Towers – Single Circuit 500-kV Lattice	147		
Towers – Single Circuit 500-kV H-Frame	73		
Towers – Single Circuit 500-kV 3-Pole Dead-end	1		
Communication Station(s)	1		
Light Duty Fly Yards	0		
Multi-Use Areas	5		
Pulling and Tensioning Sites	39		
Station	1		
Access Roads	Total Miles*		
Existing, 21-70% Improved	19.4- 20.3		
Existing, 71-100% Improved	10.8		
New, Bladed	1.4. 3.2		
New, Primitive	10.6 10.7		
Crossings by Approved Route	Number of Crossings*		
High-Voltage Transmission Line Crossings ¹	1		
Existing Road Crossings ²	3		
Existing Railroad Crossings ³	1		
¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.			

The facility is approved to include construction and operation of the Longhorn Station, located at the northern terminus of the transmission line in Morrow County.

The facility includes three two approved alternative transmission routes in Morrow County.

Umatilla County

Source: Esri (2013); includes Interstate, federal, and state highways.

Source: Oregon Department of Transportation (2013).

Approximate.

The approved transmission line route crosses approximately 40.8 miles in Umatilla County, as presented in Table 6, Approved Route Features - Umatilla County below.

Table 6: Approved Route Features – Umatilla County

	•
Project Features	Number of Sites*
Towers – Single Circuit 500-kV Lattice	161
Communication Station(s)	2
Light Duty Fly Yards	1
Multi-Use Areas	7
Pulling and Tensioning Sites	41
Station	0
Access Roads	Total Miles*
Existing, 21-70% Improved	15.6 -17.0
Existing, 71-100% Improved	21.2
New, Bladed	5.1- 7.1
New, Primitive	7.4
Crossings by Approved Route	Number of Crossings*
High-Voltage Transmission Line Crossings ¹	0
Existing Road Crossings ²	1
Existing Railroad Crossings ³	0
¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only ² Source: Esri (2013); includes Interstate, federal, and state highways.	transmission lines over 69 kV.

Source: B2HAPPDoc3-9 ASC 03_Exhibit C_Project_Location_ASC 2018-09-28, Table C-3.

Union County

The approved transmission line route crosses approximately 39.9 miles of land in Union County and includes various other components, as presented in Table 7, Approved Route Features -Union County below.

Table 7: Approved Route Features – Union County

Project Features	Number of Sites*
Towers – Single Circuit 500-kV Lattice	169
Communication Station(s)	2
Light Duty Fly Yards	0
Multi-Use Areas	3
Pulling and Tensioning Sites	43
Station	0

³ Source: Oregon Department of Transportation (2013).

^{*} Approximate.

Table 7: Approved Route Features – Union County

Project Features	Number of Sites*
Access Roads	Total Miles*
Existing, 21-70% Improved	31.1 31.4
Existing, 71-100% Improved	6.4 6.5
New, Bladed	7.2 8.6
New, Primitive	0.4
Crossings by Approved Route	Number of Crossings*
High-Voltage Transmission Line Crossings ¹	3
Existing Road Crossings ²	4
Existing Railroad Crossings ³	3
16 ADDV - (2046) 1111 D - 6 - 1 1 1 1 1 1 1	

 $^{^{1}}$ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.

Source: B2HAPPDoc3-9 ASC 03_Exhibit C_Project_Location_ASC 2018-09-28, Table C-4.

The Morgan Lake alternative is the only alternative route in Union County and was developed based on input from landowners. The Morgan Lake alternative is approved to include one alternative communication station in Union County.

Baker County

The approved transmission line route crosses approximately 68.4 miles of land in Baker County and includes various other components, as presented in Table 8, *Approved Route Features* – *Baker County* below.

Table 8: Approved Route Features – Baker County

Project Features	Number of Sites*
Towers – Single Circuit 500-kV Lattice	281
Towers – Single Circuit 230-kV H-Frame	5
Towers – Single Circuit 230-kV 3-Pole Dead-end	4
Communication Station(s)	2
Light Duty Fly Yards	1
Multi-Use Areas	6
Pulling and Tensioning Sites	61
Station	0
Access Roads	Total Miles
Existing, 21-70% Improved	41.0 44.0

² Source: Esri (2013); includes Interstate, federal, and state highways.

³ Source: Oregon Department of Transportation (2013).

^{*} Approximate.

Table 8: Approved Route Features - Baker County

Project Features	Number of Sites*	
Existing, 71-100% Improved	22.2 24.0	
New, Bladed	22.2 23.5	
New, Primitive	6.0 6.2	
Crossings by Approved Route	Number of Crossings*	
High-Voltage Transmission Line Crossings ¹	9	
Existing Road Crossings ² 3		
Existing Railroad Crossings ³		
¹ Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmis ² Source: Esri (2013); includes Interstate, federal, and state highways. ³ Source: Oregon Department of Transportation (2013). * Approximate.	sion lines over 69 kV.	

The facility includes two approved alternative transmission routes in Baker County.

Source: B2HAPPDoc3-9 ASC 03 Exhibit C Project Location ASC 2018-09-28, Table C-5.

Malheur County

The approved transmission line route crosses approximately 74.1 miles of land in Malheur County and includes various other components, as presented in Table 9, *Approved Route Features – Malheur County* below.

Table 9: Approved Route Features – Malheur County

Project Features	Number of Sites*
Towers – Single Circuit 500-kV Lattice	327
Towers – Single Circuit 500-kV H-Frame	6
Towers – Single Circuit 500-kV 3-Pole Dead-end	3
Towers – Single Circuit 138-kV H-Frame	8
Towers – Single Circuit 138-kV 3-Pole Dead-end	3
Communication Station(s)	3
Light Duty Fly Yards	2
Multi-Use Areas	9
Pulling and Tensioning Sites	83
Station	0
Access Roads	Total Miles*
Existing, 21-70% Improved	41.7 43.6
Existing, 71-100% Improved	12.8 14.3

Table 9: Approved Route Features – Malheur County

Project Features	Number of Sites*	
New, Bladed	53.1 56.8	
New, Primitive	13.8 14.1	
Crossings by Approved Route	Number of Crossings*	
High Voltage Transmission Line Crossings ¹	4	
Existing Road Crossings ²	2	
Existing Railroad Crossings ³	1	
Source: ABB Ventyx (2016) and Idaho Power Company; includes only transmission lines over 69 kV.		

The facility includes one approved alternative route in Malheur County, the Double Mountain alternative.

City of North Powder

Facility components approved within City of North Powder include an approximately 27.2-acre portion of a multi-use area.

City of Huntington

Facility components approved within City of Huntington include one multi-use area.

4.0 Facility Development

4.1 Construction

This site certificate authorizes a 4-year construction duration. Construction will generally occur between 7 a.m. and 7 p.m., Monday through Saturday. Additional hours may be necessary to make up schedule deficiencies or to complete critical construction activities.

Construction activities could occur simultaneously across the entirety of the 300-mile transmission line route. Construction activities will generally include the following phases:

Phase I - Civil construction

 Activities along the transmission line will involve clearing the corridor and constructing access roads and, if applicable, harvestable timber will be cleared then hauled off.

Phase II - Foundation Construction

 Foundations will be constructed at each structure site to support the steel towers. Track mounted drills and excavators will be mobilized to each structure site to excavate the

Source: Esri (2013); includes Interstate, federal, and state highways.

Source: Oregon Department of Transportation (2013).

^{*} Approximate.

Source: B2HAPPDoc3-9 ASC 03 Exhibit C Project Location ASC 2018-09-28, Table C-6.

site and concrete trucks will then deliver concrete to the sites to construct the foundations.

Phase III - Structure Erection

Steel lattice towers will be assembled at each site and erected on the foundations.
 Material will be delivered via flatbed trucks to each structure site and unloaded with forklifts and cranes where it will be assembled in pieces in the work area around the foundations.

Phase IV - Conductor Pulling/Tensioning

 Conductor will be pulled along the corridor and through the structures via helicopters while large man lift trucks provide work crews access to each structure.⁵

Construction will include approximately 437 workers and crews for the following activities: substation construction, ROW clearing, roads/pad grading, foundations, tower lacing, tower setting, wire stringing, restoration, blasting, materials management, mechanic & equipment management, refueling, dust control, construction inspection, materials testing, environmental compliance, and surveyors.

Construction will include the following vehicular trips:

- Up to 486 one-way worker trips per day
- O Up to 620 one-way light construction trips per day
- O Up to 188 one-way heavy construction trips per day

Limits of temporary and permanent disturbance by facility components are established in Table 10 below.

Table 10: Site Boundary and Temporary/Permanent Disturbance Areas by Facility Component

		Site	Construction	Operations
Component	Length or Count	Site	Construction	Operations
Component		Boundary ¹	Disturbance	Disturbance
	Transmiss	ion Lines		
Single-Circuit 500-kV	270.8 miles (Approved Route)/ 33.3 miles (Approved Alternatives)	500 feet (width)	_2	_2
Single-Circuit 230-kV	0.9 mile (Approved Route)	500 feet (width)	_2	_2
Single-Circuit 138-kV	1.1 miles (Approved Route)	500 feet (width)	_2	_2
Transmission Structures				

⁵ B2HAPPDoc13 DPO IPC Responses to Select DPO Comments Rec'd by 2019-11-07; B2HAPP DPO IPC Responses - City of La Grande comments 2019-10-09.

Table 10: Site Boundary and Temporary/Permanent Disturbance Areas by Facility Component

Component	Length or Count	Site Boundary ¹	Construction Disturbance	Operations Disturbance
500-kV Lattice	1,085 (Approved Route)/ 118 (Approved Alternative)	_3	250 x 250 feet (1.4 acres)	50 x 50 feet (0.06 acre)
500-kV H-Frame (NWSTF area)	73 (Approved Route)/ 34 (Approved Alternative)	_3	250 x 90 feet (0.5 acres) on NWSTF / 250 x 150 feet (0.9 acres) off) 10 x 40 feet (0.001 acre)
500-kV H-Frame (Birch Creek area)	6 (Approved Route)	_3	250 x 250 feet (1.4 acre)	10 x 40 feet (0.001 acre)
500-kV Y-Frame	8 (Approved Alternative)	_3	Varies (0.4 acres)	8 x 8 feet (0.001 acre)
500-kV 3-Pole Dead- end (NWSTF area)	1 (Approved Route)/ 2 (Approved Alternative)	_3	250 x 90 feet (0.5 acre)	10 x 90 feet (0.02 acre)
500-kV 3-Pole Dead- end (Birch Creek area)	3 (Approved Route)	_3	250 x 250 feet (1.4 acre)	10 x 90 feet (0.02 acre)
500-kV H-Frame Dead- end (NWSTF area)	3 (Approved Alternative)	_3	250 x 90 feet (0.5 acre)	10 x 50 feet (0.01 acre)
230-kV H-Frame	5 (Approved Route)	_3	250 x 100 feet (0.6 acre)	25 x 5 feet (0.01 acre)
230-kV H-Frame (Removal)	9 (Approved Route)	_3	150 x 100 feet (0.3 acre)	_4
230-kV 3-Pole Dead- end	4 (Approved Route)	_3	250 x 150 feet (0.6 acre)	40 x 130 feet (0.1 acre)
138-kV H-Frame	8 (Approved Route)	_3	150 x 250 feet (0.9 acre)	16.5 x 5 feet (0.001 acre)
138-kV H-Frame (Removal)	10 (Approved Route)	_3	100 x 100 feet (0.2 acre)	_4
138-kV 3-Pole Dead- end	3 (Approved Route)	_3	250 x 150 feet (0.9 acre)	30 x 130 feet (0.09 acre)
69-kV H-Frame (Removal)	94 (Approved Route)	_3	90 x 90 feet (0.2 acre)	_4
	Stat	ions		
Longhorn	1	188.9	24.4 acres	19.6 acres
	Access	Roads ⁵		

Table 10: Site Boundary and Temporary/Permanent Disturbance Areas by Facility Component

Component	Length or Count	Site Boundary ¹	Construction Disturbance	Operations Disturbance
Existing Road, Moderate Improvements (21-70%)	148.8 miles (Approved Route)/ 13.2 miles (Approved Alternatives)	100 feet (width)	16 feet (width)	14 feet (width)
Existing Road, Extensive Improvements (71-100%)	73.4 miles (Approved Route)/ 6.3 miles (Approved Alternative)	100 feet (width)	30 feet (width)	14 feet (width)
New, Bladed	88.8 miles (Approved Route)/ 12.8 miles (Approved Alternative)	200 feet (width)	35 feet (width)	14 feet (width)
New, Primitive	117.5 miles (Approved Route)/ 12.8 miles (Approved Alternatives)	200 feet (width)	16 feet (width)	10 feet (width)
Permanent Facilities				
Communication Station	10 (Approved Route)/ 2 (Approved Alternative)	_2	100 x 100 feet (0.2 acre)	75 x 75 feet (0.1 acre)
Distribution Power Lines to Communication Station	7 (Approved Route)/ 2 (Approved Alternative)	50 feet (width)	25 feet (width)	14 feet (width)
	Temporary	Facilities		
Multi-use Areas	30 (Approved Route)/ 4 (Approved Alternative)	Discrete site boundary; discontiguo us from	23 acres	_
Light Duty Fly Yards	4 (Approved Route)	Discrete site boundary; adjacent to transmissio	5 acres	-

Table 10: Site Boundary and Temporary/Permanent Disturbance Areas by Facility Component

Component	Length or Count	Site	Construction	Operations
Component		Boundary ¹	Disturbance	Disturbance
		Discrete		
Pulling and	299 (Approved Route)/	site		
Tensioning Sites	32 (Approved Alternative)	boundary;	4 acres	_
		adjacent to		
		transmissio		

Site Boundary size may be less than indicated in specific areas to avoid impacts to protected areas or for other reasons.

4.2 Operations and Maintenance

Operations and maintenance (O&M) activities shall include routine inspection and maintenance of the transmission line, in compliance with the Transmission Maintenance and Inspection Plan (TMIP) (see Condition OPR-OE-01).

In accordance with the TMIP, three types of line maintenance patrols will be conducted: routine line patrols/inspections, unscheduled emergency line patrols, and aerial vegetation patrols. The routine line patrols shall include a detailed visual inspection of the entire line conducted at least once per year.

Emergency line patrols shall be performed in response to any unexplained system outage or interruption, or whenever requested by a dispatcher, to identify major structural failures or issues.

Aerial vegetation patrols shall be conducted by a transmission utility arborist to identify and manage vegetation encroachments that threaten the transmission lines.

Transmission Patrolmen shall patrol and inspect the transmission lines at a minimum once a year to identify any transmission defects and any vegetation hazards that may develop between vegetation clearing cycles.

The TMIP requires that the certificate holder complete comprehensive 10-year maintenance inspection at least every 10-years.

O&M activities will also include short- and long-term monitoring and minimization measures for noxious weeds, restoration/reclamation, revegetation and habitat enhancement, as required by

² No temporary or permanent disturbance expected along centerline, other than for specific facility features indicated below.

³ Component will be sited entirely within the site boundary.

⁴ No permanent disturbance expected once existing towers are removed.

⁵ See the Road Classification Guide and Access Control Plan (Exhibit B, Attachment B-5) for more information about road types.
⁶ Existing roads with no substantial improvements are defined as existing roads that require improvements along 20 percent or less of the entire road segment. These roads have minimal to no temporary or permanent disturbance impacts beyond their existing road surface/profile, are not included in site boundary.

 $^{^7}$ Certificate holder will construct distribution lines to communication stations within their service territory.

site certificate conditions provided in Section 5.0 of this site certificate.

4.3 Retirement/Decommissioning

The certificate holder shall retire or decommission the facility based on a retirement to be approved by the Council in accordance with the requirement of OAR 345-027-0110 and applicable conditions provided in Section 5.6 of this site certificate.

5.0 Site Certificate Conditions

5.1 Condition Format

The conditions in Sections 5.2 through 5.6 of this Site Certificate are organized and coded to indicate the phase of implementation, the standard the condition is required to satisfy, and an identification number (1, 2, 3, etc.).⁶ The table below presents a "key" for phase of implementation:

Key	Type of Conditions/Phase of Implementation
GEN	General Conditions: Design, Construction and Operation
PRE	Pre-Construction Conditions
CON	Construction Conditions
OPR	Operational Conditions
RET	Retirement Conditions

The standards are presented using an acronym; for example, the General Standard of Review is represented in the condition numbering as "GS"; the Soil Protection standard is represented in the condition numbering as "SP" and so forth.

For example, the coding of Condition GEN-GS-01 represents that the condition is a general condition (GEN) to be implemented during multiple phases including design, preconstruction, construction and/or operation of the facility, is required to satisfy the Council's General Standard of Review, and is condition number 1. The condition language also includes in brackets [] for the name of the condition as imposed in the Final Order on the Application (i.e. General Standard of Review Condition 1).

⁶ The identification number is not representative of an order that conditions must be implemented; it is intended only to represent a numerical value for identifying the condition.

5.2 General Conditions: Design, Construction and Operation

Condition Number	(Site certificate conditions for all standards and phases)				
STANDARD: G	STANDARD: GENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]				
GEN-GS-01	 a. Construction Commencement Deadline: The certificate holder shall begin construction of the facility within four years after the effective date of the site certificate. Under OAR 345-015-0085(8), the site certificate is effective upon execution by the Council chair and the certificate holder. Prior to beginning construction as defined in OAR 345-001-0010(12), the certificate holder shall provide the Department written verification of the date that it will begin construction, acknowledge the commencement of the construction completion timeline, and confirm the construction completion deadline as stated in General Standard of Review Condition 1(b). b. Construction Completion Deadline: The certificate holder shall complete construction of the facility within four years after the construction commencement date outlined in General Standard of Review Condition 1(a). Within 90 days of construction completion, the certificate holder shall provide the Department written notification of the anticipated date of construction completion. c. Authorization to construct and operate facility components, including alternative transmission line routes, expires if not constructed by the construction completion deadline established in General Standard of Review Condition 1(b). [General Standard of Review Condition 1, Mandatory Condition OAR 345-025-0006(4)] 				
GEN-GS-02	 a. At least 180 days prior to beginning construction (unless otherwise agreed to by the Department), the certificate holder shall submit to the Department a construction plan outlining construction phasing or segments, activities and schedules for completing construction of the facility consistent with the site certificate. Submission of pre-construction surveys or plans shall be conducted in accordance to site certificate conditions and may occur consistent with the phase or segment of the facility that is being constructed. b. Upon Department verification of compliance with applicable pre-construction requirements in the site certificate for any phase or segment of the facility, the Department shall notify the certificate holder in writing that pre-construction requirements have been met and they may commence construction for that phase or segment. [General Standard of Review Condition 2] 				
GEN-GS-03	The certificate holder shall design, construct, operate, and retire the facility: a. Substantially as described in the Final Order on the ASC and the site certificate; b. In compliance with the requirements of ORS Chapter 469, applicable Council rules, and applicable state and local laws, rules and ordinances in effect at the				

	time the site certificate is issued; and
	c. In compliance with all applicable permit requirements of other state agencies.
	[General Standard of Review Condition 6; Mandatory Condition OAR 345-025-
	0006(3)]
	If the certificate holder becomes aware of a significant environmental change or
	impact attributable to the facility, the certificate holder shall, as soon as possible,
GEN-GS-04	submit a written report to the Department describing the impact on the facility and any affected site certificate conditions.
	[General Standard of Review Condition 8; Mandatory Condition OAR 345-025-
	0006(6)]
	Before any transfer of ownership of the facility or ownership of the site certificate
	holder, the certificate holder shall inform the Department of the proposed new
CEN CC OF	owners. The requirements of OAR 345-027-0400 apply to any transfer of ownership
GEN-GS-05	that requires a transfer of the site certificate.
	[General Standard of Review Condition 10; Mandatory Condition OAR 345-025-
	0006(15)]
	Subject to conditions of the site certificate, the certificate holder may construct the
	facility anywhere within the site boundary (approved corridor(s)), and as described in
	ASC Exhibit B and represented in ASC Exhibit C Attachment C-2 and C-3 mapsets and
	Amendment 1 mapsets. The approved corridors include:
	a. The transmission line route extending approximately 273-miles through Morrow,
GEN-GS-06	Umatilla, Union, Baker, and Malheur counties;
GEIN-G3-00	 b. West of Bombing Range Road alternative 1 and the west of Bombing Range Road alternative 2 in Morrow County;
	c. Morgan Lake alternative in Union County; and
	d. Double Mountain alternative in Malheur County-; and
	e. Amendment 1 site boundary changes
	[General Standard of Review Condition 11; Site-Specific Condition OAR 345-025-
	0010(5)]
STANDARD: O	RGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]
	The certificate holder shall:
	a. Prior to construction, notify the Department and affected counties of the identity
	and qualifications of the major design, engineering, and construction
	contractor(s) for the facility. The certificate holder shall select contractors that
	have substantial experience in the design, engineering, and construction of
GEN-OE-01	similar facilities.
	b. During construction, report to the Department in its semi-annual construction
	progress report required pursuant to OAR 345-026-0080(1)(a) the identity and
	qualifications of any new or changes to its design, engineering and construction
	contractors. [Organizational Expertise Condition 2]
	The certificate holder shall be responsible for any matter of non-compliance under
GEN-OE-02	the site certificate. Any notice of violation (NOV) issued under the site certificate will
	the site certificate. Any notice of violation (NOV) issued under the site certificate will

	be issued to the certificate holder. Any civil penalties under the site certificate will be
	levied on the certificate holder.
	[Organizational Expertise Condition 5]
	Within 72 hours after discovery of incidents or circumstances that violate the terms
	or conditions of the site certificate, the certificate holder must report the conditions
GEN-OE-03	or circumstances to the Department, in addition to the requirements of OAR 345-
	026-0170.
	[Organizational Expertise Condition 6]
STANDARD: S	TRUCTURAL STANDARD (SS) [OAR 345-022-0020]
	The certificate holder shall design, engineer, and construct the transmission lines,
	Longhorn Station, and communication stations in accordance with the International
	Building Code, Oregon Structural Specialty Code, and local building codes that are
GEN-SS-01	most current at the time that final engineering of each of these components is
	completed and in a manner that does not conflict with National Electrical Safety
	Code identified in Siting Standards for Transmission Lines Condition 3.
	[Structural Standard Condition 2]
	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
GEN-SS-02	events. As used in this rule "seismic hazard" includes ground shaking, ground failure,
GLN-33-02	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.
	[Structural Standard Condition 3; Mandatory Condition OAR 345-025-0006(12)]
	The certificate holder shall notify the Department, the State Building Codes Division
	and the Department of Geology and Mineral Industries promptly if site investigations
	or trenching reveal that conditions in the foundation rocks differ significantly from
GEN-SS-03	those described in the application for a site certificate. After the Department
GLIN-33-03	receives the notice, the Council may require the certificate holder to consult with the
	Department of Geology and Mineral Industries and the Building Codes Division to
	propose and implement corrective or mitigation actions.
	[Structural Standard Condition 4; Mandatory Condition OAR 345-025-0006(13)]
	The certificate holder shall notify the Department, the State Building Codes Division
	and the Department of Geology and Mineral Industries promptly if shear zones,
	artesian aquifers, deformations or clastic dikes are found at or in the vicinity of the
GEN-SS-04	site. After the Department receives notice, the Council may require the certificate
	holder to consult with the Department of Geology and Mineral Industries and the
	Building Codes Division to propose and implement corrective or mitigation actions.
	[Structural Standard Condition 5; Mandatory Condition OAR 345-025-0006(14)]
STANDARD: S	OIL PROTECTION (SP) [OAR 345-022-0022]
	The certificate holder shall:
GEN-SP-01	a. Prior to construction of the facility, submit to the Department a final copy of an
	ODEQ-issued NPDES 1200-C General Construction Permit, including the final

	Erosion Sediment Control Plan (ESCP). The protective measures described in the 1200-C Permit Application and ESCP as provided in Attachment I-3 of the Final Order on the ASC, shall be included in the final ESCP.
	b. During construction of the facility, the certificate holder shall conduct all work in compliance with the NPDES 1200-C General Construction Permit and ESCP. [Soil Protection Condition 1]
	[Soil Protection Condition 1] The certificate holder shall:
GEN-SP-02	 a. Prior to construction of the facility, submit to the Department a final copy of a Construction Spill Prevention Control and Countermeasures Plan (SPCC Plan). The protective measures described in the draft Construction SPCC Plan, as provided in Attachment G-4 of the Final Order on the ASC, shall be included in the final SPCC Plan, unless otherwise approved by the Department. b. During construction of the facility, the certificate holder shall conduct all work in
	compliance with the final Construction SPCC Plan.
	[Soil Protection Condition 2]
GEN-SP-03	Prior to operation, if the certificate holder is required by DEQ statutes or rules to implement a SPCC Plan for operation of the facility, the certificate holder shall submit to the Department a copy of a DEQ-approved operation-related SPCC Plan. The certificate holder shall maintain compliance with the operation-related SPCC Plan during operations at the Longhorn Station. [Soil Protection Condition 3]
GEN-SP-04	 a. Prior to construction, in accordance with the OAR 345-025-0016 agency consultation process outlined in the draft Framework Blasting Plan (attachment G-5 of the Final Order on the ASC) the certificate holder shall finalize, and submit to the Department for approval, a final Blasting Plan. The final Blasting Plan shall meet all applicable federal, state and local requirements related to the transportation, storage, and use of explosives. b. Prior to construction, the certificate holder will consult with landowners regarding right-of-way acquisition, and during these consultations, the certificate holder will discuss with the landowner any blasting that the certificate holder plans to conduct on the landowner's property. If the landowner identifies a natural spring or well on the property, the certificate holder will notify the landowner that at the landowner's request, the certificate holder shall conduct pre-blasting baseline flow and water quality measurements for turbidity. The certificate holder shall compensate the landowner for adequate repair or replacement if damages to the flow or quality of the natural spring are caused by blasting. c. During construction, the certificate holder shall conduct all work in compliance with the final Blasting Bl
	with the final Blasting Plan approved by the Department. [Soil Protection Condition 4]
STANDARD: L	AND USE (LU) [OAR 345-022-0030]
GEN-LU-01	For facility components in Morrow County, the certificate holder shall:
	·

- a. Prior to construction of any phase or segment of the facility, provide to the Department a copy of the following Morrow County approved permits, if such permits are required by Morrow County zoning ordinances:
 - i. Zoning permit for facility components to be located in General Industrial (MG) and Port Industrial Zones.
 - ii. Flood plain development permit, for work in the Flood Plain Overlay Zone;
 - iii. Utility crossing permit;
 - iv. Access approach site permit; and
 - v. Construction permit to build on right-of-way.
- b. Prior to construction of a stream crossing at, or substantial road modification adjacent to, a Goal 5 stream including Sand Hollow Creek, Little Butter Creek, Butter Creek, and Matlock Creek, consult with ODFW on construction methods, measures to minimize riparian impacts, and measures to evaluate and monitor riparian impacts in order to demonstrate maintenance of 75 percent of vegetation layers or strata within the defined riparian zone. Consultation with DEQ and Morrow County Soil Conservation Services shall be completed if determined by the certificate holder, the Department, or ODFW to be necessary based on extent of potential water and erosion impacts. (MCZO Section 3.200(D)).
- c. During construction, the certificate holder shall comply with the conditions of permits and consultation requirements listed in (a) and (b), and if applicable, (d).
- d. During construction, if the certificate holder determines additional Countyapproved permits are required, the certificate holder shall provide to the Department a copy of those additional permits.
- e. Prior to construction of any phase or segment of the facility, the certificate holder shall provide to the Morrow County Weed Supervisor a list of the suppliers that will be supplying the aggregate used in construction in Morrow County. The certificate holder shall ensure that said suppliers provide the Morrow County Weed Supervisor reasonable access to the aggregate sites for inspection for weeds.

[Land Use Condition 1]

For facility components in Morrow County, the certificate holder shall design the facility to comply with the following setback distances and other requirements:

Significant Resource Overlay Zone (MCZO Section 3.200(D)(3)(b))

 a. Buildings and the fixed bases of the transmission line towers shall be setback at least 100 feet from the high-water mark of all Goal 5 streams (i.e. Sand Hollow Creek, Little Butter Creek, Butter Creek and Matlock Canyon Creek).

Sand Hollow Flood Pain Overlay Zone (MCZO Section 3.100(5.1-1)

b. Buildings and structures located within the multi-use area shall not be located within the Sand Hollow Flood Plain Overlay Zone (see ASC Exhibit K Figure K-21) unless anchored to prevent flotation, collapse or lateral movement of the structure.

In the EFU Zone (Based solely on certificate holder representations in the ASC)

GEN-LU-02

- c. Buildings and the fixed bases of the transmission line towers shall be setback as follows:
 - Front yards shall be set back at least 20 feet from minor collector road rights-of-way, 30 feet from major collector road rights-of-way, 80 feet from arterial road rights-of-way, and 100 feet from intensive agricultural uses;
 - ii. Side yards shall be set back at least 20 feet from the property line, 30 feet for corner lots, and 100 feet from intensive agricultural uses; and
- iii. Rear yards shall be set back at least 25 feet from the property line, and 100 feet from intensive agricultural uses.
- d. Buildings and the fixed bases of the transmission line towers shall be set back at least 100 feet from the high-water mark of all streams and lakes.

In the General Industrial Zone (MCZO Section 3.070(D))

e. Buildings and the fixed bases of the transmission line towers shall be set back at least 50 feet from arterial road rights-of-way, 30 feet from collector road rights of-way, and 20 feet from lower-class road rights-of-way.

In the Port Industrial Zone (MCZO Section 3.073(D))

- f. Buildings associated with the Longhorn Station and multi-use area, and the fixed bases of the transmission line towers shall be setback as follows:
 - Front yards shall be set back at least 30 feet from the property line; buildings and structures shall be setback at least 90 feet from the centerline of any public, county, or state road;
- ii. Rear and side yards shall be set back at least 10 feet from the property line. [Land Use Condition 2]

For facility components in Umatilla County, the certificate holder shall:

- a. Prior to construction of any phase or segment of the facility, provide to the Department a copy of the following Umatilla-County issued permits:
 - Zoning Permit for each tax lot crossed by facility components evaluated as a Utility Facility Necessary for Public Service (UCDC 152.059) including transmission line, new roads, substantially modified roads, multi-use areas (including batch plant and helipads), and communication stations in EFUzoned land.
 - ii. Installation of Utilities on County and Public Roads Permit.

GEN-LU-03

- b. Road Approach and Crossing Permits as determined necessary by County Public Works Department. If after construction commencement the certificate holder determines additional County-approved permits are required, the certificate holder shall provide to the Department a copy of those additional permits.
- c. Prior to construction, provide to the Department and Umatilla County a copy of the ODEQ issued Air Contaminant Discharge or General Permit for the mobile batch plant.
- d. During construction, the certificate holder shall comply with all condition requirements of permits identified under (a), (b), and (c) of this condition.

[Land Use Condition 3]

For facility components located in Umatilla County, the certificate holder shall design the facility to comply with the following setback distances and other requirements: In All Zones:

- a. Buildings, the fixed bases of transmission line towers, and new access roads shall be set back from Class I streams at least 25-feet or one-half the stream width, whichever is greater.
- b. Permanent vegetation removal within the riparian zone of all Class I streams shall retain 75% of all layers or strata of vegetation.
- c. Within the transmission line right-of-way, a maximum of 25% of existing natural vegetation along streams, lakes, and wetlands may be removed, unless removal of a greater quantity of vegetation is necessary for reliability purposes.
- d. The certificate holder shall coordinate with the Oregon Department of Fish and Wildlife and Soil and Water Conservation District on minor drainage improvements necessary to ensure effective drainage on surrounding agricultural lands. Existing drainage ditches may be cleared to original specifications without review.
- e. Access points to multi-use areas and communication stations shall be limited to one every 200 feet.
- f. New roads that enter onto a public or county road or state or federal highway shall be constructed of at least similar if not the same material as the public or county road or state or federal highway, and the material shall extend at least 25 feet back from the edge of the existing travel lane surface.

In the EFU Zone (Based solely on certificate holder representations in the ASC):

- g. Buildings shall be setback as follows: (i) at least 30 feet from the property line or private road easement boundary; or (ii) at least 60 feet from the center line of the road, highway, or private road easement, whichever is greater.
- h. Buildings and the fixed bases of the transmission line towers shall be set back at least 100 feet from the high-water mark of all streams, lakes, and wetlands.
- i. Parking lots shall be designed and operated as follows:
 - areas used for standing and maneuvering of vehicles at the multi-use areas will have paved surfaces maintained adequately for all weather use and will be drained as to avoid flow of water across public sidewalks;
 - ii. parking spaces along the outer boundaries of any multi-use area parking lot will be contained by a curb at least four inches high and set back a minimum of four and one-half feet from the property line, or by a bumper rail; and
 - iii. artificial lighting, if provided, will not create or reflect glare in a residential zone or on any adjacent dwelling.

In the LI zone:

- j. The temporary multi-use area shall include visibility-obscuring fencing or shall setback the fence or limit areas of activity a minimum of 500 feet from adjacent public roads.
- The temporary multi-use area shall be designed to comply with front, side, and rear yard setbacks of 20 feet.

GEN-LU-04

In the RTC Zone: I. The temporary multi-use area shall include a visibility-obscuring fencing as necessary to limit views of the area by travelling public and from surrounding properties. [Land Use Condition 5] For facility components in Union County, the certificate holder shall: a. Prior to construction of any phase or segment of the facility, provide to the Department a copy of the following Union County-approved permits, if such permits are required by Union County zoning ordinances: 1. Flood plain development permit; 2. Road approach permit; and GEN-LU-05 3. Work in county right-of-way permit. b. During construction, the certificate holder shall comply with conditions of permits listed in (a) and (c). c. During construction, if the certificate holder determines additional Countyapproved permits are required, the certificate holder shall provide to the Department a copy of those additional permits. [Land Use Condition 6] During construction of any phase or segment of the facility in Union County, the certificate holder shall construct the facility to comply with the following setback distances and other requirements: In All Zones: a. Buildings, the fixed bases of transmission line towers, and new access roads shall be set back from Class I streams at least 25-feet or one-half the stream width, whichever is greater. b. Permanent vegetation removal within the riparian zone of all Class I streams shall retain 75% of all layers or strata of vegetation. In the EFU Zone (Based solely on certificate holder representations in the ASC): c. Buildings shall be setback as follows: (i) front yards shall be set back at least 20 feet from property lines and road rights-of-way; (ii) and rear yards shall be set back at least 10 feet from property lines and road rights-of-way. GEN-LU-06 d. A clear-vision area shall be maintained on the corners of all multi-use area properties at the intersection of two or more streets or a street and a railroad as follows: (i) the clear-vision area shall consist of a triangular area with the two lot lines measuring a distance of 30 feet or at an intersection involving an alley of 10 feet; and (ii) the clear-vision area shall not contain any planting, fence, wall, structure, or temporary or permanent obstruction exceeding 2.5 feet in height, except for trees with branches removed to a height of 8 feet. e. Concrete batch plants shall not be located within 2 miles of a vineyard totaling at least 40 acres and which was planted as of February 27, 2013. In the Agricultural Grazing Zone: f. Buildings shall be setback as follows: (i) front yards shall be set back at least 20 feet from property lines and road rights-of-way; and (ii) rear yards shall be set back at least 10 feet from property lines and road rights-of-way.

g. All signage shall comply with the provisions of UCZPSO 3.08.			
 In the Timber-Grazing Zone: h. Buildings shall be setback as follows: (i) front and rear yards shall be set back at least 20 feet from property lines and road rights-of-way; (ii) and side yards shall be set back at least 10 feet from property lines and road rights-of-way. i. All signage shall comply with the provision of UCZPSO 5.08. 			
[Land Use Condition 7]			
 For facility components in Baker County, the certificate holder shall: a. Prior to construction in Baker County, the certificate holder shall provide to the department a copy of the following Baker County-approved permits, if such permits are required by Baker County ordinances: i. Flood plain development permit; ii. Road approach permit; and iii. Work in county right-of-way permit. b. If after commencement of construction the certificate holder determines additional County-approved permits are required, the certificate holder shall provide to the department a copy of those additional permits. 			
c. During construction, the certificate holder shall comply with conditions of permits listed in (a) and (b).			
[Land Use Condition 9]			
For facility components in Malheur County, prior to construction of any phase or segment of facility components, the certificate holder shall: a. Obtain one zoning permit for development of facility components in both the EFU and ERU zone, and one zoning permit for development of facility components in the Heavy Industrial (C-12) zone; copies of zoning permits shall be provided to the Department. b. Provide to the Department a copy of Malheur County-approved Flood plain development permits for each location where development would occur within a regulatory floodplain. c. If after construction commencement, the certificate holder determines additional County-approved permits are required, the certificate holder shall provide a copy of those permits to the Department. [Land Use Condition 11]			
For facility components in Malheur County, the certificate holder shall design the facility to comply with the following setback distances and other requirements: In the EFU and ERU Zones (Based solely on certificate holder representations in the ASC): a. Buildings shall be setback as follows: i. at least 40 feet from a street or road right-of-way; and ii. at least 15 feet from any other property line. b. No sight obscuring fence exceeding three feet in height shall be placed within the 40-foot street setback, also within this setback shrubbery other than trees shall be maintained at heights not exceeding three feet. [Land Use Condition 12]			

GEN-LU-10	For the multi-use area in City of North Powder, the certificate holder shall design the site to comply with the following setback distance and other requirements: In the Commercial Interchange Zone a. All signs shall comply with NPZO 4.04(B) development standards (ASC Exhibit K p. K-275) b. Based solely on certificate holder representations in ASC, buildings shall not exceed 45 feet in height and shall be setback per NPZO Section 4.03 (ASC Exhibit K p. K-277): i. Front yards shall be set back at least 30 feet from property lines; ii. Side yards shall be setback at least 20 feet from a Residential Zone, street, or corner lot; and iii. Rear yards shall be set back at least 20 feet from a Residential Zone. [Land Use Condition 13]
GEN-LU-11	 The certificate holder shall: a. Prior to construction of any phase or segment of the facility, in accordance with the OAR 345-025-0016 agency consultation process outlined in the draft Agriculture Assessment and Mitigation Plan (Attachment K-1 of the Final Order on the ASC), submit to the Department a final Agricultural Assessment and Mitigation Plan. b. During construction and operation of any phase or segment of the facility, implement the Agriculture Mitigation Plan as finalized per sub(a) of this condition. c. During operation, implement a post-construction monitoring plan to identify any remaining soil and agricultural impacts associated with construction that require additional restoration or mitigation, in accordance with Section 7.0 of the Agricultural Mitigation Plan, Attachment K-1 of the Final Order on the ASC. [Land Use Condition 14]
GEN-LU-12	 The certificate holder shall limit its transmission line right-of-way in Goal 4 forest lands to no wider than 300 feet. a. During construction, the certificate holder shall limit its use of the portion of the transmission line right-of-way located beyond the center 100 feet to vegetation maintenance activities. b. During operation, the certificate holder shall limit its use of the portion of the transmission line right-of-way located beyond the center 100 feet to vegetation maintenance activities. [Land Use Condition 15]
GEN-LU-13	The certificate holder shall: a. Prior to construction, in accordance with the OAR 345-025-0016 agency consultation process outlined in the draft Right-of-Way Clearing Assessment (Attachment K-2 of the Final Order on the ASC), submit to the Department for its approval, a final Right-of-Way Clearing Assessment. The protective measures described in the draft Right-of-Way Clearing Assessment in Attachment K-2 of the Final Order on ASC shall be included and implemented as part of the final Right-of-Way Clearing Assessment, unless otherwise approved by the

Department.

b. During construction, the certificate holder shall conduct all work in compliance with the final Right-of-Way Clearing Assessment.

[Land Use Condition 16]

STANDARD: PROTECTED AREA (PA) [OAR 345-022-0040]

During design and construction of the facility, the certificate holder must:

- a. Coordinate construction activities in Ladd Marsh Wildlife Area with the Wildlife Area manager.
- b. Provide evidence to ODFW of a determination of eligibility and findings of effect pursuant to Section 106 NRHP compliance for the facility and the final HPMP for the portion of the facility that would cross Ladd Marsh Wildlife Area subject to

[Protected Areas Condition 1]

GEN-PA-02

GEN-PA-01

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.

[Protected Areas Condition 2]

STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]

confidential material submission materials.

GEN-RT-01

The certificate holder must prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition to the extent that prevention of such site conditions is within the control of the certificate holder.

[Retirement and Financial Assurance Condition 1, Mandatory Condition OAR 345-025-0006(7)]

STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]

The certificate holder shall:

a. Prior to construction of a phase or segment of the facility, finalize, in accordance with the OAR 345-025-0016 agency consultation process outlined in the draft Reclamation and Revegetation Plan (Attachment P1-3 of the Final Order on the ASC), and submit to the Department for its approval a final Reclamation and Revegetation Plan for that phase or segment of the facility to be constructed. The protective measures described in the draft Reclamation and Revegetation Plan in Attachment P1-3 of the Final Order on the ASC shall be included and implemented as part of the final Reclamation and Revegetation Plan, unless otherwise approved by the Department. Components of the plan to be finalized are as follows. All components can be specific to the phase or segment of the facility to be constructed:

- GEN-FW-01
- Habitat (type/subtype) and disturbance impact (acres) assessment based on final facility design and layout and preconstruction field verification of disturbance areas.

	ii. Identification and mapping of reclamation treatment and control
	monitoring sites per habitat type.
	iii. Identification and mapping of transect size and quantity, based on size of
	disturbance areas, to be paired with treatment and control monitoring
	sites per habitat type.
	iv. Collection of preconstruction qualitative and quantitative data at
	treatment and control monitoring sites.
	v. Development of site-specific data analysis protocol for photographs and a
	standardized data-recording form.
	vi. Identification, and confirmation of availability, of appropriate seed mixes
	per impacted habitat type
	b. Post-construction of a phase or segment of the facility, the certificate holder
	shall conduct all work in compliance with the final Reclamation and Revegetation
	Plan referenced in sub(a) of this condition.
	[Fish and Wildlife Condition 1]
	The certificate holder shall:
	a. Prior to construction of a phase or segment of the facility, in accordance with the
	OAR 345-025-0016 agency consultation process outlined in the draft Vegetation
	Management Plan (Attachment P1-4 of the Final Order on the ASC), finalize and
	submit to the Department for its approval, in consultation with ODFW, a final
	Vegetation Management Plan. The protective measures described in the draft
GEN-FW-02	Vegetation Management Plan in Attachment P1-4 of the Final Order on the ASC, shall be included and implemented as part of the final Vegetation Management
GEIN-FWV-UZ	Plan, unless otherwise approved by the Department.
	b. During construction, the certificate holder shall conduct all work in compliance
	with the final Vegetation Management Plan referenced in sub(a) of this
	condition.
	c. During operation, the certificate holder shall conduct all work in compliance with
	the final Vegetation Management Plan referenced in sub(a) of this condition.
	[Fish and Wildlife Condition 2]
	The certificate holder shall:
	a. Prior to construction of a phase or segment of the facility, in accordance with
	the OAR 345-025-0016 agency consultation process outlined in the draft Noxious
GEN-FW-03	Weed Plan(s) (Attachment P1-5 of the Final Order on the ASC), finalize, and
	submit to the Department for its approval, a final Noxious Weed Plan. The
	protective measures as described in the draft Noxious Weed Plan provided as
	Attachment P1-5 to the Final Order on the ASC, shall be included and
	implemented as part of the final Noxious Weed Plan, unless otherwise approved
	by the Department.
	b. During operation, the certificate holder shall conduct all work in compliance with
	the final Noxious Weed Plan referenced in sub(a) of the condition.
	[Fish and Wildlife Condition 3]
GEN-FW-04	The certificate holder shall:

a. Prior to construction of any phase or segment of the facility, finalize, and submit to the Department for its approval, a final Fish and Wildlife Habitat Mitigation Plan, based on the plan provided as Attachment P-6 of the Final Order on the ASC. The final Fish and Wildlife Habitat Mitigation Plan shall include the following, unless otherwise approved by the Department:

<u>Information To Be Included in Final Habitat Mitigation Plan, based on the phase or segment of the facility to be constructed:</u>

- i. The areas that were surveyed for biological resources;
- ii. The location of all facility components and related and supporting facilities;
- iii. The areas that will be permanently and temporarily disturbed during construction;
- iv. The protective measures described in the draft Fish and Wildlife Habitat Mitigation Plan in Attachment P-6 of the Final Order on the ASC; and
- v. The results of the biological surveys referenced in Fish and Wildlife Conditions 15 and 16.

<u>Final Habitat Mitigation Plan Shall Address the Following:</u> The final Fish and Wildlife Habitat Mitigation Plan shall address the potential habitat impacts through mitigation banking, an in-lieu fee program, development of mitigation projects by the certificate holder, or a combination of the same.

- i. To the extent the certificate holder shall develop its own mitigation projects, the final Habitat Mitigation Plan shall:
 - 1. Identify the location of each mitigation site, including a map of the same:
 - 2. Identify the number of credit-acres that each mitigation site will provide for the certificate holder;
 - 3. Include a site-specific mitigation management plan for each mitigation site that provides for:
 - A. A baseline ecological assessment;
 - B. Conservation actions to be implemented at the site;
 - C. An implementation schedule for the baseline ecological assessment and conservation actions;
 - D. Performance measures;
 - E. A reporting plan; and
 - F. A monitoring plan.
- ii. To the extent the certificate holder shall utilize a mitigation bank or inlieu fee program, the final Habitat Mitigation Plan shall:
 - Describe the nature, extent, and history of the mitigation bank or inlieu fee program; and
 - 2. Identify the number of credit-acres that each mitigation site will provide for the certificate holder.
- iii. Oregon's Elk Mitigation Framework shall be used to calculate the amount of elk habitat compensatory mitigation required for the facility.
- v. The final Fish and Wildlife Habitat Mitigation Plan may be amended

	from time to time by agreement of the certificate holder and the Department. Such amendments may be made without amendment to the site certificate. The Council authorizes the Department to agree to amendments of the plan and to mitigation actions that may be required under the plan; however, the Council retains the authority to approve, reject, or modify any amendment of the plan agreed to by the Department. b. During construction, the certificate holder shall commence implementation of the conservation actions set forth in the final Fish and Wildlife Habitat Mitigation Plan referenced in sub(a) of this condition. [Fish and Wildlife Condition 4]
GEN-FW-05	Prior to construction of any phase or segment of the facility, the certificate holder shall train all construction personnel on the protection of cultural, paleontological, ecological, and other natural resources such as (a) federal and state laws regarding antiquities, paleontological resources, and plants and wildlife, including collection and removal; (b) the importance of these resources; (c) the purpose and necessity of protecting them; and (d) reporting and procedures for stop work. Prior to the training, the certificate holder must provide the Department with a copy of training materials that will be used such as Power Point slides, information hand-outs, maps, and other materials. [Fish and Wildlife Condition 6]
GEN-FW-06	Prior to and during construction, the certificate holder shall flag the following environmentally sensitive areas as restricted work zones: a. State protected plant species; b. Wetlands and waterways that are not authorized for construction impacts; c. Areas with active spatial and seasonal restrictions; and d. Category 1 habitat. Prior to construction of a phase or segment of the facility, the certificate holder shall submit a mapset showing the location of environmentally sensitive areas and restricted work zones to the department for its approval. The certificate holder shall make the mapset available to all construction personnel. [Fish and Wildlife Condition 7]
GEN-FW-07	During construction and operation, the certificate holder shall employ a speed limit of 25 miles per hour or less on private facility access roads. [Fish and Wildlife Condition 8]
GEN-FW-08	The certificate holder shall construct the transmission line to avian-safe design standards, consistent with the certificate holder's Avian Protection Plan (Idaho Power 2015) as provided in Attachment P1-9 of the Final Order on the ASC. Within 30 days of identification of an avian fatality within the site boundary, where predicted causal factor is electrocution or collision, the certificate holder shall report the species name and location identified (Milepost) and shall consult with ODFW and the Department on retrofit technologies or other adaptive management strategy to minimize fatality risk. [Fish and Wildlife Condition 10]

STANDARD: S	CENIC RESOURCES (SR) [OAR 345-022-0080]	
	The certificate holder shall use dull-galvanized steel for lattice towers and non-	
GEN-SR-01	specular conductors.	
	[Scenic Resources Condition 1]	
	If, at final facility design, the transmission line route crosses Ladd Marsh Wildlife	
	Management Area in Union County, the certificate holder shall select transmission	
GEN-SR-02	structures to be constructed between approximately Milepost 108 and Milepost 113	
	with design modifications including Lattice-frames with a Natina finish.	
	[Scenic Resources Condition 2]	
	At final facility design, the certificate holder shall select transmission structures, to	
	be constructed in the vicinity of the National Historic Oregon Trail Interpretive Center	
	between approximately Milepost 145.1 and Milepost 146.6, with the following	
	design modifications:	
	a. H-frames;	
	b. Tower height no greater than 130 feet; andc. Weathered steel (or an equivalent coating).	
GEN-SR-03	Additionally, the certificate holder shall construct the facility using tower structures	
	that meet the following criteria between approximately Milepost 146.6 and Milepost	
	146.7:	
	a. H-frames;	
	b. Tower height no greater than 154 feet; and	
	c. Weathered steel (or an equivalent coating).	
	[Scenic Resources Condition 3]	
	At final facility design, the certificate holder shall select transmission structures, to	
	be constructed in the vicinity of Birch Creek Area of Critical Environmental Concern	
GEN-SR-04	between approximately Milepost 197.9 and Milepost 199.1, with design	
	modifications including H-frame, with structure height not to exceed 100 feet.	
	[Scenic Resources Condition 4]	
STANDARD: H	ISTORIC, CULTURAL, AND ARCHEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]	
	During final design and construction of the facility, the certificate holder shall design	
	and locate facility components to avoid direct impacts to Oregon Trail/National	
GEN-HC-01	Historic Trail resources consistent Attachment S-9 Historic Properties Management	
	Plan (HPMP) of the Final Order on the ASC.	
	[Historic, Cultural and Archeological Resources Condition 1]	
	Prior to construction of a phase or segment of the facility, subject to confidential	
GEN-HC-02	material submission procedures, and based on 1) new survey data from previously	
	unsurveyed areas and 2) the final design of the facility, the certificate holder shall	
	submit to the Department, the State Historic Preservation Office (SHPO), and	
	applicable Tribal Governments, for review and Department approval a final Historic	
	Properties Management Plan (HPMP) Attachment S-9 of the Final Order on ASC. The	
	Department may engage its consultant to assist in review of the HPMP. The	
	certificate holder shall conduct all construction activities in compliance with the final	
Department-approved HPMP.		

[Historic, Cultural and Archeological Resources Condition 2]

STANDARD: RECREATION (RC) [OAR 345-022-0100]

If the Morgan Lake alternative facility route is selected, the certificate holder shall

GEN-RC-01

construct the facility using tower structures that meet the following criteria for the transmission line that would be visible from Morgan Lake Park, specifically between milepost (MP) 5.0 to MP 8.0 of the Morgan Lake alternative, as shown on ASC Exhibit C, Attachment C-3, Map 8.

- a. H-frames;
- b. Tower height no greater than 130 feet; and
- c. Weathered steel (or an equivalent coating).

[Recreation Condition 1]

STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]

At least 90 days prior to use of a helicopter(s) during construction, the certificate holder shall submit to the Department and each affected County Planning Department a proposed Helicopter Use Plan. The plan must be approved by the Department, in consultation with each county where helicopter use is proposed, prior to use of a helicopter during construction. The certificate holder shall conduct all work in compliance with the approved Helicopter Use Plan. The Helicopter Use Plan shall identify or provide:

- a. The type of helicopters to be used (all helicopters must be compliant with the noise certification and noise level limits set forth in 14 CFR § 36.11);
- b. The duration of helicopter use;
- c. Approximate helicopter routes to be used;
- d. Protected areas and recreation areas within two miles of the approximate helicopter routes;
- e. Roads or residences over which external loads will be carried;
- f. Multi-use areas and light-duty fly yards containing helipads shall be located: (i) in areas free from tall agricultural crops and livestock; (ii) at least 500 feet from organic agricultural operations; and (iii) at least 500 feet from existing dwellings on adjacent properties;
- g. Flights shall occur only between sunrise and sunset;
- h. At least 30 days prior to initiating helicopter operations at any multi-use area or light-duty fly yard, the certificate holder shall contact adjacent property owners within 1,000 feet of the relevant multi-use area or light-duty fly yard;
- At least 30 days prior to initiating helicopter operations, the certificate holder shall consult with the Oregon Department of Aviation regarding the preparation and posting of notices to airmen regarding the location and nature of work being performed. The notice will be posted at each of the public airports in the vicinity of the facility to alert other aviators of the location and timing of facility-related helicopter construction activities; and
- j. The certificate holder shall maintain a customer service telephone line to address, among other things, complaints regarding helicopter operations.

[Public Services Condition 3]

GEN-PS-01

Prior to construction of a facility phase or segment, in accordance with the OAR 345-025-0016 agency consultation process outlined in the plan (Attachment U-3 of the Final Order on the ASC), the certificate holder shall submit final Fire Prevention and Suppression Plan(s) to the Department for approval. The plan finalization process shall consider (a)(i) and (a)(ii) unless otherwise identified by a land management agency or other participating review agency:

- The protective measures as described in the draft Fire Prevention and Suppression Plan as provided in Attachment U-3 of the Final Order on the ASC and:
 - Wildfire training for onsite workers and facility personnel be conducted by individuals that are National Wildfire Coordination Group and Federal Emergency Management Agency certified.
 - ii. Specific seasonal work restrictions, onsite fire-fighting equipment and necessary fire protection resources based on: 1) documented evaluation of reasonably available sources related to wildfire risk and sensitive seasonal conditions such as high temperatures, drought and high winds; and 2) update Table PS-9 of the Final Order on the ASC based on information obtained from the LGRFPD on the number of full-time and volunteer employees, number and type of equipment/vehicles, and response times to the facility. Response time must consider LGRFPD crew mobilization time and access limitations (e.g., road condition, level of service and impact of multi-users from Morgan Lake Park, residents and emergency services.
- b. A description of the fire districts and rural fire protection districts that will provide emergency response services during construction and copies of any agreements between the certificate holder and the districts related to that coverage.
- c. All work must be conducted in compliance with the approved plan during construction and operation, as applicable, of the facility.

Public Services Condition 6]

The certificate holder shall:

a. Prior to operation, provide a copy of its Wildfire Mitigation Plan to the Department and each affected county which provides a wildfire risk assessment and establishes action and preventative measures based on the assessed operational risk from and of wildfire in each county affected by the facility.

GEN-PS-03

- b. During operation, the certificate holder shall update the Wildfire Mitigation Plan on an annual basis, or frequency determined acceptable by the Department in consultation with the Oregon Public Utilities Commission.
- c. During operation, for the service territories the facility would be located within, the certificate holder shall provide to each of the fire districts and rural fire protection a contact phone number to call in the event a district needs to request an outage as part of a fire response.

GEN-PS-02

d. Any Wildfire Mitigation Plan required by the Oregon Public Utilities Commission shall be considered by EFSC as meeting the requirements of this condition.

[Public Services Condition 7]

STANDARD: WASTE MINIMIZATION (WM) [OAR 345-022-0120]

At least 90 days prior to construction of a facility phase or segment, the certificate holder shall submit to the Department a Construction Waste Management Plan. The Department must review and approve the plan prior to construction of a facility phase or segment. The site certificate holder shall conduct all work in compliance with the approved Plan. The Plan must address, at a minimum:

- The number and types of waste containers to be maintained at multi-use areas and pulling and tensioning sites;
- b. Waste segregation methods for recycling or disposal;
- Names and locations of appropriate recycling and waste disposal facilities, collection requirements, and hauling requirements to be used during construction;
- d. Recycling steel and other metal scrap;
- e. Recycling wood waste;
- f. Recycling packaging wastes such as paper and cardboard;
- g. Collecting non-recyclable waste for transport to a local landfill by a licensed waste hauler or by using facility equipment and personnel to haul the waste;
- Segregating all hazardous and universal wastes such as used oil, oily rags and oil- absorbent materials, mercury-containing lights and lead-acid and nickel cadmium batteries for disposal by a licensed firm specializing in the proper recycling or disposal of hazardous and universal wastes;
- When possible, discharging concrete truck rinse-out within foundation holes, completing truck wash-down off-site, and burying other concrete waste as fill on-site whenever possible; and
- j. For waste hauling and disposal within Morrow County, the certificate holder shall ensure its personal or third party contractors adhere to the applicable requirements in the Morrow County Solid Waste Management Ordinance Section 5.000 Public Responsibilities, 5.010 Transportation of Solid Waste and 5.030 Responsibility for Propose Disposal of Hazardous Waste which requires that all loads be covered and secured and that operators be responsible for hazardous waste disposal in accordance with applicable regulatory requirements.
- k. If required by county ordinance, solid waste transported on public roads must be covered and secured during transporting, including:
 - i. Loads which are totally contained within an enclosed vehicle or container;
 - ii. Loads of solid waste contained in garbage cans with tightly fitting lids, tied plastic bags or similar totally enclosed individual containers that are completely contained within the walls of a vehicle or container, such that no solid waste can reasonably be expected to escape during hauling;

GEN-WM-01

- iii. Loads of brush, building materials and similar bulky materials which are secured in or on the hauling vehicle or completely contained within the walls of a vehicle or container, such that none can reasonably be expected to escape during hauling; or
- iv. Loads consisting entirely of rock, concrete, asphalt paving, stumps and similar materials that are completely contained within the walls of a vehicle or container, such that none can reasonably be expected to escape during hauling.
- I. A requirement that the certificate holder report to the Department on the implementation of the Plan during construction must be included in the six month construction report required pursuant to OAR 345-026-0080(1)(a).

[Waste Minimization Condition 1]

STANDARD: SITING STANDARDS FOR TRANSMISSION LINES (TL) [DIVISION 24]

To reduce or manage human exposure to electromagnetic fields, the certificate holder shall design and construct:

- All aboveground 500-kV transmission lines with a minimum clearance of 34.5 feet from the ground under all operating conditions;
- b. All aboveground 230-kV transmission lines with a minimum clearance of 20 feet from the ground under all operating conditions; and
- c. All aboveground 138-kV transmission lines with a minimum clearance of 20 feet from the ground under all operating conditions.
- d. In areas where an aboveground transmission line will cross an existing transmission line, the certificate holder shall construct the transmission line at a height and separation that would ensure that alternating current electric fields do not exceed 9-kV per meter at one meter above the ground surface.
- e. The Department may authorize a lower conductor clearance in areas determined to not be accessible to the public or otherwise demonstrated by the applicant to be compliant with the standard.

[Siting Standards for Transmission Lines Condition 1]

The certificate holder shall design, construct, and operate the transmission lines, Longhorn Station, and communication stations in accordance with the requirements of the version of the National Electrical Safety Code that is most current at the time that final engineering of each of these components is completed; and

The certificate holder shall develop and implement a program that provides reasonable assurance that all fences, gates, cattle guards, trailers, or other objects or structures of a permanent nature in place at the time of construction and within the right-of-way, that could become inadvertently charged with electricity are grounded or bonded throughout the life of the line. The certificate holder shall be responsible for costs associated with grounding or bonding of permanent infrastructure in place at the time of construction.

[Siting Standards for Transmission Lines Condition 3, Site-Specific Condition OAR 345-

GEN-TL-01

GEN-TL-02

025-0010(4)]

STANDARD: NOISE CONTROL REGULATIONS (NC) [OAR 340-035-0035]

Prior to construction, the certificate holder will initiate discussions with the 41 NSR property owners at which it has estimated exceedances of the ambient antidegradation standard may occur identified in Attachment X-4 and/or X-5 of the Final Order on the ASC (NSR: 8, 9, 10, 11, 5002, 69, 70, 5004, 46, 118, 125, 5010, 5011, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 518, 111, 112, 132, 133, 5008, 5009, 113, and 115) to develop mutually agreed upon Noise Exceedance Mitigation Plans, specific to each NSR location. The site-specific Noise Exceedance Mitigation Plans will include agreed upon measures that would be implemented at the NSR location to minimize or mitigate the ambient antidegradation standard noise exceedance.

- a. If the certificate holder and the NSR property owner agree upon a specific Noise Mitigation Plan, the certificate holder will submit a signed acknowledgement from the property owner to the Department for its records.
- b. If an agreement between certificate holder and NSR property owner is not obtained, the certificate holder shall concurrently notify the Department and NSR property owner of the dispute and of Council review of the dispute to occur at the next regularly scheduled Council meeting, to the extent possible, from the date of the certificate holder's notice. The notice shall explain that the NSR property owner will be given an opportunity to provide comments to the Council on the dispute, unless the Council Chair defers the dispute review to the Department. Review of the dispute will be based on the information per sub(i) below, and any other relevant facts provided by the NSR property owner and will result in a determination of the appropriate mitigation measure(s), proportional to the facility operational noise levels in excess of the ambient degradation standard, as determined to occur at the NSR property. The Council or Department's determination of appropriate mitigation is not binding on the NSR property owner or certificate holder if the NSR property owner opts not to accept the mitigation.
 - submit to the Department: (1) the mitigation measures it offered the NSR property owner, the mitigation measures that the NSR property owner requested and an explanation of the dispute; (2) a list of the dates that the certificate holder communicated with, or attempted to communicate with, the NSR property owners; and (3) the names, addresses, and phone numbers of the NSR owners.
- c. In working with NSR property owners under this condition, certificate holder will propose corona-noise mitigation of installation of sound- attenuating windows for residential structures as follows:
 - For NSRs where an 11 to 14 dBA sound level increase above ambient noise levels are expected, certificate holder will purchase and install sound attenuating windows with an STC rating of 25-40.

GEN-NC-01

- ii. For NSRs where a 15 dBA or greater sound level increase is expected, certificate holder will purchase and install sound attenuating windows with an STC rating of above 40.
- iii. If an owner of an NSR where an 11 dBA or greater sound level increase is expected provides a letter from a heath care provider indicating that health care provider's belief that the owner has a health condition that is exacerbated by increased sound levels, upon request, certificate holder will purchase and install sound attenuating windows with an STC rating of over 40 and would work with the NSR property owner to consider other mitigation options, as appropriate. During landowner consultations required under this condition, the certificate holder will specifically ask each landowner whether that landowner has a health condition that the landowner believes is exacerbated by elevated sound levels.
- iv. At the request of an NSR property owner, certificate holder will offer alternative mitigation proposals, including but not limited to performing air-sealing of the NSR residence, planting trees, or installing insulation.
- d. Prior to operation, the certificate holder will implement the mitigation measures agreed upon with the NSR property owners and/or as determined by EFSC or the Department to be the appropriate mitigation measures.

[Noise Control Condition 1]

a. After the Site Certificate has been issued and before landowner consultations contemplated in Condition 1, the certificate holder will prepare a new version of Attachment X-7, which will update landowner information and correct any errors (Updated Attachment X-7). The certificate holder will send notices to all landowners listed in Updated Attachment X-7, which notice shall: (a) inform the recipient that the recipient is the owner of an NSR; (b) provide the requirements and condition language of Noise Control Conditions 1 and 2 as adopted by the Council; and (c) provide a plain language summary of the steps designated in Noise Control Conditions 1 and 2. In addition, prior to construction, the certificate holder shall develop and submit to the Department an operational noise complaint response plan as well as distribute a simplified operational noise complaint response plan to the landowners listed in Updated Attachment X-7.

GEN-NC-02

- b. The plan shall specify that it is intended to address complaints filed by persons falling into one of the following categories: (1) the owner of an NSR property identified in Noise Control Condition 1, and for whom has received mitigation under Noise Control Condition 1, but who believes that exceedances (as measured at their NSR property) are occurring in a manner not otherwise allowed under Noise Control Condition 4 or Noise Control Condition 5; or (2) An owner of an NSR property within one mile of the site boundary who was not identified under Noise Control Condition 1 and who has not received mitigation from the certificate holder, but who nevertheless believes that exceedances above the ambient degradation standard have occurred at their NSR property.
- c. The plan shall include the following: Scope of the complaint response plan, including process for complaint filing, receipt, review and response. The scope

- shall clearly describe how affected persons will be provided necessary information for filing a complaint and receiving a response, and will specify the information that the complainant must include in its complaint, including the date the certificate holder received the complaint, the nature of the complaint, weather conditions of the date for which the complaint is based (such as wind speed, temperature, relative humidity, and precipitation), duration of perceived noise issue, the complainant's contact information, and the location of the affected property.
- d. The plan shall require that the certificate holder notify the Department within three working days of receiving a noise complaint related to the facility. The notification shall include the date the certificate holder received the complaint, the nature of the complaint, weather conditions of the date for which the complaint is based (such as wind speed, temperature, relative humidity, and precipitation) as described by the complainant, duration of perceived noise issue, the complainant's contact information, the location of the affected property, and a schedule of any actions taken or planned to be taken by the certificate holder (including inspection and maintenance actions, or actions taken or planned to be taken pursuant to the processes described in subsection (e) of this condition).
- e. The plan shall identify the following process if a noise complaint is received:
 - i. The certificate holder shall assess possible causes of the corona noise. If the complaint is received within the first 12 months of operation, the certificate holder will assess whether the corona noise is typical of noise that occurs during the transmission line "burn in period" (the first 12 months of operation) and ensure that it already has taken appropriate measures near that NSR to minimize corona noise that may occur during the burn in period (e.g., use conductors with a nonspecular finish/sandblasting of conductors to make them less reflective and clean them of manufacturing oils, protect the conductors to minimize scratching and nicking during construction). If the exceedance occurs during the burn-in period, and if the certificate holder complies with the requirements of this condition, the certificate holder will not be found to be in violation of its site certificate because of the exceedance.
 - ii. If it is determined the corona noise is not typical "burn in period" noise, the certificate holder will assess whether the noise exceeds the ambient antidegradation standard in a manner not otherwise allowed under Noise Control Condition 4 or Noise Control Condition 5. If the complainant's noise sensitive property or properties are included in Attachment X-5 of the Final Order on the ASC, the modeled sound level increases as presented in Attachment X-4 of the Final Order on the ASC may be relied upon to determine whether the corona noise exceeds the ambient antidegradation standard, unless the complainant voluntarily provides alternative noise data.

- iii. If the complainant's NSR property or properties are not included in Attachment X-5 of the Final Order on the ASC, the certificate holder shall model the sound level increases using the methods set forth in ASC Exhibit X, unless the complainant voluntarily provides alternative noise data.
- iv. If the complainant voluntarily provides alternative noise data and the data suggests an exceedance that had not previously been identified and mitigated, and/or an exceedance not otherwise allowed under Noise Control Condition 4 or Noise Control Condition 5, the complaint shall be verified through site specific sound monitoring conducted by an Oregon registered Professional Engineer, Board Certified by the Institute of Noise Control Engineering noise specialist, employed or contracted by the certificate holder, in accordance with NPCS-1 unless otherwise approved by the Department. If site specific sound monitoring is not authorized by the complainant, the certificate holder's modeling results may be relied upon to determine compliance.
- v. In the event of a dispute regarding complainant's noise data and the certificate holder's data from site specific sound monitoring, certificate holder shall request that EFSC, in consultation with the Department's noise consultant, if necessary, make the final determination regarding which data will be used to determine whether corona noise exceeds the ambient antidegradation standard and/or in a manner not allowed under Noise Control Condition 4 or Noise Control Condition 5. The EFSC Chair may direct the Department to make this determination.
- f. The plan shall specify that if it is determined pursuant to the process described in subsection (e) of this condition that corona noise at the complainant's NSR property exceeds the ambient antidegradation standard in a manner not allowed under Noise Control Condition 4 or Noise Control Condition 5, and/or exceeds the ambient antidegradation standard at an NSR property that had not previously been predicted to experience exceedances under Noise Control Condition 1, the certificate holder shall work with the NSR property owner to develop a mutually agreed upon mitigation plan to include agreed upon measures that would be implemented at the NSR location to minimize or mitigate the ambient antidegradation standard noise exceedance. To be clear, the fact that the certificate holder has received an exception or variance under Noise Control Conditions 4 and 5 does not excuse the certificate holder from providing mitigation under this condition.
 - i. If the NSR property was identified in Noise Control Condition 1 and has previously received mitigation by the certificate holder, and if it has been determined that the NSR property experiences exceedances not allowed under Noise Control Condition 4 or Noise Control Condition 5, the certificate holder will work with the complainant to identify supplemental mitigation measures, which may include any of the measures discussed in Noise Control Condition 1 or the ASC, or other measures requested by the complainant.

- ii. If the NSR property was not identified in Noise Control Condition 1 and has not been provided with mitigation by the certificate holder, certificate holder will work with the NSR property owner to identify appropriate mitigation measures, which may include any of the measures discussed in Noise Control Condition 1 or the ASC, or other measures requested by the landowner.
- iii. If, through the efforts described above, the certificate holder executes an agreement with the NSR property owner, the certificate holder will submit a signed acknowledgement from the property owner to the Department for its records. If an agreement between certificate holder and NSR property owner is not obtained, the certificate holder shall concurrently notify the Department and NSR property owner of the dispute and of Council review of the dispute to occur at the next regularly scheduled Council meeting, to the extent possible, from the date of the certificate holder's notice. The notice shall explain that the NSR property owner will be given an opportunity to provide comments to the Council on the dispute, unless the Council defers the dispute review to the Department. Review of the dispute will be based on the information per (iv) below, and any other relevant facts provided by the NSR property owner and will result in a determination of the appropriate mitigation measure(s), proportional to the facility operational noise levels in excess of the ambient degradation standard, as determined to occur at the NSR property. The Council or Department's determination of appropriate mitigation is not binding on the NSR property owner or certificate holder if NSR property owner opts not to accept the mitigation.
- iv. At the time of issuance of the notice per (iii) above, certificate holder will submit to the Department: (1) the mitigation measures it offered the NSR property owner, the mitigation measures that the NSR property owner requested and an explanation of the dispute; (2) a list of the dates that the certificate holder communicated with, or attempted to communicate with, the NSR property owners; and (3) the names, addresses, and phone numbers of the NSR owners.
- g. The certificate holder shall provide necessary information to the complainant to support understanding of corona noise, corona noise levels and effects, and of the process to verify actual noise levels of events resulting in complaints. If the complainant opts not to authorize the certificate holder to conduct monitoring, and it is otherwise determined pursuant to the process described in subsection (e) of this condition that corona noise does not exceed the ambient antidegradation standard, the noise complaint shall be considered fully resolved and no mitigation shall be required.

[Noise Control Condition 2]

STANDARD: REMOVAL FILL LAW (RF) [OAR 141-085-0500 through -0785]

GEN-RF-01

The certificate holder shall:

a. Prior to construction of a phase or segment of the facility, the certificate holder shall submit to the Department and Oregon Department of State Lands (DSL) a

- final Site Rehabilitation Plan (Plan), consistent with the draft Plan provided in Attachment J-2 of the Final Order on the ASC. The Department shall provide written verification of its review of the final Plan, confirming that the Plan is consistent with the draft Site Rehabilitation Plan.
- b. Following construction and during operation of a phase or segment of the facility, the certificate holder shall ensure that temporary impacts to wetlands and non-wetland waters of the state are restored in accordance with the final Plan.
- c. The Department will provide updates to Council on the certificate holder's implementation of the final Plan and of any Plan revisions at Council meetings, following submittal of the certificate holder's six-month construction progress report per General Standard of Review Condition 3 or annual report per General Standard of Review Condition 4.

[Removal Fill Condition 2]

The certificate holder shall:

- a. Prior to construction of a phase or segment of the facility, submit an updated final Compensatory Wetland and Non-Wetland Mitigation Plan (CWNWMP), consistent with the draft CWNWMP (Attachment J-1 to the Final Order on the ASC), for review and approval by the Department, in consultation with Department of State Lands (DSL). The Department shall provide written verification of its review and approval of the final CWNWMP. The final amount of wetland mitigation credit required shall be based on the final design configuration of the phase or segment of the facility and the estimated acres of wetlands and non-wetland waters of the state that would be permanently impacted, unless otherwise agreed to by the Department.
- Following construction and during operation of a phase or segment of the facility, the certificate holder shall implement the actions described in the final CWNWMP.

GEN-RF-02

- c. The Department will provide updates to Council on the certificate holder's implementation of the final CWNWMP and of any Plan revisions at Council meetings, following submittal of the certificate holder's six-month construction progress report per General Standard of Review Condition 3 or annual report per General Standard of Review Condition 4.
- d. The final CWNWMP version approved when the facility begins operation may be revised or updated from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council. Such revisions or updates may be made without amendment of the site certificate. The Council authorizes the Department to agree to revisions or updates to this plan, in consultation with DSL. The Department shall notify the Council of all revisions or updates, and the Council retains the authority to approve, reject, or modify any revisions or updates of the plan agreed to by the Department.

[Removal Fill Condition 3]

GEN-RF-03

Prior to construction of a phase or segment of the facility and during operation, the certificate holder shall maintain compliance with the General and Special Conditions set forth in the removal-fill permit (Attachment J-3 to the Final Order on the ASC).

[Removal Fill Condition 5]

The certificate holder shall:

- a. Prior to construction of a phase or segment of the facility, comply with procedures in all Removal-Fill Conditions, and receive an updated removal-fill permit (Attachment J-3 to the Final Order on the ASC) reviewed and approved by the Department in consultation with the Oregon Department of State Lands.
- b. Prior to construction of a phase or segment of the facility, submit a final copy of the updated removal-fill permit issued by the Oregon Department of State Lands.
- c. Following construction and during operation of a phase or segment of the facility, the certificate holder shall implement the actions described in the removal-fill permit.

GEN-RF-04

- d. The Department will provide updates to Council on the certificate holder's implementation of the removal-fill permit and of any permit revisions at Council meetings, following submittal of the certificate holder's six-month construction progress report per General Standard of Review Condition 3 or annual report per General Standard of Review Condition 4.
- e. The removal-fill permit version approved when the facility begins operation may be revised or updated from time to time by agreement of the certificate holder and the Oregon Energy Facility Siting Council ("Council"). Such revisions or updates may be made without amendment of the site certificate. The Council authorizes the Department to agree to revisions or updates to this permit. The Department shall notify the Council of all revisions or updates, and the Council retains the authority to approve, reject, or modify any revisions or updates of the permit agreed to by the Department.

[Removal Fill Condition 6]]

STANDARD: FISH PASSAGE [OAR 635-412-0035

GEN-FP-01

a. Prior to construction, the certificate holder shall finalize, and submit to the Department for its approval in consultation with ODFW, a final Fish Passage Plan. As part of finalizing the Fish Passage Plan, the certificate holder shall request from ODFW any new information ODFW may have on the status of the streams within the site boundary and shall address the information in the final Fish Passage Plan. In addition, the certificate holder shall seek concurrence from ODFW on the fish-presence determinations for non-fish bearing streams within the Ladd Creek watershed, as presented in ASC Exhibit P1-7B Table 3. If the certificate holder in consultation with ODFW, determines any of the previously identified non-fish bearing streams within the Ladd Creek Watershed to be fishbearing, the certificate holder shall complete a crossing risk evaluation and obtain concurrence from ODFW on applicability of fish passage requirements. If fish passage requirements apply, certificate holder shall seek approval from the Energy Facility Siting Council of a site certificate amendment to incorporate ODFW approval of new crossings and fish passage design/plans and conditions. The protective measures described in the draft Fish Passage Plan in Attachment

- BB-2 to the Final Order on the ASC, shall be included as part of the final Fish Passage Plan, unless otherwise approved by the Department.
- The certificate holder shall maintain compliance with the measures outlined in the final Fish Passage Plan approved by the Department in consultation with ODFW.
- c. The certificate holder shall comply with the following operational provisions, as required per ODFW's fish passage approval (December 30, 2015), per Attachment BB-2 Appendix A of the Final Order on the ASC:
 - 1. All in water work shall occur during the ODFW in-water work windows for each waterbody.
 - 2. Temporary water management and fish rescue, salvage, and recovery, is required (as prescribed in OAR 635-412-0035(10)) prior to all in-water work activities (defined as all work at or below the ordinary high water elevation) associated with the project. Fish salvage activities require the certificate holder to obtain State of Oregon Scientific Take Permits from ODFW.
 - 3. Wildlife rescue, salvage, and recovery activities associated with the facility require the applicant to obtain State of Oregon Wildlife Rescue Salvage Permits from ODFW.
 - 4. Fish passage design standards, as defined in OAR 635-412-0035(1) and (3), shall be implemented for all fish passage components of these projects.
 - 5. The certificate holder shall be responsible for all maintenance required such that projects provide adequate passage for native migratory fish. If monitoring by the certificate holder or ODFW indicates that fish passage is not being provided, the certificate holder in consultation with ODFW, shall determine the cause and, during a work period approved by ODFW, shall modify the structure as appropriate to rectify problems as necessary. Failure to maintain fish passage for the duration of these approvals shall constitute a violation of these approvals and applicable fish passage laws (ORS 509.610).
 - 6. After construction completion, the certificate holder or its designee, shall maintain, monitor, evaluate and report on the effectiveness of fish passage as required under ORS 509.610, and shall provide written status reports to ODFW's Fish Passage Program annually for the first three (3) years and then a final report at Year 5, or as determined by ODFW. Reports shall include photographs from established photo-points as part of the fish-passage evaluation and monitoring. Monitoring, evaluation, and reporting shall be conducted annually unless problems are observed that may require additional analysis. Fish passage reports shall consist of visual observations, photographs, as-built plan reviews, and future site visits with regards to fish passage at and through the project sites. Reports shall be submitted to the State Fish Passage Coordinator and the La Grande and Malheur Watershed District Fish Biologists. Electronic or hard copy submissions are acceptable.
 - 7. Failure to maintain fish passage at these locations shall constitute a violation of these approvals and applicable fish passage laws (ORS 509.585 and 509.610).

- 8. ODFW shall be allowed to inspect the crossing sites at reasonable times for the duration of the approval. Unless prompted by emergency or other exigent circumstances, inspection shall be limited to regular and usual business hours, including weekends.
- 9. The appropriate ODFW District Fish Biologist shall be contacted 2-weeks in advance and prior to implementation of fish passage projects.
- 10. These fish passage approvals in no way authorize a take of a federally listed species.

[Fish Passage Condition 1]

5.3 Pre-Construction Conditions

STANDARD: 0	PRGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]
PRE-OE-01	Prior to construction, the certificate holder shall notify the Department of the
	identity and qualifications of any construction managers, including the on-site
	construction manager(s), to demonstrate that the construction manager is qualified
	in managing facility construction and has the capability to ensure compliance with all
	site certificate conditions.
	[Organizational Expertise Condition 3]
	Prior to construction, the certificate holder shall contractually require all
	construction contractors and subcontractors involved in the construction of the
	facility to comply with all applicable laws and regulations and with the terms and
	conditions of the site certificate. The certificate holder shall provide to the
	Department a copy of the executed contract terms requiring legal/site certificate
PRE-OE-02	compliance. Copies of the relevant contract terms may redact business confidential
	information. The contractors, on behalf of the certificate holder, may perform the
	requirements set forth in these site certificate conditions. However, such
	performance and such contractual provisions shall not relieve the site certificate
	holder of responsibility under the site certificate.
	[Organizational Expertise Condition 4]
	Prior to construction, the certificate holder shall:
	a. Submit to the Department and affected counties a list of third-party permits to
	be obtained or that have been obtained by Umatilla Electric Co-Op, Pacific Power
	and Oregon Trail Electric Cooperation for the communication station distribution
PRE-OE-03	lines.
	b. Submit to the Department copies of all obtained third party permits, as identified
	in (a) of this condition.
	[Organizational Expertise Condition 7]
STANDARD: S	TRUCTURAL STANDARD (SS) [OAR 345-022-0020]
	At least 90 days prior to construction of a phase or segment of the facility:
	a. The certificate holder shall submit an investigation plan, prepared by a
	professional engineer or geologist licensed in Oregon, for the pre-construction
	site-specific geologic and geotechnical investigation to the Department for
	review in consultation with DOGAMI. The investigation plan shall specify the
	investigation methods to be used to evaluate site-specific seismic and non-
PRE-SS-01	seismic hazards identified in (b) of this condition and should, at a minimum, be
	consistent with the Oregon State Board of Geologist Examiners Guideline for
	Preparing Engineering Geologic Reports and include methods for literature
	review, geotechnical field exploration program, laboratory testing, mapping and
	detailed site reconnaissance.
	b. The certificate holder shall submit to the Department and DOGAMI a pre-
	construction site-specific geological and geotechnical investigation report
	1 Contraction one opening georgical and georgenineal investigation report

(report), prepared by a professional engineer or geologist licensed in Oregon, for review, demonstrating that the facility site has been adequately characterized and the facility and temporary construction activities, such as blasting, have been designed and located to avoid seismic, soil and geologic hazards.

- i. The report shall at a minimum include information derived from the geological and geotechnical investigations regarding:
 - 1. Subsurface soil and geologic conditions within the site boundary;
 - Site-specific geotechnical design criteria and data for the facility components informed by a Probabilistic Seismic Hazard Assessment and based on, at a minimum, identified fault sources, ground motion, site class for ground motion, and response spectra;
 - 3. Potentially active faults that may affect the facility and their potential risk to the facility;
 - 4. Potential slope instability and landslide hazards based on boring locations spaced approximately 1 mile along the alignment at dead-end structures; any corners or changes in alignment heading (angles); crossings of highways, major roads, rivers, railroads, and utilities as power transmission lines, natural gas pipelines, and canals; locations where blasting may occur; and, locations necessary to verify lithologic changes and/or geologic hazards such as landslides, steep slopes, or soft soil area.
 - 5. Potential liquefaction hazards;
 - 6. Potential soil expansion hazards;
 - 7. Groundwater detections and any related potential risk to the facility;
 - 8. Corrosive soils detections and any related potential risk to the facility; and
 - 9. Facility components within the 100-year flood zone and any related potential risk to the facility
 - 10. Define and delineate geological and geotechnical hazards to the facility, and identify means to mitigate the identified hazards.
 - 11. The report shall identify the applicable codes (i.e. Oregon Building Code, Oregon Structural Specialty Code), including name and reference number, that the facility components will be designed to satisfy.
- ii. In the electronic (email) submission of the report to the Department, as required under (b) of this condition, the certificate holder shall identify whether blasting is recommended. For any recommended blasting locations, in table and map format, specify the transmission line structure number, milepost and county; and, either submit with the report the draft Framework Blasting Plan (Soil Protection Condition 4, Attachment G-5 of this order), following the pre-construction agency review process or provide the schedule for initiation of the established agency review process, as provided in the draft Blasting Framework Plan.

[Structural Standard Condition 1]

STANDARD: LAND USE (LU) [OAR 345-022-0030]

PRE-LU-01 | Prior to construction of any phase or segment of facility components in Umatilla

	County, the certificate holder shall work with the Public Works Department on building standards for the road improvements and construction, and for any roads constructed in forest lands in Umatilla County, the certificate holder will ensure road construction is consistent with the Oregon Forest Practices Act. [Land Use Condition 4]
PRE-LU-02	Prior to construction of any phase or segment of the facility in Baker County, the certificate holder shall provide to the Baker County Planning Department a list of the suppliers that will be supplying the aggregate used in construction in Baker County along with a copy of the suppliers' land use permits. [Land Use Condition 8]

STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]

Retirement and Financial Assurance Condition 4: Consistent with Mandatory Condition OAR 345-025-0006(8), before beginning construction of the facility, the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee. During the construction phase (defined as the period of time from the beginning of construction as defined in ORS 469.300(6) to the date when the facility is placed in service), the certificate holder shall adjust the amount of the bond or letter of credit on a quarterly basis, as follows:

a. The amount of the bond or letter of credit will be increased on a quarterly basis to correspond with the progress of the construction of the facility at the beginning of each quarter. The amount of the bond or letter of credit at the beginning of any such quarterly period will be equal to the product of (i) the estimated total decommissioning cost for the facility, adjusted for inflation, as specified in section (c) of this condition; and (ii) a fraction, the numerator of which is the number of quarters that have passed since commencement of construction, and the denominator of which will be the number of quarters during which the certificate holder must complete the construction phase; provided that in all cases the number resulting from the calculation shall not exceed 1.0.

PRE-RT-01

- b. The certificate holder and the Department shall assume a four-year construction phase comprising sixteen quarterly periods. Therefore, for the first quarter of the construction phase, the bond or letter of credit will be maintained in an amount equal to one-sixteenth (1/16) of the total estimated decommissioning cost specified in section (c) of this condition. At the end of the first year of construction—i.e., four quarters—the amount of the bond or letter of credit will be equal to four-sixteenths (4/16) of the total estimated decommissioning costs.
- c. The estimated total decommissioning cost for the facility is \$140,779,000 (3rd Quarter 2016 dollars), to be adjusted to the date of issuance of the bond or letter of credit, and on a quarterly basis thereafter during the construction phase. For the purposes of calculating the bond or letter of credit amount required by section (a) of this condition, the certificate holder shall adjust the estimated total decommissioning cost using the following calculation:

- ii. Adjust the estimated decommissioning cost to correspond with the progress of the construction of the facility at the beginning of each quarter, based on the unit costs and assumptions identified in the Final Order on the ASC, Attachment W-1.
- iii. Adjust the estimated total decommissioning cost (expressed in Q3 2016 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency and using the third quarter 2016 index value and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the index is no longer published, the Council shall select a comparable calculation to adjust third quarter 2016 dollars to present value.
- Round the result total to the nearest \$1,000 to determine the inflationadjusted estimated total decommissioning cost.
- d. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.
- e. The certificate holder shall use a form of bond or letter of credit approved by the Council. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under OAR 345-026-0080(1)(b). The bond or letter of credit shall not be subject to revocation or reduction before the facility has been placed in service, at which time the certificate holder must provide the bond or letter of credit specified in Retirement and Financial Assurance Condition 5.
- f. The amount of the bond or letter of credit may be amended from time to time by agreement of the certificate holder and the Department to account for adjustments in the construction schedule. Subject to Department approval, the certificate holder may request an adjustment of the bond or letter of credit amount based on final design configuration of the facility by applying the unit costs and assumptions presented in the Final Order on the ASC, Attachment W-1. Such adjustments may be made without amendment to the site certificate. The Council authorizes the Department to agree to these adjustments in accordance with this condition.

[Retirement and Financial Assurance Condition 4]

STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]

PRE-FW-01

Prior to construction of a phase or segment of the facility, the certificate holder shall conduct, as applicable, the following biological surveys on those portions of the site boundary that have not been surveyed at the time of issuance of the site certificate, based on the survey protocols included in ASC Exhibit P Attachment P1-2 Revised Final Biological Survey Work Plan, unless otherwise approved by the Department in consultation with ODFW:

- a. Northern Goshawk;
- b. American Three-Toed Woodpecker;
- c. Great Gray Owl;
- d. Flammulated Owl;

	e. Terrestrial Visual Encounter Surveys; f. Wetlands; and			
	g. Fish Presence and Crossing Assessment Surveys.			
	[Fish and Wildlife Condition 15]			
PRE-FW-02	Prior to construction of a phase or segment of the facility, the certificate holder shall conduct, as applicable, the following biological surveys on all portions of the site boundary, regardless of whether those portions have been surveyed at the time of issuance of the site certificate, based on the survey protocols included in ASC Exhibit P Attachment P1-2 Revised Final Biological Survey Work Plan, unless otherwise approved by the Department in consultation with ODFW: a. Washington ground squirrels; b. Raptor nests;			
	c. Pygmy rabbits;			
	 d. State-listed Threatened and Endangered plants e. Greater sage-grouse, as necessary for the State of Oregon to calculate the amount of sage-grouse habitat compensatory mitigation required for the facility using Oregon's Sage-Grouse Habitat Quantification Tool. [Fish and Wildlife Condition 16] 			
PRE-FW-03	 [Fish and Wildlife Condition 16] At least 90 days prior to construction of a facility phase or component in sage-grouse habitat as mapped by The Oregon Department of Fish and Wildlife (ODFW) at that time, unless otherwise agreed to by the Department, the certificate holder shall finalize, and submit to the Department for its approval, in consultation with ODFW, a final Sage-Grouse Habitat Mitigation Plan for the phase or segment to be constructed. a. The certificate holder shall provide to the Department the information necessary for the State of Oregon to calculate the amount of sage-grouse habitat compensatory mitigation required for the facility using Oregon's Sage-Grouse Habitat Quantification Tool (HQT). b. The final Sage-Grouse Habitat Mitigation Plan shall address the potential sage-grouse habitat impacts through mitigation banking, an in-lieu fee program, development of mitigation projects by the certificate holder, or a combination of the same. i. To the extent the certificate holder develops its own mitigation projects, the final Sage-Grouse Habitat Mitigation Plan shall: 1. Identify the location of each mitigation site, including a map of the same; 2. Identify the number of credit-acres that each mitigation site will provide for the certificate holder, including results of the HQT results for the site and mitigation actions; 3. Include a site-specific mitigation management plan for each mitigation site that provides for: A. A baseline ecological assessment; 			
	site that provides for:			

- and conservation actions;
- D. Performance measures and success criteria for mitigation actions;
- E. Adaptive management considerations for changes in habitat conditions or a results of catastrophic fire;
- F. Weed management plan;
- G. A reporting plan;
- H. A monitoring plan; and;
- I. A description of how the durability of the mitigation site will be achieved, including but not limited to, any long-term stewardship plans and financial assurances.
- ii. To the extent the site certificate utilizes a mitigation bank or in-lieu fee program, the final Sage-Grouse Habitat Mitigation Plan shall:
 - 1. Describe the nature, extent, and history of the mitigation bank or inlieu fee program;
 - 2. Identify the number of credit-acres that each mitigation site will provide for the certificate holder, and;
 - 3. Demonstrate that ODFW has approved the program to fulfill sage-grouse habitat mitigation requirements.
- The final Sage-Grouse Habitat Mitigation Plan shall include compensatory iii. mitigation sufficient to address impacts from, at a minimum, all facility components except indirect impacts from existing access roads substantially modified for the facility (related or supporting facilities). For calculation purposes, new facility roads with access control will be assigned a "no-traffic" designation, and new roads without access control will be assigned a "low-traffic" designation. As referenced in Fish and Wildlife Condition 19, the certificate holder shall demonstrate during or about the third year of operation that sage-grouse habitat mitigation shall be commensurate with the final compensatory mitigation calculations, either by showing the already-implemented mitigation is sufficient to cover all facility component impacts, or by proposing additional mitigation to address any impacts incremental to the initial calculation. The final compensatory mitigation calculations must be based on the asconstructed facility as well as the pre- and post- construction traffic studies, and must include the addition of indirect impacts from substantially modified existing access roads.
- c. Oregon's Sage-Grouse Habitat Quantification Tool shall be used to calculate the amount of sage-grouse habitat compensatory mitigation required for the facility and the number of credit-acres that each mitigation site will provide for the certificate holder.
- d. Prior to construction of a phase or segment in sage-grouse habitat as mapped by the Oregon Department of Fish and Wildlife (ODFW) at that time and based on final facility design, Oregon's Sage-Grouse Development Registry shall be used to calculate and verify compliance with the metering and disturbance thresholds established at OAR 660-023-0115(16) and (17). Evidence of compliance must be

provided to the Department prior to construction.

e. The Sage-Grouse Habitat Mitigation Plan may be amended from time to time by agreement of the certificate holder and the department. Such amendments may be made without amendment to the site certificate. The Council authorizes the Department to agree to amendments of the plan and to mitigation actions that may be required under the plan; however, the Council retains the authority to approve, reject, or modify any amendment of the plan agreed to by the Department.

[Fish and Wildlife Condition 17]

PRE-FW-04

Prior to construction of a phase or segment of the facility, the certificate holder shall conduct a one-year traffic study in elk habitat (elk summer range and elk winter range, based on the most recent ODFW maps available at the time) and sage-grouse habitat (areas of high population richness, core area habitat, low density habitat, and general habitat, based on most recent ODFW maps available at the time). The certificate holder shall submit the traffic study to the Department for its review and approval in consultation with ODFW.

[Fish and Wildlife Condition 21]

STANDARD: PUBLIC SERVICES (PS) [OAR 345-022-0110]

Prior to construction within Malheur County,

PRE-PS-01

- a. The certificate holder shall consult with the Owyhee Irrigation District on the segment between Milepost 255 and 258. Consultation shall present results of the geotechnical studies within this segment area, evaluate structure interference with irrigation structures, and confirm adequate clearance to minimize impacts to irrigation canal structures.
- b. The certificate holder shall develop mitigation for any agreed upon impacts from construction and operation of the facility to the South Canal of the Owyhee Project and any other impacted irrigation pipelines or equipment as determined appropriate by the certificate holder and Owyhee Irrigation District. A copy of any finalized agreement shall be submitted to the Department.

[Public Services Condition 1]

At least 90 days prior to construction of a facility phase or segment in each affected county and jurisdiction, unless otherwise approved by the Department, the certificate holder shall complete the following to address traffic impacts and transportation coordination in each county and jurisdiction:

PRE-PS-02

a. The certificate holder shall, in accordance with the OAR 345-026-0016 agency consultation process outlined in the draft Transportation and Traffic Plan (Attachment U-2 of the Final Order on the ASC) submit to the Department for review and approval, a final county-specific Transportation and Traffic Plan associated with the phase or segment of the facility to be constructed. The protective measures described in the draft Transportation and Traffic Plan, Attachment U-2 to the Final Order on the ASC, shall be included and implemented as part of the final county-specific Plan, unless otherwise approved by the Department, in consultation with the county or jurisdiction;

- b. The final county-specific Transportation and Traffic Plan submitted to the Department, county, and jurisdiction shall include:
 - The identification of the final material/equipment transportation, access, and haul routes and documentation of the existing condition of the routes/roads;
 - ii. Attachment B-5 Road Classification Guide and Access Control Plan attached to the Final Order on the ASC updated to reflect the final design of the facility. Include applicable road segment maps with road names for existing public roads, road names in Appendix A: Access Road Segment Attribute Table, road improvements designations, and final access control device description and locations;
 - 1. If, at final facility design, substantial modification of existing roads not identified as related or supporting facilities in Attachment B-5 (maps) of the Final Order on the ASC is necessary, the certificate holder must submit an Amendment Determination Request (OAR 345-027-0357), or submit a site certificate amendment request to the Department, prior to the modification to determine whether the road modifications are related or supporting facilities. Substantial modification of existing roads shall be as defined in Attachment B-5, which includes repairs to more than 20 percent of road surface, defined by the road prism width and longitudinal distance over a defined road segment.
 - iii. List any road use permits, encroachment permits, oversize/overweight permits, or road use or other legal agreements obtained by the construction contractor or applicant.
- c. The final Transportation and Traffic Plan for a phase or segment of the facility must be approved by the Department, in consultation with each county or jurisdiction, prior to construction.
- d. Prior to construction or road modification in any area designated as a geologic hazard zone by Oregon Department of Geology and Mineral Industries (DOGAMI) data and maps (e.g., as landslide or debris flow fan), or by relevant local zoning ordinances and maps, the site certificate holder and/or its construction contractors will consult with a licensed civil engineer to assess the proposed construction or road design in relation to potential geologic hazards.

[Public Services Condition 2]

PRE-PS-03

Prior to construction of any phase or segment of the facility, the certificate holder shall submit to the Federal Aviation Administration (FAA) and the Oregon Department of Aviation (ODA) a FAA Form 7460-1 Notice of Proposed Construction or Alteration for transmission structures within 5-miles of a public airport (La Grande /Union County Airport and Baker City Airport) and cranes exceeding 200 feet in height. The certificate holder shall submit to the Department a copy of the FAA and ODA hazard determination.

[Public Services Condition 4] At least 90 days prior to construction of a facility phase or segment, the certificate holder shall submit to the Department a proposed Environmental and Safety Training Plan, for review and approval by the Department, in consultation with each county and the medical response entities identified in the plan. The plan must include at a minimum, the following elements: Measures for securing multi-use areas and work sites when not in use; b. Drug/alcohol/firearm policies with clear consequences for violations; and c. An emergency and medical response plan including: i) Contact information for federal, state, and county emergency management PRE-PS-04 services: ii) Emergency response procedures for helicopter emergency response, spill reporting, hospitals closest to the transmission line route, and any other emergency response procedures; iii) Landing locations for medical emergency life-flights. d. Requirements for training workers on the contents of the plan. e. The certificate holder shall maintain copies of the Environmental and Safety Training Plan onsite and conduct all work in compliance with the plan during construction and operation of the facility. [Public Services Condition 5] STANDARD: SITING STANDARDS FOR TRANSMISSION LINES (TL) [DIVISION 24] Prior to construction, the certificate holder shall schedule a time to brief the Public Utility Commission Safety, Reliability, and Security Division (Safety) Staff as to how it will comply with OAR Chapter 860, Division 024 during design, construction, PRE-TL-01 operations, and maintenance of the facilities. The certificate holder shall notify the Department how and when it briefed the Public Utility Commission staff. [Siting Standards for Transmission Lines Condition 4] STANDARD: REMOVAL FILL LAW (RF) [OAR 141-085-0500 through -0785] The certificate holder shall: a. Prior to construction of a phase or segment of the facility, submit updated electronic wetland delineation report(s) to the Department and to the Oregon Department of State Lands. All wetland delineation report(s) submitted to the Oregon Department of State Lands shall follow its submission and review PRE-RF-01 procedures. b. Prior to construction of a phase or segment of the facility, the Department must receive a Letter of Concurrence issued by the Oregon Department of State Lands referencing the applicable wetland delineation for the phase or segment of the facility. [Removal Fill Condition 1] Prior to construction of a phase or segment of the facility, the certificate holder shall provide an electronic copy of the updated Joint Permit Application (JPA) to the PRE-RF-02 Department. [Removal Fill Condition 4]

5.4 Constructions Conditions

Condition Number	(Site certificate conditions for all standards and phases)	
STANDARD: G	ENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
CON-GS-01	Within six months after the Construction Commencement Deadline in General Standard of Review Condition 1, and every six months thereafter during construction of the facility and related or supporting facilities, the certificate holder shall submit a semiannual construction progress report to the Department consistent with OAR 345-026-0080(1)(a). To the extent that information required by this rule is contained in reports the certificate holder submits to other state, federal or local agencies, the certificate holder may submit excerpts from such other reports to satisfy this rule, unless otherwise required by a site certificate condition. [General Standard of Review Condition 3]	
CON-GS-02	The certificate holder may begin construction, as defined in OAR 345-001-0010(12), or create a clearing on a part of the site if the certificate holder has construction rights on that part of the site and the certificate holder would construct and operate part of the facility on that part of the site even if a change in the planned route of transmission line occurs during the certificate holder's negotiations to acquire construction rights on another part of the site. [General Standard of Review Condition 7; Mandatory Condition OAR 345-025-0006(5)]	
STANDARD: LA	AND USE (LU) [OAR 345-022-0030]	
CON-LU-01	During construction in Baker County, the certificate holder shall construct the facility to comply with the following setback distances and other requirements: In the EFU Zone (Based solely on certificate holder representations in the ASC): a. Buildings shall be setback as follows: front yards shall be set back at least 20 feet from property lines and road rights-of-way. b. Buildings and the fixed bases of transmission line towers shall be set back at least 60 feet from the center line of a road or street or 30 feet from any right-of-way in excess of 60 feet. c. Buildings and the fixed bases of transmission line towers shall be set back at least 10 feet from property lines. d. Buildings and the fixed bases of the transmission line towers shall be set back at least 50 feet from the high-water mark of naturally-occurring riparian area, bog, marsh, or waterway. [Land Use Condition 10]	
CON-LU-02	Within 90-days of construction within Union County, if the Morgan Lake alternative route segment is selected at final facility design, the certificate holder shall provide the Department a copy of the Memorandum of Agreement, if executed, between the City of La Grande and certificate holder for improvements at Morgan Lake Park.	

	[Land Use Condition 17]		
STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]			
CON-FW-01	During construction, the certificate holder shall not conduct ground-disturbing activities within elk or mule deer winter range between December 1 to March 31. Upon request by the certificate holder, the Department in consultation with ODFW may provide exceptions to this restriction. The certificate holder's request must include a justification for the request, including any actions the certificate holder will take to avoid, minimize, or mitigate impacts to elk and mule deer in the relevant area. [Fish and Wildlife Condition 11]		
CON-FW-02	During construction, if active pygmy rabbit colonies or the roost of a State Sensitive bat species is observed during the biological surveys set forth in Fish and Wildlife Conditions 15 and 16, the certificate holder shall submit to the Department for its approval a notification addressing the following: a. Identification of the State Sensitive bat species observed; b. Location of pygmy rabbit colony or bat roost; and c. Any actions the certificate holder will take to avoid, minimize, or mitigate impacts to pygmy rabbit colony or bat roost. d. The Department in consultation with the Oregon Department of Fish and Wildlife (ODFW) will review and approve the proposed avoidance, minimization, or mitigation measures prior to the action by the certificate holder to impact State Sensitive bat species roosts or hibernacula. [Fish and Wildlife Condition 12]		
CON-FW-03	During construction, if the certificate holder will be conducting ground-disturbing activities during the migratory bird nesting season between April 1 and July 15, the certificate holder shall conduct, as applicable, biological surveys for native, non-raptor bird species nests on all portions of the site boundary a maximum of 7 days prior to ground-disturbing activities, regardless of whether those portions have been previously surveyed. If the certificate holder identifies a native, non-raptor bird species nest, the certificate holder shall submit to the Department for its approval a notification addressing the following: a. Identification of the native, non-raptor species observed; b. Location of the nest; and c. Any actions the certificate holder will take to avoid, minimize, or mitigate impacts to the nest. [Fish and Wildlife Condition 13]		

During construction, the certificate holder shall not conduct ground-disturbing activities within the following timeframes and spatial buffers surrounding occupied nests of certain raptor species. Upon request by the certificate holder, the Department in consultation with ODFW may provide exceptions to this restriction. The certificate holder's request must include a justification for the request, including any actions the certificate holder will take to avoid, minimize, or mitigate impacts to the raptor and its nest.

CON-FW-04

Raptor Nest Buffers		
	Spatial Buffers	
Nesting	(radius around nest	Temporal
Species	site):	Restrictions
Bald eagle	0.5 mile	January 1 to August 15
Golden eagle	0.5 mile	February 1 to August 15
Ferruginous hawk	0.50 mile	March 15 to August 15
Flammulated owl	0.25 mile	March 1 to August 15
Great gray owl	0.25 mile	March 1 to August 15
Northern goshawk	0.5 mile	May 1 to August 15
Peregrine falcon	0.25 mile	January 1 to July 1
Prairie falcon	0.25 mile	March 15 to July 1
Red-tailed hawk	300 to 500 feet	March 1 to August 15
Swainson's hawk	0.25 mile	April 1 to August 15
Western burrowing owl	0.25 mile	April 1 to August 15

[Fish and Wildlife Condition 14]

[Fish and Wildlife Condition 18]

CON-FW-05

During construction of a facility phase or component in sage-grouse habitat as mapped by the Oregon Department of Fish and Wildlife (ODFW) at that time, the certificate holder shall implement the conservation actions set forth in the final Sage-Grouse Habitat Mitigation Plan referenced in Fish and Wildlife Condition 17 within six months of the impact actions.

CON-FW-06

During construction, the certificate holder shall not conduct ground-disturbing activities within sage-grouse areas of high population richness, core area habitat, low density habitat, or general habitat between March 1 to June 30. Upon request by the certificate holder, the Department in consultation with ODFW may provide exceptions to this restriction. The certificate holder's request must include a justification for the exception, including any actions the certificate holder will take to avoid, minimize, or mitigate impacts to sage-grouse in the relevant area. [Fish and Wildlife Condition 20]

STANDARD: THREATENED AND ENDANGERED SPECIES (TE) [OAR 345-022-0070]

CON-TE-01

During construction, the certificate holder shall not conduct ground-disturbing activities within Category 1 Washington ground squirrel (WAGS) habitat, subject to the following:

The identification and categorization of WAGS habitat shall be based on the

- surveys referenced in Fish and Wildlife Condition 16 and the results of the surveys shall apply for up to three years.
- b. The certificate holder may span Category 1 WAGS habitat and may work within Category 1 WAGS habitat, provided such work does not cause any ground disturbance.
- c. The results of the surveys completed per Fish and Wildlife Condition 16 shall remain valid for 3 years. If, during construction and within three years of the protocol survey, an occupied WAGS colony is encountered, the habitat category identified during the protocol survey shall remain valid (i.e. habitat not considered Category 1); the certificate holder shall submit to the Department for its approval, in consultation with ODFW, a notification addressing the following:
 - i. Location of the burrow or colony; and
 - ii. Any actions the certificate holder will take to avoid, minimize, or mitigate impacts to the colony.

[Threatened and Endangered Species Condition 1]

During construction, the certificate holder shall not conduct ground-disturbing activities within a 33-foot buffer around threatened or endangered plant species, based on pre-construction field surveys required per site certificate condition Fish and Wildlife Habitat 16, subject to the following:

CON-TE-02

- a. If complete avoidance is not possible (for example, if the threatened or endangered plant species is located within 33 feet of an existing road where upgrades are authorized), the certificate holder shall install temporary construction mats over soils where the threatened or endangered plant species have been observed and where construction vehicles will be operated; and
- b. If herbicides are used to control weeds, the certificate holder shall follow agency guidelines including guidelines recommended by the herbicide manufacturer, in establishing buffer areas around confirmed populations of threatened or endangered plant species and refrain from using herbicides within those buffers.

[Threatened and Endangered Species Condition 2]

STANDARD: NOISE CONTROL REGULATIONS (NC) [OAR 340-035-0035]

During construction, the certificate holder shall implement the following design measures and construction techniques to minimize potential corona noise during operations:

CON-NC-01

- a. For 500 kV transmission lines, use a triple bundled conductor configuration.
- b. Maintain tension on all insulator assemblies to ensure positive contact between insulators.
- c. Protect conductor surface to minimize scratching or nicking.

[Noise Control Condition 3]

5.5 Operational Conditions

Condition Number	(Site certificate conditions for all standards and phases)	
STANDARD: G	ENERAL STANDARD OF REVIEW (GS) [OAR 345-022-0000]	
OPR-GS-01	After January 1 but no later than April 30 of each year after beginning operation of the facility, unless otherwise agreed upon by the certificate holder and the Council Secretary, the certificate holder shall submit an annual report to the Department addressing the subjects listed in OAR 345-026-0080(1)(b). To the extent that information required by this rule is contained in reports the certificate holder submits to other state, federal or local agencies, the certificate holder may submit excerpts from such other reports to satisfy this rule, unless otherwise required by a site certificate condition. [General Standard of Review Condition 4]	
OPR-GS-02	The certificate holder shall submit a legal description of the site to the Department, Malheur County Planning Department, Baker County Planning Department, Union County Planning Department, Umatilla County Planning Department, and Morrow County Planning Department within 90 days after beginning operation of the facility. The legal description required by this rule means a description of metes and bounds or a description of the site by reference to a map and geographic data that clearly and specifically identify the outer boundaries that contain all parts of the facility. [General Standard of Review Condition 5; Mandatory Condition OAR 345-025-0006(2)]	
OPR-GS-03	Upon completion of construction, the certificate holder shall restore vegetation to the extent practicable and shall landscape all areas disturbed by construction in a manner compatible with the surroundings and proposed use. Upon completion of construction, the certificate holder shall remove all temporary structures not required for facility operation and dispose of all timber, brush, refuse and flammable or combustible material resulting from clearing of land and construction of the facility. In the annual report, the certificate holder shall report to the Department restoration activities, and applicable sections of the Reclamation and Revegetation Plan provided as Attachment P1-3 of the Final Order on the ASC, by county and area of temporary disturbance (i.e. multi-use areas, light duty fly yards, pulling and tensioning sites). [General Standard of Review Condition 9; Mandatory Condition OAR 345-025-0006(11)]	
STANDARD: ORGANIZATIONAL EXPERTISE (OE) [OAR 345-022-0010]		
OPR-OE-01	During operations, the certificate holder shall provide documentation of inspection, including date inspection(s) occurred, issues identified, and any corrective actions taken, within the annual report submitted to the Department pursuant to OAR 345-026-0080(1)(b), for the following:	

- a. Transmission line(s): Routine line patrols/inspections, unscheduled emergency line patrols, aerial vegetation patrols, and comprehensive 10-year maintenance inspection conducted in accordance with its Transmission Maintenance and Inspection Plan and Transmission Vegetation Management Program.
- b. Longhorn Station: Monthly inspections including visual inspections of buildings, fencing, and electrical equipment; monitoring of all protective relays, gauges, counters, meters, and communication devices; and, annual infrared assessment of bus and operating equipment carrying capacity in accordance with the Station Maintenance Program.

[Organizational Expertise Condition 1]

STANDARD: SOIL PROTECTION (SP) [OAR 345-022-0022]

OPR-SP-01

During operation, the certificate holder shall inspect the facility components for soil impacts as part of the certificate holder's regular transmission line inspection process and shall implement corrective action and mitigation measures, if necessary. [Soil Protection Condition 5]

STANDARD: RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]

Consistent with Mandatory Condition OAR 345-025-0006(8), no later than the date the facility is placed in service (the In-Service Date), the certificate holder shall submit to the State of Oregon, through the Council, a bond or letter of credit naming the State of Oregon, acting by and through the Council, as beneficiary or payee. The certificate holder shall maintain a bond or letter of credit as follows:

- a. Notwithstanding subsections (b) (g) of this condition, the Council retains the authority to require the certificate holder to submit a bond or letter of credit, in a timeframe identified by Council, and in an amount equal to the estimated total decommissioning cost for the facility (\$140,779,000 in 3rd Quarter 2016 dollars adjusted to present day value), or another amount deemed by the Council to be satisfactory to decommission the facility and restore the site to a useful, nonhazardous condition.
- b. From the In-Service Date until In-Service Year 51, the amount of bond or letter of
- credit shall be \$1.00.
- c. On the 50th anniversary of the In-Service Date, the certificate holder shall begin maintaining a bond or letter of credit in an amount that will increase on an annual basis for the next 50 years. In year 51, the amount of the bond or letter of credit will be set at one-fiftieth (1/50) of the total estimated decommissioning costs, adjusted for inflation, as specified in section (e) of this condition. Each year, through the 100th year of service, the bond or letter of credit shall be increased by one-fiftieth (1/50) of the estimated decommissioning costs. Once the bond or letter of credit is in an amount equal to 100 percent of decommissioning costs, it will remain at that level for the life of the facility.
- d. On the fifth anniversary of the In-Service Date, and on each subsequent quinquennial thereafter, or any year if requested by Council, the certificate holder shall notify the Department 60 days prior and report to the Council in writing or in-person on the following subjects for the prior 5-year reporting

OPR-RT-01

period: (i) the physical condition of the facility; (ii) any evolving transmission or electrical technologies that could impact the continued viability of the facility; (iii) the facility's performance in the context of the larger power grid; and (iv) the certificate holder's general financial condition, including the certificate holder's credit rating and current financial statements for that 5-year reporting period. The Department shall review the 5-year report and may engage its consultant in the review of the 5-year report. The Department may also include other information in its evaluation of the 5 year-report, including but not limited to: expertise of other reviewing agencies and internal Department staff, consultation with industry experts, or other consulting parties. The certificate holder shall be responsible for all costs associated with review of the 5-year report, in accordance with applicable rules and statutes. Based on the information provided in the 5-year report, and the Department's review and recommendations, the Council will consider whether the certificate holder should be required to post a bond or letter of credit that varies from the financial assurance requirements set forth in sections (b) and (c) of this condition. The certificate holder shall be subject to Council's determination. The Council's determination may include extending the date on which the certificate holder would be required to begin posting the financial assurances set forth in section (c) of this condition.

- e. The estimated total decommissioning cost for the facility is \$140,779,000 (3rd Quarter 2016 dollars), to be adjusted to the date of issuance of the bond or letter of credit in In-Service Year 51, and on an annual basis thereafter. Subject to Department approval, the certificate holder may request an adjustment of the bond or letter of credit amount based on final design configuration of the facility by applying the unit costs and assumptions presented in the Final Order on the ASC, Attachment W-1. Such adjustments may be made without amendment to the site certificate. The Council authorizes the Department to agree to these adjustments in accordance with this condition. The certificate holder shall adjust the decommissioning cost for inflation using the following calculation:
 - i. Adjust the estimated total decommissioning cost (expressed in Q3 2016 dollars) to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain-Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast" or by any successor agency and using the third quarter 2016 index value and the quarterly index value for the date of issuance of the new bond or letter of credit. If at any time the index is no longer published, the Council shall select a comparable calculation to adjust third quarter 2016 dollars to present value.
 - ii. Round the result total to the nearest \$1,000 to determine the inflationadjusted estimated total decommissioning cost.
- f. The certificate holder shall use an issuer of the bond or letter of credit approved by the Council.

g. The certificate holder shall use a form of bond or letter of credit approved by the Council. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the Council under OAR 345-026-0080(1)(b). The certificate holder shall maintain a bond or letter of credit in effect at all times as described in this condition and Retirement and Financial Assurance Condition 4 until the facility has been retired.

[Retirement and Financial Assurance Condition 5]

STANDARD: FISH AND WILDLIFE HABITAT (FW) [OAR 345-022-0060]

During the third year of operation, the certificate holder shall provide to the Department a report demonstrating that fish and wildlife habitat mitigation is commensurate with the final compensatory mitigation calculations.

OPR-FW-01

a. The final calculations shall be based on the as-constructed facility.

b. Oregon's Elk Mitigation Framework shall be used to calculate the amount of elk habitat compensatory mitigation required for the facility, and the information from the pre- and post-construction traffic studies, as required by Fish and Wildlife Conditions 21 and 22, shall be used in the calculation.

[Fish and Wildlife Condition 5]

OPR-FW-02

During operation, the certificate holder shall employ access control on facility access roads within elk habitat (elk summer range and elk winter range) and sage-grouse habitat (areas of high population richness, core area habitat, low density habitat, or general habitat), subject to approval by the applicable land-management agency or landowner.

[Fish and Wildlife Condition 9]

During the third year of operation, the certificate holder shall provide to the Department and ODFW the data from the traffic studies in Fish and Wildlife Conditions 21 and 22 for ODFW to calculate the final amount of indirect impact from facility roads that are considered related or supporting facilities to sage-grouse habitat and corresponding compensatory mitigation required using Oregon's Sage-Grouse Habitat Quantification Tool. After receiving the calculations from the State, the certificate holder shall provide to the Department a report demonstrating that sage-grouse habitat mitigation shall be commensurate with the final compensatory mitigation calculations.

OPR-FW-03

- a. The final calculations shall be based on the as-constructed facility.
- b. Oregon's Sage-Grouse Habitat Quantification Tool shall be used to calculate the amount of sage-grouse habitat compensatory mitigation required for the facility, and the information from the pre- and post-construction traffic studies shall be used in the calculation.

[Fish and Wildlife Condition 19]

OPR-FW-04

During the second year of facility operation, the certificate holder shall conduct a one-year traffic study in elk habitat (elk summer range and elk winter range, based on the same maps used for the pre-construction traffic study) and sage-grouse habitat (areas of high population richness, core area habitat, low density habitat, general habitat, based on the same maps used for the pre-construction traffic study).

[Fish and Wildlife Condition 22]

STANDARD: HISTORIC, CULTURAL, AND ARCHEOLOGICAL RESOURCES (HC) [OAR 345-022-0090]

Within three year after construction is completed, the certificate holder shall finalize, and submit to the Department for its approval, a final Cultural Resources Technical Report.

OPS-HC-01

- The results of all cultural resource monitoring required by the Historic Properties Management Plan (HPMP) referenced in Historic, Cultural, and Archaeological Resources Condition 2; and
- b. The results of all cultural resources testing or data recovery conducted as a result of unanticipated discoveries as required by the Inadvertent Discovery Plan in the Historic Properties Management Plan referenced in Historic, Cultural, and Archaeological Resources Condition 2.

[Historic, Cultural and Archeological Resources Condition 3]

STANDARD: SITING STANDARDS FOR TRANSMISSION LINES (TL) [DIVISION 24]

OPR-TL-01

Prior to placing the facility in service, the certificate holder shall take the following steps to reduce the risk of induced current and nuisance shocks:

- a. Provide to landowners a map of overhead transmission lines on their property and advise landowners of possible health and safety risks from induced currents caused by electric and magnetic fields.
- b. Implement a safety protocol to ensure adherence to National Electric Safety Code grounding requirements.

[Siting Standards for Transmission Lines Condition 2]

During operation, the certificate holder shall:

- a. Annually update the Public Utility Commission Safety Staff as to how the operator will comply with OAR Chapter 860, Division 024 considering future operations, maintenance, emergency response, and alterations until project retirement.
- b. File information with the Commission before January 2 of each even-numbered year, as required by ORS 758.013:
 - The name and contact information of the person that is responsible for the operation and maintenance of the electric power line, and for ensuring that the electric power line is safe; and

OPR-TL-02

- ii. The name and contact information of the person who is responsible for responding to conditions that present an imminent threat to the safety of employees, customers and the public.
- iii. In the event that the contact information described above in Siting Standards for Transmission Lines Condition 5(b) changes or that ownership of the electric power line changes, the person who engages in the operation of the electric power line must notify the commission of the change as soon as practicable, but no later than within 90 days.
- c. Provide Public Utility Commission Safety Staff with:
 - Maps and drawings of routes and installation of electrical supply lines showing:

- 11. Transmission lines and structures (over 50,000 Volts)
- 12. Distribution lines and structures differentiating underground and overhead lines (over 600 Volts to 50,000 Volts)
- 13. Substations, station, roads and highways
- ii. Plan and profile drawings of the transmission lines (and name and contact information of responsible professional engineer).
- d. Document compliance with the above provisions in its annual report to the Department as provided in General Standard Condition 4.

[Siting Standards for Transmission Lines Condition 5]

STANDARD: NOISE CONTROL REGULATIONS (NC) [OAR 340-035-0035]

During operation:

a. Pursuant to OAR 340-035-0010, an exception to compliance with the ambient antidegradation standard at OAR 340-035-0035(1)(b)(B) (which prohibits an increase of more than 10 dBA above ambient sound pressure levels) is granted during facility operation when there is foul weather (a rain rate of 0.8 to 5 millimeters per hour), which Council finds constitutes an infrequent event under OAR 345-035-0035(6)(a).

OPR-NC-01

- b. The ambient antidegradation standard at OAR 340-035-0035(1)(b)(B) may be exceeded by the transmission line at any time of day or night during foul weather events (defined as a rain rate of 0.8 to 5 millimeters per hour). [OAR 340-035-0010(2)]
- c. The quantity and quality of noise generated in exceedance of the ambient antidegradation standard OAR 340-035-0035(1)(b)(B), during foul weather events (defined as a rain rate of 0.8 to 5 millimeters per hour), shall not be more than 10 dBA (or ambient plus 20 dBA). [OAR 340-035-0010(2)]

[Noise Control Condition 4]

During operation:

OPR-NC-02

- a. A variance to compliance with the ambient antidegradation standard at OAR 340-035-0035(1)(b)(B) (i.e. an increase of 10 dBA above ambient sound pressure levels) is granted pursuant to OAR 345-035-0100(1) for the transmission line at any time of day or night during foul weather events (defined as a rain rate of 0.8 to 5 millimeters per hour).
- The ambient antidegradation standard at OAR 340-035-0035(1)(b)(B) may be exceeded by the transmission line at any time of day or night. [OAR 340-035-0100]

[Noise Control Condition 5]

5.6 Retirement Conditions

STANDARD: R	RETIREMENT AND FINANCIAL ASSURANCE (RT) [OAR 345-022-0050]
RET-RT-01	The certificate holder must retire the facility in accordance with a retirement plan approved by the Council if the certificate holder permanently ceases construction or operation of the facility. The retirement plan must describe the activities necessary to restore the site to a useful, nonhazardous condition, as described in OAR 345-027-0110(5). After Council approval of the plan, the certificate holder must obtain the necessary authorization from the appropriate regulatory agencies to proceed with restoration of the site. [Retirement and Financial Assurance Condition 2; Mandatory Condition OAR 345-025-0006(9)]
RET-RT-02	The certificate holder is obligated to retire the facility upon permanent cessation of construction or operation. If the Council finds that the certificate holder has permanently ceased construction or operation of the facility without retiring the facility according to a final retirement plan approved by the Council, as described in OAR 345-027-0110, the Council must notify the certificate holder and request that the certificate holder submit a proposed final retirement plan to the Department within a reasonable time not to exceed 90 days. If the certificate holder does not submit a proposed final retirement plan by the specified date, the Council may direct the Department to prepare a proposed final retirement plan for the Council's approval. Upon the Council's approval of the final retirement plan, the Council may draw on the bond or letter of credit described in OAR 345-025-0006(8) to restore the site to a useful, nonhazardous condition according to the final retirement plan, in addition to any penalties the Council may impose under OAR Chapter 345, Division 29. If the amount of the bond or letter of credit is insufficient to pay the actual cost of retirement, the certificate holder must pay any additional cost necessary to restore the site to a useful, nonhazardous condition. After completion of site restoration, the Council must issue an order to terminate the site certificate if the Council finds that the facility has been retired according to the approved final retirement plan. [[Retirement and Financial Assurance Condition 3; Mandatory Condition OAR 345-

025-0006(16)]

6.0 Successors and Assigns

To transfer this site certificate or any portion thereof or to assign or dispose of it in any other manner, directly or indirectly, the certificate holder shall comply with OAR 345-027-0400.

7.0 Severability and Construction

If any provision of this agreement and certificate is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the agreement and certificate did not contain the particular provision held to be invalid.

8.0 Execution

This site certificate may be executed in counterparts and will become effective upon signature by the Chair of the Energy Facility Siting Council and the authorized representative of the certificate holder.

IN WITNESS THEREOF, this site certificate has been executed by the State of Oregon, acting by and through the Energy Facility Siting Council and Idaho Power Company (certificate holder).

ENERGY FACILITY STIING COUNCIL	Idano Power Company
Ву:	Ву:
Kent Howe, Vice Chair	Authorized Representative
Date:	Date:
	Ву:
	Date:

EXHIBIT 2.b.

Public Utility Commission(s) Dockets Key comments and Filings - Stop B2H + some members RE: Idaho Power IRP's

2021 IRP Docket at the Oregon Public Utility Commission, LC#78

- Stop B2H Coalition Opening Comments for 2021 IRP LC#78 (July 7, 2022)
- Stop B2H Coalition Closing Comments for 2021 IRP LC#78 (September 8, 2022)
- Stop B2H Coalition Comments on Staff Report for 2021 IRP LC#78 (November 18, 2022)
- Lois Barry Comments for 2021 IRP LC#78 (November 29, 2022)
- Peter Barry Comments for 2021 IRP LC#78 (November 29, 2022)
- Irene Gilbert Comments for 2021 IRP LC#78 (November 29, 2022)
- Norm Cimon Comments for 2021 IRP LC#78 (November 30, 2022)
- Fuji Kreider Comments for 2021 IRP LC#78 (November 29, 2022)

2019 AMENDED IRP Docket at the Oregon Public Utility Commission, LC#74

- Application for Reconsideration of Order No. 21-184, in LC 74 (Aug 3, 2021)
- STOP B2H Coalition Closing Comments LC 74 (submitted January 8, 2021)
- <u>STOP B2H Coalition Amended and Revised Opening Comments</u> LC 74 (submitted April 7, 2020)

2017 IRP Docket at the Oregon Public Utility Commission, LC#68 (2018 hearing)

- Stop B2H Coalition Opening Comment for the Docket 68
- Stop B2H Coalition's Closing Comment (Redacted version) for Docket 68 and the verbal testimony at the Public Hearing
- More Comments/filings from STOP members for Docket 68
- Full OPUC Docket LC#68

2017 IRP Docket at the Idaho Public Utility Commission, IPC-E-17-11

• Stop B2H Coalition Comments

2015 IRP Docket at the Oregon Public Utility Commission, LC#63 (2016 hearing)

- Regarding the transmission line lack of upgrades and appropriate modeling
- Regarding lack of distributed generation and forward thinking in their planning
- Union County's comments to the OPUC in the 2015 IRP Docket
- Additional "Stop B2H" member's filings

BEFORE THE PUBLIC UTILITY COMISSION OF OREGON

In the Matter of

Idaho Power Company

Docket LC 68

2017 Integrated resource Plan

Amended Comments from the STOP B2H Coalition

Submitted November 5, 2017

Stop B2H Coalition

respectfully submits these amended comments.

There are no substantive changes to the original document; rather formatting corrections have been made to improve readability.

Table of Contents

Introduction	3
Section 1. Idaho Power has adequate firm Transmission	ut
Building B2H	
Idaho Power's Assumed Levelized Cost of PNW Market Purchases Is Not Credible	
PNW Imports Represent a Natural Gas Resource Strategy and Must be Evaluated As Such	
Idaho Power Ignores Certain Costs of Importing PNW Power	10
The Claimed Cost of B2H to Idaho Power Ratepayers is Significantly Understated Due to	11
Phantom Transmission Revenue Credits	11
Section 2. The cost of the B2H transmission line must be verified	13
Section 3. Conservation, Energy Efficiency and Demand-side Management	15
Idaho Power: Conservation and Efficiency in Oregon	
Idaho Power: Residential Customer Outreach	
Idaho Power: Agricultural and Commercial Conservation Initiatives	17
Idaho Power: Discussion of Service Area Conservation & Efficiency	17
Citizen Alternative: Demand Response	19
Overview	19
Idaho Power: Demand Response Capability	19
Idaho Power: Demand Response Needed Upgrades	20
Idaho Power: Demand Response Potential Benefits	20
Idaho Power: Demand Response Future	21
Section 4. Distributed Generation	21
Lack of Prudency and resistance toward Distributed Generation	21
Distributed Generation - Industrial	26
Citizen Alternative: Distributed Generation.	28
Overview	28
Trends	
Business Models for Distributed Generation	30
Valuation of Distributed Generation	31
Section 5. Conclusion	32
"Idaho Power, a company culture out of step with Oregon"	32

Introduction

Stop B2H Coalition (STOP), a citizens' interest group, hereby submits its Opening Comments related to Idaho Power's 2017 Integrated Resource Plan. STOP presents its case that Idaho Power has the resources available to meet future needs without building the Boardman to Hemingway transmission line (B2H) and without building new thermal generating facilities. The early decommissioning of coal plants planned in the 2017 IRP is supported by STOP. The B2H which is at the core of the company's 2017 IRP preferred portfolio design is not supported by STOP.

OPUC Guideline¹ the Prudency test² and STOP's concern for the long-term burden on ratepayers, set the overall tone for most arguments against the B2H. Specific concerns and challenges will be cited, as well as, citizen alternatives offered within the following Sections and Appendices.

Idaho Power is over-estimating its demand load forecast, under-estimating its energy efficiency and demand-side management capabilities, and has transmission resources currently available to meet its needs of the future. STOP also challenges the company's cost-estimates for the B2H transmission line, creating a dubious conclusion of the least-cost, lowest risk portfolio scenario, aka: "best cost/risk portfolio."

Section 1. Idaho Power has adequate firm Transmission

OPUC Guideline 5: Idaho Power has firm transmission rights and capacity which the company is unwilling to use or fully disclose. This section demonstrates and documents that the company has 350 MW of firm transmission which was not disclosed in its IRP. This more than meets the energy needs that Idaho Power claims it needs via B2H.

Idaho Power's proposed action plan is centered on the construction of the Boardman to Hemingway transmission line (B2H) as the key "resource" action in the proposed Action Plan. Idaho Power is resolute in their request that the Oregon Commission acknowledge Idaho Power's request to construct B2H, despite a clear failure on the part of Idaho Power to conform to the OPUC Integrated Resource Planning Guidelines, and the inconvenient fact that electric

¹ Guideline 1: Substantive Requirements. a. All resources must be evaluated on a consistent and comparable basis.... b. Risk and uncertainty must be considered.... c. The primary goal must be the selection of a portfolio of resources with the best combination of expected costs and associated risks and uncertainties for the utility and its customers... and d. The plan must be consistent with the long-run public interest as expressed in Oregon and federal energy policies.

² "Prudence is determined by the reasonableness of the actions 'based on information that was available (or could reasonably have been available) at the time." (In re PGE, UE 102, Order No. 99-033 at 36-37.) See also In re Northwest Natural Gas, UG 132, Order No. 99-697 at 52: ("In this review, therefore, we must determine whether the NW Natural's actions and decisions, based on what it knew or should have known at the time, were prudent in light of existing circumstances.")

transmission by itself is not a resource. Specifically, the IRP is devoid of any analysis of the underlying power resource actually represented by B2H in the IRP, which are short-term forward capacity purchases in the PNW for import into Idaho.

Idaho Power describes the B2H transmission line as a "supply-side resource," a concept which is absurd on its face. A transmission line does not supply any capacity or energy to meet loads. In some circumstances, a new transmission investment can be considered to create an "option" to acquire a resource in the future and this is exactly how the IRP Guidelines instruct the utility to consider possible transmission expansion not tied to reliability or the construction and integration of specific resources. Specifically, Guideline 5³ states that "utilities should consider... electric transmission facilities as resource options, taking into account their value for making additional purchases and sales." Idaho Power makes no attempt to value B2H as an option using standard option pricing approaches. (This would entail determining the option value of B2H to Idaho Power ratepayers first, and then comparing that value to the cost of B2H.)

Instead of analyzing the option value of B2H, Idaho Power identifies B2H as a resource. To justify their selection of B2H as a resource, Idaho Power has apparently created a single 20 year point estimate forecast of power prices in the Pacific Northwest that is intended to support the wisdom of Idaho Power spending over \$250 million for a minority ownership share of B2H. As shown below, this point estimate approach suffers from serious analytic shortcomings and flawed assumptions.

The OPUC must refuse to acknowledge the B2H action item in the IRP, as there is absolutely no substantive analysis in the record to support IPC's B2H action item. Idaho Power has failed to meet even the minimum requirements of the IRP as set forth in the Commission approved IRP Guideline 1: Substantive Requirements. Specifically, Idaho Power has failed to present and support a credible forecast of PNW purchase power delivered costs/prices over the planning horizon. Furthermore, IPC has treated the cost of purchase power imports from the PNW as a single point estimate for the entire IRP planning period, without consideration of any risk or uncertainty around that estimate, as required by the IRP Guidelines.

Even more duplicitous is IPC's failure to highlight to the Commission that in 2015, IPC actually acquired over 350 MW of additional long-term firm import capacity which is approximately the same amount of transmission originally sought via the proposed B2H transmission line⁵. Specifically, IPC acquired more than 350 MW of incremental firm PNW import capacity through

³OPUC IRP Guideline 5: Transmission "Portfolio analysis should include costs to the utility for the fuel transportation and electric transmission required for each resource being considered. In addition, utilities should consider fuel transportation and electric transmission facilities as resource options, taking into account their value for making additional purchases and sales, accessing less costly resources in remote locations, acquiring alternative fuel supplies and improving reliability".

⁴ See IRP Appendix C, Page 76.

⁵ The 2011, 2013, and 2015 IRP's all said that IPC sought 350 MW of incremental summer peak import capability.

a complex "asset swap" with PacifiCorp⁶. The acquisition of this import capacity, via ownership of transmission lines formerly owned by PacifiCorp, came at a large cost, resulting directly in an over 43% transmission rate increase to Idaho Power ratepayers. IPC has inexplicably failed to highlight this expensive transmission acquisition in their IRP, and has further failed to address why IPC still needs B2H after their 2015 acquisition of incremental transmission. As explained below, by Idaho Power's own admission, their IRP projects that in 2026, when B2H would come into service, Idaho Power will already be relying on imports to meet 17% of peak loads. Idaho Power has not addressed the price and supply risks of relying on spot markets to serve 17% of peak load, much less their desire to further increase their reliance on spot market purchases to meet over 25% of their peak loads with the addition of B2H.

Idaho Power Has Already Acquired 350 MW of Incremental PNW Import Capacity Without Building B2H

Idaho Power appears to be obscuring the fact that they now hold considerably more long-term firm import capability from the PNW than they held when they last produced their 2015 IRP. Idaho Power correctly describes that the existing transmission system is rated to move up to 1200 MW of power from the PNW to Idaho (WECC Path 14) in a West to East direction and further correctly states that this capacity was and is fully subscribed. What Idaho Power fails to identify in the IRP is that in 2015, there was a fundamental change in the allocation of those 1200 MW of transmission rights, effectively reallocating over 350 MW of the existing 1200 MW of capacity from PacifiCorp to Idaho Power. The capacity reallocation was part of a larger "Asset Swap" between Idaho Power and PacifiCorp.

This asset swap transaction came at an enormous cost to Idaho Power Ratepayers and other users of the Idaho Power transmission system, requiring an approximate 47 percent increase in transmission rates over 2 years. ¹⁰ The following table from the WECC Path Rating Catalogue shows the allocation of Path 14 capacity before the Asset Swap transaction. It shows that the 1200 MW West to East transfer capability was allocated between BPA, PacifiCorp and Avista.

⁶ Joint Application for Authorization for Disposition of Jurisdictional Facilities, FERC Docket EC15-54, Exhibit C page 146

⁷ IPC 2015 PTP Transmission Rate was \$22.48 and the rate today is \$34.90, a 55% increase over two years. See http://www.oatioasis.com/ipco/index.html.

⁸ 2017 IRP page 58.

⁹ See FERC Dockets EC15-54 and ER15-680.

¹⁰ See FERC Docket ER15-2292.

Allocation:	The transfer cap	pability of the path is allocated among the interconnections as							
	follows:								
	• 2400	MW East-to-West:							
	1587	MW IPC – PAC interconnection							
	413	MW IPC - BPA interconnection							
	400	MW IPC - AVA interconnection							
	• 1200	MW West-to-East:							
	350	MW BPA - IPC interconnection							
	400-510	MW PAC - IPC interconnection							
	340-450	MW AVA - IPC interconnection							
	For the 1200-M	W west-to-east, the sum of the PAC and AVA allocation cannot							
	be greater 850 f	MW (Seasonal Allocations: Spring – AVA 400 MW and PAC 450							
	MW, Summer – AVA 340 MW and PAC 510 MW, and Winter – AV								
	PAC 400 MW).								

Under terms of the asset swap and capacity reallocation, PacifiCorp received 1,090 MW of East to West capacity across Idaho and in turn, Idaho Power received rights to PacifiCorp's west to east capacity from the PNW to Idaho. The following table identifies the allocation of capacity between parties after the asset swap transaction closed in December of 2015. It shows that after the asset swap and capacity reassignment, IPC now holds approximately 82 percent of PacifiCorp's former west-to-east capacity allocation, or over 400 MW. STOP is unable to find any evidence in the IRP that Idaho Power has disclosed, or otherwise considered this new capacity in their IRP.

	Direct		Capacit	•	ition BEF V)	ORE	Directional Capacity Allocation AFTER Asset Swap (MW)						
	West to East			East to West			We	st to Ea	East to West				
	IPC	PAC	Total	IPC	PAC	TOTAL	IPC	PAC	Total	IPC	PAC	L	
Borah-West Transmission Total	1600	0	1600	2557	0	2557	1600	0	1600	1467	1090	2557	
Idaho-Northwest Transmission (WECC Path 14)													
Hemingway-Summer Lake 500 kV	0	550	550	C	1500	1500	450	100	550	0	1500	1500	
Walla-Walla-Hurricane	<u>0</u>	<u>398</u>	<u>398</u>	<u>c</u>	398	398	<u>325</u>	<u>73</u>	<u>398</u>	<u>0</u>	<u>398</u>	398	
Source: Joint Application for Authorization for D	ispositio	on of J	urisdict	ional Fa	acilities,	FERC Do	cket EC	15-54, E	xhibit (page :	146		

-

¹¹ PacifiCorp and Idaho Power are allowed to schedule up to 550 MW over the Hemingway-Summer Lake line and 398 MW over the Walla-Wall-Hurricane line respectively, but the simultaneous schedule across the two lines cannot exceed PacifiCorp's historical allocation of 510 MW as reflected in the WECC Path Rating Catalogue.

It is possible that Idaho Power has in fact acknowledged this new capacity starting in 2026 when a mysterious jump in import capacity is identified that is unrelated to B2H. The following table compares the stated amount of capacity available for imports from the PNW in the 2015 IRP to the same line item in the 2017 IRP.

Calcul	ation of I	daho Pov	ver's Pro	posed Re	liance or	Market	Purchase	s (impor	ts) to Me	et Peak L	oads		
July-17	July-18	July-19	July-20	July-21	July-22	July-23	July-24	July-25	July-26	July-27	July-28	July-29	July-30
239	234	230	227	224	273	270	266	261	257	254	249	245	242
313	313	302	433	492	489	488	487	486	616	615	614	613	612
74	79	72	206	268	216	218	221	225	359	361	365	368	370
3195	3195	3310	3366	3417	3472	3528	3589	3640	3695	3753	3812	3870	3927
0	0	0	0	0	0	0	0	0	500	500	500	500	500
489	429	362	311	255	195	138	76	23	466	406	341	103	42
						9.9%	11.5%	12.7%	17.6%	18.9%	20.3%		
	July-17 239 313 74 3195	July-17 July-18 239 234 313 313 74 79 3195 3195 0 0	July-17 July-18 July-19 239 234 230 313 313 302 74 79 72 3195 3195 3310 0 0 0	July-17 July-18 July-19 July-20 239 234 230 227 313 313 302 433 74 79 72 206 3195 3195 3310 3366 0 0 0 0	July-17 July-18 July-19 July-20 July-21 239 234 230 227 224 313 313 302 433 492 74 79 72 206 268 3195 3319 3366 3417 0 0 0 0 0	July-17 July-18 July-19 July-20 July-21 July-22 239 234 230 227 224 273 313 313 302 433 492 489 74 79 72 206 268 216 3195 3310 3366 3417 3472 0 0 0 0 0	July-17 July-18 July-19 July-20 July-21 July-22 July-23 239 234 230 227 224 273 270 313 313 302 433 492 489 488 74 79 72 206 268 216 218 3195 3319 3366 3417 3472 3528 0 0 0 0 0 0	July-17 July-18 July-19 July-20 July-21 July-22 July-23 July-24 239 234 230 227 224 273 270 266 313 313 302 433 492 489 488 487 74 79 72 206 268 216 218 221 3195 3195 3310 3366 3417 3472 3528 3589 0 0 0 0 0 0 0 0	July-17 July-18 July-19 July-20 July-21 July-22 July-23 July-24 July-25 239 234 230 227 224 273 270 266 261 313 313 302 433 492 489 488 487 486 74 79 72 206 268 216 218 221 225 3195 3310 3366 3417 3472 3528 3589 3640 0 0 0 0 0 0 0 0	July-17 July-18 July-19 July-20 July-21 July-22 July-23 July-24 July-25 July-26 239 234 230 227 224 273 270 266 261 257 313 313 302 433 492 489 488 487 486 616 74 79 72 206 268 216 218 221 225 359 3195 3310 3366 3417 3472 3528 3589 3640 3695 0 0 0 0 0 0 0 0 500	July-17 July-18 July-19 July-20 July-21 July-22 July-23 July-24 July-25 July-26 July-27 239 234 230 227 224 273 270 266 261 257 254 313 313 302 433 492 489 488 487 486 616 615 74 79 72 206 268 216 218 221 225 359 361 3195 3310 3366 3417 3472 3528 3589 3640 3695 3753 0 0 0 0 0 0 0 0 500 500	239 234 230 227 224 273 270 266 261 257 254 249 313 313 302 433 492 489 488 487 486 616 615 614 74 79 72 206 268 216 218 221 225 359 361 365 3195 3195 3310 3366 3417 3472 3528 3589 3640 3695 3753 3812 0 0 0 0 0 0 0 0 500 500	July-17 July-18 July-19 July-20 July-21 July-22 July-23 July-24 July-25 July-26 July-27 July-28 July-29 239 234 230 227 224 273 270 266 261 257 254 249 245 313 313 302 433 492 489 488 487 486 616 615 614 613 74 79 72 206 268 216 218 221 225 359 361 365 368 3195 3195 3310 3366 3417 3472 3528 3589 3640 3695 3753 3812 3870 0 0 0 0 0 0 0 500 500 500

As can be seen in the table, by Idaho Power's own admission, in 2026 they will be relying on over 600 MW of firm import capability to meet peak loads without B2H. This 600 MW of imports represents almost 18% of forecasted peak load in 2026 after DSM and EE. This is an astounding level of reliance on imports and lacks credibility. But Idaho Power does not want to stop there. Their preferred Portfolio 7with B2H projects that market purchases will comprise over 27% Idaho Power's projected peak loads before the first generating resource (reciprocating engines) are added to the system in 2031.

Idaho Power's Assumed Levelized Cost of PNW Market Purchases Is Not Credible One of the fundamental requirements for any IRP is the identification of resource options and an analysis of the cost of each resource considered; both stand-alone costs and the cost of each resource when integrated into a utility's resource Portfolio. In fact, Oregon IRP Guideline 1a requires that all resources be evaluated on a consistent and comparable basis, yet the 2017 IRP contains no analysis of the cost, availability, price and supply risk of relying on PNW spot market purchases to meet firm peak load requirements. Furthermore, Idaho Power seems to believe that incremental imports of PNW spot market power is the preferred new resource in the IRP, whether already existing import capability represents only 1 percent of peak supply, or represents more than 15 percent of peak supply as is the case for Idaho Power.

Remarkably, Idaho Power presents no analysis or material discussion of the "PNW imports" resource contained in the 2017 IRP. There is no discussion or forecast of forward power price curves in the PNW that is internally consistent with Idaho Power's forecast of natural gas prices (i.e., prevailing fuel prices). Idaho Power presents no analysis of the correlation between summer spot market prices and prevailing natural gas prices in the PNW. There is no analysis of the expected effect on spot market power prices when 1,300 MW of coal capacity is retired in the PNW in 2020.¹² Imports from the PNW don't even appear in the IRP Table of Supply Side Resources¹³. In short, Idaho Power apparently expects the Commission to take Idaho Power's recommendation to build B2H on faith. 14 The only relevant information on the cost of PNW imports appears in a single page of Appendix C that summarizes the Levelized Cost of Supply Side Resources. 15 A cursory examination of the levelized cost of PNW imports contained in Appendix C compared to actual market prices clearly indicates that Idaho Power has significantly understated the expected cost of a B2H/PNW Import resource. While STOP does not have the resources to independently perform the analysis the Idaho Power has failed to do, the limited examination of Idaho Power's conclusions explained below highlights the flawed assumptions underpinning Idaho Power's 2017 IRP.

PNW Imports Represent a Natural Gas Resource Strategy and Must be Evaluated As Such

The choice of a resource Portfolio that relies primarily on expanded market purchases of power to meet summer peak loads represents a natural gas based resource strategy. This is an empirical fact. During periods of high demand in the PNW, the marginal cost of dispatching gas-fired generation typically sets the market price of power. As stated in the Council's 7th Power Plan:

"Since natural gas-fired plants are often the marginal generating unit, gas prices play an important role in determining the wholesale electricity prices. Variations in the future price of gas could have a significant impact on electricity prices for the region." ¹⁶

Idaho Power's IRP fails to account for the relationship between daily natural gas prices and the daily market price of power in the PNW. Instead, Idaho Power appears to have selected a single point estimate of monthly power prices to populate the Aurora model. This point estimate of monthly power prices used by Idaho Power to calculate the levelized cost of purchase power is already proving to be too low.

First, a simple comparison of actual on-peak PNW market prices in July and August of 2017 to Idaho Power's unsupported forecast of market prices shows that Idaho Power has materially underforecast the cost of purchase power in their Portfolio modeling. The following table shows

¹² Both the 700 MW Centralia unit 1 and 600 MW Boardman coal plants are required to close by the end of 2020.

¹³ 2017 IRP Appendix C, page 73

¹⁴ See IRP Appendix C, page 73

¹⁵ See Levelized Cost of Energy, IRP Appendix C, page 76

¹⁶Power Council 7th Power Plan, https://nwcouncil.org/media/6829307/wholesaleelectricity.pdf page 11.

the actual volume weighted average monthly price at MIDC this past summer alongside the actual monthly PNW gas price, and the implied market heat rate (i.e., the actual relationship between gas prices and power prices). The table also identifies the PNW power price that Idaho Power selected when calculating their levelized cost of PNW market purchases. Actual market prices in July 2017 were 24% higher than assumed by Idaho Power and actual market prices in August of 2017 were 98% higher than assumed by Idaho Power.

	J	ul-16	Α	ug-16	Jul-17	1	Aug-17
Forecast MIDC Power Price Used by Idaho Power in Levelized Cost Calculation (\$MWh)	NA		NA		\$ 24.27	\$	28.18
Actual Weighted Ave. MIDC On-Peak Power Price (\$MWh)	\$	28.83	\$	35.62	\$ 30.00	\$	55.76
Actual as Percent of Forecast	NA		NA		124%		198%
Actual Weighted Ave. Malin Gas Price	\$	2.64	\$	2.66	\$ 2.69	\$	2.69
Implied Heat Rate (Btu/kWh)		10,923		13,392	11,143		20,694
				•	•		•
Source: US Energy Information Administration: https://www.eia.gov/electricity/wholesale/#history							
and Attachment 5 to Response to Staff Data Request 56	5						

More importantly, Idaho Power's whole treatment of the B2H resource option suffers from a failure to reflect the inherent relationship between gas prices and market power prices, and the risk and volatility represented by a significant increase in reliance on the market to meet firm load commitments. For example, the implied market heat rate of July market power in the PNW was 10,900 in 2016 and 11,100 in 2017, or an average of 11,000 Btu/kWh. Based upon this relationship, a \$1.00 increase in gas price would result in an \$11.00 per MWh increase in the market price of power.

The correct way to incorporate B2H transmission and market purchases into resource planning would be to treat B2H as an "option" to purchase market power based upon an implied market heat rate (monthly differentiated) and a forecast of gas prices. In this way, sensitivity analysis and risk assessments that test the robustness of resource portfolios under fuel price uncertainty would capture this relationship between market price risk and gas price risk. Idaho Power's IRP fails in this regard.

This fundamental flaw in their IRP Portfolio analysis leads Idaho Power to erroneous and unsupportable conclusions in support of building B2H to create an option to buy more power in the PNW. Specifically, Idaho Power appears to penalize non-B2H portfolios in the high gas price sensitivities based upon the higher cost of dispatching existing and new gas-fired resources, but does not similarly penalize B2H Portfolios that rely on relatively higher cost market purchases in this higher gas price environment. Such an approach fails to meet the clear requirement of IRP Guideline 1 that requires that "consistent assumptions and methods should be used for the evaluation of all resources".

B2H should be modeled by Idaho Power as an option to purchase peak summer market power at a price based upon an empirically supported market heat rate (e.g., 11,000 Btu/kWh) and the cost of gas. The Aurora model would then compare the cost of purchasing market power based upon the gas price and an 11,000 heat rate, to dispatching the next resource in the alternative fossil fuel portfolio. In the fossil fuel portfolio, the comparable option would be the reciprocating internal combustion engine (ICE) that would dispatch at a guaranteed heat rate of only 8,400 Btu per kWh¹⁷. This means that if the price of gas rises by \$1, the cost of market power would rise by \$11 MWh but the cost of power from the ICE unit would only rise by \$8.40 MWh. By extension, a combined-cycle combustion turbine would dispatch at a guaranteed heat rate of only 6,700 Btu/kwh and a \$1 rise in gas price would only increase the cost of power by only \$6.70 MWh, compared to the \$11 increase for purchased power.

Idaho Power Ignores Certain Costs of Importing PNW Power

Idaho Power's specification of the cost of PNW imports ignores the cost of wheeling PNW power to the Idaho Power system. This is a significant and unacceptable oversight. PNW power prices are based upon the cost of undelivered power. While a party can transact (purchase) power at the PNW market price, that power still needs to incur wheeling costs to be delivered to a scheduling point where the power can be exported from the PNW to the Idaho Power system. Even with the construction of B2H, the B2H line will not access any power plants directly. Idaho Power will still need to pay for a transmission wheel and losses, likely over the BPA transmission system, to get the power from whatever the generating source in the PNW to the Idaho Power System, including to B2H. If this transmission wheel is over the BPA transmission system to B2H, then Idaho Power would pay BPA's hourly transmission rate plus 1.9% for transmission losses. BPA's current transmission rate is \$4.23 MWh¹⁸ and the cost associated with real power losses would bring the cost of wheeling up to about \$5 MWh. If the transmission is instead provided over the PacifiCorp system, the costs would be about double (\$10 MWh) as PacifiCorp's hourly transmission rate is \$7.70 MWh and PacifiCorp assesses losses at the rate of 4.45%. Based upon Idaho Power's representation of the levelized cost of

¹⁷ 2017 IRP Appendix C, page 73

https://www.bpa.gov/Finance/RateInformation/RatesInfoTransmission/FY18-19/2018%20Rate%20Schedule%20Summary.pdf

PNW market power, their failure to properly account for wheeling costs alone means Idaho Power has understated the expected costs of imports by as much as 20 percent.

The Claimed Cost of B2H to Idaho Power Ratepayers is Significantly Understated Due to Phantom Transmission Revenue Credits

In what appears to be a desperate attempt by Idaho Power to make the numbers for B2H work, they introduce the theoretical concept of substantial secondary transmission sales revenues as an offset to the cost of B2H. Without analytic support, they value these annual transmission sales revenues at a levelized benefit of \$9 MWh (i.e., credit against the annual fixed cost of B2H), and perform no sensitivity analysis around this assumption. To put this in context, this projection translates into over \$9 million/year levelized. Idaho Power appears to have hardwired these large and speculative revenues into the Aurora model.

Idaho Power does not provide any support for this rosy estimate of secondary transmission revenues but a look at demand for existing capacity held by Idaho Power from the PNW to Idaho is illustrative of a lack of value for the path in all but the late spring months when excess PNW hydro drives PNW market prices low or even negative.

To test the credibility of Idaho Power's claim of lucrative revenues from secondary transmission sales, STOP examined the secondary revenues earned by Idaho Power in 2016 on the path after the capacity reallocation from PacifiCorp described above. The following table shows all secondary revenues earned by Idaho Power in 2016 on their share of the Northwest to Idaho path acquired from PacifiCorp. The table shows that in 2016 Idaho Power earned barely \$1 million in secondary revenues from third parties using Idaho Power's allocation of transfer capability from the PNW to Idaho during times when Idaho Power is not otherwise using their existing import capacity.

¹⁹ 350 MW * \$9 *33% Capacity Factor * 8760

		Energy Recd					MWH	MWH	Total	
ine	Payment to IPC by	From	Energy Del To	Туре	POR	POD	received	Delivered	Revenue	Rev/MWh
	2 Iberdrola Renewables	PACW	PACE	NF	SMLK	BORA	3141	3141	\$14,229	\$4.53
	3 Iberdrola Renewables	PACW	Sierra Pac Power	NF	SMLK	M345	791	791	\$3,583	\$4.53
	4 Morgan Stanley	PACW	PACE	NF	SMLK	BORA	339	339	\$424	\$1.25
	5 Morgan Stanley	PACW	PACE	NF	SMLK	BRDY	65	65	\$81	\$1.25
	6 Morgan Stanley	PACW	PACE	NF	Walla Walla	BORA	1285	1285	\$1,609	\$1.25
	7 Morgan Stanley	PACW	PACE	NF	Walla Walla	BRDY	175	175	\$219	\$1.25
	8 Morgan Stanley	PACW	M345	NF	Walla Walla	M345	739	739	\$925	\$1.25
	9 PacifiCorp	PACW	PACE	NF	SMLK	BORA	66107	66107	\$182,331	\$2.76
	10 PacifiCorp	PACW	PACE	ST Firm	SMLK	BORA	48505	48505	\$133,782	\$2.76
	11 PacifiCorp	PACW	PACE	NF	SMLK	BRDY	5070	5070	\$13,984	\$2.76
	12 PacifiCorp	PACW	PACE	NF	WallaWalla	BORA	81394	81394	\$224,494	\$2.76
	13 PacifiCorp	PACW	PACE	ST Firm	WallaWalla	BORA	126597	126597	\$349,169	\$2.76
	14 PacifiCorp	PACW	PACE	NF	WallaWalla	BRDY	347	347	\$957	\$2.76
	15 Powerex	PACW	PACE	NF	SMLK	BORA	17185	17185	\$75,637	\$4.40
	16 Powerex	PACW	PACE	NF	SMLK	BRDY	1729	1729	\$7,610	\$4.40
	17 Powerex	PACW	Sierra Pac Power	NF	SMLK	M345	2359	2359	\$10,383	\$4.40
	18 Powerex	PACW	PACE	NF	WallaWalla	BORA	1883	1883	\$8,288	\$4.40
	19 Powerex	PACW	PACE	NF	WallaWalla	BRDY	1641	1641	\$7,223	\$4.40
	20 Powerex	PACW	PACE	NF	WallaWalla	M345	390	390	\$1,717	\$4.40
	21 Shell Energy N. America	PACW	PACE	NF	SMLK	BORA	704	704	\$2,613	\$3.71
	22 Shell Energy N. America	PACW	PACE	NF	SMLK	BRDY	15037	15037	\$55,813	\$3.71
	23 Shell Energy N. America	PACW	PACE	ST Firm	SMLK	BRDY	1192	1192	\$4,424	\$3.71
	24 Shell Energy N. America	PACW	Sierra Pac Power	NF	SMLK	M345	19483	19483	\$72,315	\$3.71
	25 Shell Energy N. America	PACW	Sierra Pac Power	ST Firm	SMLK	M345	3274	3274	\$12,151	\$3.71
	26 Shell Energy N. America	PACW	PACE	NF	WallaWalla	BRDY	2921	2921	\$10,842	\$3.71
	27 Shell Energy N. America	PACW	Sierra Pac Power	NF	WallaWalla	M345	3265	3265	\$12,118	\$3.71
	28 The Energy Authority	PACW	PACE	NF	SMLK	BORA	449	449	\$1,897	\$4.22
	29 The Energy Authority	PACW	PACE	NF	SMLK	BRDY	50	50	\$211	\$4.22
	30 Transalta Energy Marketing	PACW	PACE	NF	SMLK	BORA	4267	4267	\$17,314	\$4.06
	31 Transalta Energy Marketing	PACW	Sierra Pac Power	NF	SMLK	M345	50	50	\$203	\$4.06
						TOTALS	410434	410434	\$1,226,546	

Basic economic realities would suggest that when existing transmission capacity across a certain path in a certain direction has little demand for use on a non-firm basis, expanding the capacity across the path as B2H would accomplish does nothing to increase demand for the path. Stated another way, the expected level of secondary transmission revenues accruing to Idaho Power by virtue of B2h is likely zero.

STOP asks that the Commission investigate the company's acquired 350 MW of Incremental PNW Import Capacity which has not been disclosed.

STOP also asks the Commission to investigate the questionable costs of purchasing power, the natural gas resource strategy, and the calculation of transmission revenues into the cost by Idaho Power.

Section 2. The cost of the B2H transmission line must be verified

OPUC Guidelines 1, 5, 13 & Prudency test

The cost of the B2H has been \$1.2 billion for several years and more information should be shared with the public so an informed and prudent decision can be made. The best-cost/least risk portfolio choice is also dependent on a verified calculation. The Section above addresses the questionable costs of purchasing PNW power and transmission revenues. In fact, even simple cost calculation must be updated and submitted to a third party competent to audit and report to the Commission. A number of additional calculations need to be made (and updated) and the costs recalculated:

- a) The assumed inflation rate of 2.1% per year should be recalculated for the life of the project—not merely the 20 year planning period. The rate payers will burdened with the cost of the B2H for 50-55 years—not 20.
- b) The cost of financing should also be calculated and shown. Again, for the entire project life and not for the planning period alone. For example, if Idaho Power's share is approximately \$286 million *before* financing here's what it looks like over 55 years using a prime rate of 1.5%:

Terms						ayment De	tails	Totals			
Item		Original Principal	Annual Interest Rate	Years to Pay	Periods / Year	Payment / Period	Total Yearly Payment	Payout Over Life of Loan	Interest Over Life of Loan		
	Power Line	\$286,000,000	1.50%	55	12	\$636,643	\$7,639,716	\$420,184,399	\$134,184,399		

The above is illustrative only, but if the financing is at a higher rate, this could easily lead to one-half-billion dollars in debt that Idaho Power customers will be responsible for.

- c) Cost overruns for transmission lines are between 30-50%²⁰. Are they included? A prudent planner would calculate costs based on at least some cost overruns.
- d) A contingency cost, such as litigation, needs to be to be added to the B2H, as compared to over-run costs, which are different. The costs involved in burying the approximate 1.5 miles of the transmission line in front of the National Historic Oregon Trail Interpretive

²⁰ Common Cost Overruns on Transmission lines: https://www.utilitydive.com/news/cost-overruns-in-spp-transmission-projects-draw-ire-of-rtos-leaders/402680/; http://www.utilitydive.com/news/cost-overruns-in-spp-transmission-projects-draw-ire-of-rtos-leaders/402680/; http://www.utilitydive.com/news/cost-overruns-in-spp-transmission-projects-draw-ire-of-rtos-leaders/402680/; http://www.utilitydive.com/news/cost-overruns-in-spp-transmission-projects-draw-ire-of-rtos-leaders/402680/; http://www.utilitydive.com/news/cost-overruns-in-spp-transmission-projects-draw-ire-of-rtos-leaders/402680/; https://www.utilitydive.com/news/cost-overruns-in-spp-transmission-projects-draw-ire-of-rtos-leaders/402680/; https://www.utilitydive.com/news/cost-overruns-ire-of-rtos-leaders/402680/; https://www.utilitydive.com/news/cost-overruns-ire-of-rtos-leaders/402680/; <a href="https://www.utilitydive.com/news/cost-overruns-ire-of-rtos-overruns-ire-of-rtos-overruns-ire-of-rtos-overruns-ire-of-rtos-overruns-ire-of-rtos-overruns-ire-of-rtos-overruns-ire-of-rtos-overruns-ire-of-rtos-overruns-ire-of-rtos-overrun

Center, near Baker City, needs to be added. The B2H violates protections under the National Historic Trail Act and it is nearly certain to be litigated if burial of the line it is not included in the cost.

- e) The added surplus sales of generation are included as a cost offset in the AURORA portfolio modeling in Idaho Power's 2017 IRP. (This was also discussed on a technical level in Section 1, above.) In the IRP at p 64, the company admits that historically, additional transmission wheeling revenue has not been quantified for a transmission capacity addition. In the IRP modeling, the estimated incremental transmission wheeling revenue from non-native load customers was modeled as an annual revenue credit for B2H portfolios.
- f) We understand there is a 20% contingency fund. Is this fund included in the base cost or is it on top of the \$1.2billion total? Are the above mentioned items included in this 20% contingency fund? Similarly, the rate of return on investment (ROI) or profit the company will make should be calculated and shown. We understand it to be in the range of 6.7%. Is the profit/ROI included or in addition to the \$1.2 billion? Separating these would be more transparent to the public and the Commission.
- g) An estimate of the cost increase to B2H ratepayer's energy bills should be calculated and shown. In Order No. 17-235, effective July 1, 2017, the Commission approved a revenue requirement increase of \$1,056,800, or 1.91 percent, associated with a 2025 end-of-life for both Valmy units. Is one to assume that approximately \$1 million in investment equates to approximately a 1.9% increase to the ratepayers?

STOP asks the Commission to investigate the cost estimates provided by the company. In particular, STOP contends that the cost estimates do not reflect the entire cost of the B2H project over the life of the project. Rather, they only include some of the costs for the 20 year planning period. This lacks truthful integrity and does not seem to be a prudent refection of true cost and risk that the ratepayers will be assuming.

STOP also asks the Commission to investigate the legitimacy and prudency of the utility adding <u>potential revenues</u> to off-set costs in their calculations. Future revenues, given the rapidly changing energy industry discussed in STOP's remaining comments, seem suspect at best. STOP would like to see revenue assumptions separated from the cost calculations to better compare the cost/risk to other portfolios in the IRP.

Section 3. Conservation, Energy Efficiency and Demand-side Management

OPUC Guideline 1: Substantive Requirements. All energy sources must be evaluated on a consistent and comparable basis. All known resources for meeting the utility's load should be considered, including supply-side options ... and demand-side options which focus on conservation and demand response.

What follows is referenced from Idaho Power's 2017 IRP, <u>Appendix B: DSM Annual Report</u>, with the page or section numbers from that document included where relevant.

Idaho Power has achieved much less in energy relative efficiency savings when compared to other utilities. Conservation and efficiency are widely acknowledged to be the area where the greatest savings can be achieved at the least cost and risk to the utility²¹.

Idaho Power: Conservation and Efficiency in Oregon

Idaho Power's residential efficiency efforts in Oregon have focused on the same funding sources that have been on-going utility initiatives for decades. These include education and energy efficient lighting programs which made up 42.5% of the \$280 thousand in Oregon funding for 2016. Weatherization programs accounted for an additional 20.2%.

The only initiative which remotely touches on demand response is the A/C Cool program. A device attached to the air conditioning unit automates on/off cycling at preset intervals, helping moderate peak demand during the hottest summer days. That program is shown in Appendix 2 as having cost the utility a little less than \$42 thousand, 14.9% of total expenditures.

Darrel Anderson, Idaho Power's CEO, has stated that:

"it is easier to develop incentives when people are paying 30 cents a kilowatt hour." (Fisher 2016)

The reality is that hundreds of thousands of kilowatt hours have been saved by utilities whose average base charge is less than 12 cents kWh²². While Idaho Power describes customer satisfaction with its outreach efforts at length in their 2017 IRP, there is little evidence of

²¹ **Delmarva Electric** with 2/3 the number of residential customers saved 77,781 MWh.

PNM with 500,000 customers combines renewables: solar (505,640 MWh); wind (924, 618 MWh); and geothermal (519,742 MWh), to produce clean power for 154,000 homes (12.67 MWh per home or 1,950,000 MWh of total savings).

NV Energy with 1 million customers, approximately twice the number for Idaho Power, saved 235,000 MWh. Ameren Missouri with 1.2 million residential and business customers plans over the next 3 years to add energy savings of 570,000 MWh.

Delmarva Power & Light, P.S.C. Del No 8 – Electric, March 31, 2017 approximately 11 cents kWh; Public Service Company of New Mexico, 20th Revised Rate No. 1A, effective October 1, 2016 approximately 9 cents a kWh;

NV Energy https://www.nvenergy.com/about-nvenergy/rates-regulatory, w/o TOD savings, approximately 11 cents a kWh.

increased energy savings outcomes since 2011.

Idaho Power: Residential Customer Outreach

Idaho Power's efforts to persuade rate payers to conserve energy are insufficient and largely ineffective and those efforts appear to have flagged over time.

In 2016, residential customers' bills included an invitation to "Take the Smart-saver Pledge." Residents were asked to pledge an "energy saving behavior change" for three weeks, but to change their behavior for only one day each of those weeks. They were asked to choose from activities that included turning thermostats down one to three degrees, washing a full load of laundry in cold water and hang drying it, or using the crock pot or BBQ instead of the oven.

"Pledges" were sent to 367,221 customers. Those responding were eligible to win an Energy Star appliance. 937 pledges were received, and by responding to a follow up-survey customers were eligible to win one \$100 prize. 408 customers responded with all but one reported plans to continue with the energy saving changes. The utility rated the follow-up effort at 97% positive response but only achieved a miniscule .0011 % behavior change in its customer base. [pp. 21-22.]

Idaho Power's residential energy savings programs saw increases in the 2009-2011 period, but energy savings have been static or declining since then. [pp. 177–185]

Only two new energy programs have been added since 2009, with Easy Savings Kits and Educational Distributions added in 2015. It's unclear how kWh energy savings are measured for these efforts. [p. 178]

The A/C Cool Credit program mentioned previously has a total of 28,000 participants across the service area, just .063 % of residential customers. That program "was not actively marketed in 2016" although efforts were made to retain participants. [p. 34]

Idaho Power initiated successful TOD pricing with 1300 customers in 2013 (approximately .003% of residential customers). Idaho Power has not expanded the program in the intervening years.

Fifty percent of Idaho Power's overall residential energy efficiency savings are the result of the Energy Efficient Lighting program which distributes LED lights to its customers. [p. 175]

In 2016, Idaho Power saved 42,208 MWh through residential energy efficiency. As mentioned in the overview, other utilities have been more aggressive and much more successful in their efforts.

While the IRP forecasts growth of .09% per year for average energy demand, and 1.4% per year for peak-hour demand [2017 IRP, p.1], these forecasts fail to reflect the flat demand and declining average customer use the utility has seen from 2007 to 2016. This trend is true despite the fact that Idaho Power has not shown consistency in its efforts to meet peak demand by pursuing peak demand savings. Much more is possible.

Idaho Power: Agricultural and Commercial Conservation Initiatives

The utility has had more success with its agricultural and commercial customers, much of which reflects the time and staff these organizations are willing to spend on what is often the largest expense they have. The result has been ever-increasing efficiency for those customers and a significant drop in demand. As a result, the effectiveness of those programs seems to have peaked.

Irrigation, which represents the majority of Idaho Power's DSM savings, achieved 303 MW peak demand savings in 2016, slightly less than its 2011 and 2012 savings of 340 and 320 MW, constituting only 2/3 of potential DSM savings in this sector. [p. 175]

Commercial peak demand savings reached 1.2 MW for new construction in 2014, with no savings in 2015 or 2016. Retrofits reached 7.8 MW in 2010 with zero subsequent savings in the following 6 years. [p. 186]

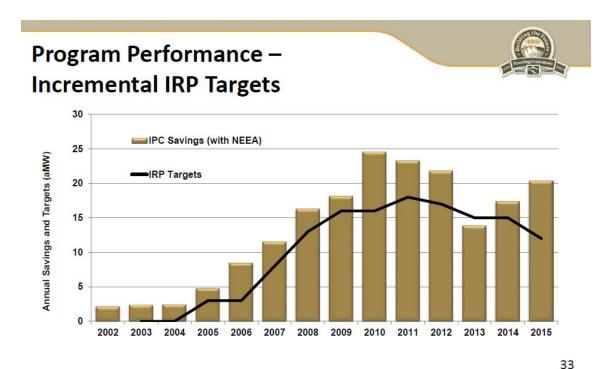
Custom Projects, the largest Industrial sector achieved 9.5 MW in 2010, with marked declines in the following years, and zero savings in 2015 and 2016. [ibid. p. 187]

Idaho Power: Discussion of Service Area Conservation & Efficiency

In the context of IRP planning, STOP notices that Idaho Power consistently under targets and therefore under-plans their savings of energy efficiency. This skewing results in over-inflated statement of need, working in the company's interest for rationalizing more facilities. This type of planning is not in the best interest of the ratepayers.

A clear example of this is demonstrated in the following slide produced by Idaho Power for its 2017 IRP Advisory Council meetings. Some data has been superimposed for comparison purposes. The slide below (Program Performance – Incremental IRP Targets) demonstrates how Idaho Power continuously underestimates it demand side savings. Since 2010, Idaho Power significantly under plans its demand side saving by a rounded 37%—the difference between the IRP targets for energy efficiency and the actual energy efficiency savings through initiatives in conjunction with the Northwest Energy Efficiency Alliance (NEEA). If these energy efficiency and conservation savings, were reflected in the 2017 IRP planning and the company's "need" calculation, there would be a significant reduction in Idaho Power's power need. (Note: in 2013, there was no DSM program implemented by the company.)

Idaho Power can obtain much more in the way of energy savings through a more focused effort around conservation and efficiency. Given the decline in average demand, these untapped resources along with the rise of distributed generation (Section 4) would go a long way towards reducing the need to import energy from outside the service area with all of the expense and risk that involves.



STOP encourages the Commission to review Idaho Power's tepid attempts at Conservation and Energy Efficiency over the years and to not acknowledge the 2017 IRP until their Action Plan reflects improvements.

STOP also asks the Commission to investigate Idaho Power's cost comparisons of DSM to B2H. See Staff Question #56 regarding cost spreadsheet errors.

Furthermore, STOP offers the following "Citizen Alternative for Demand Response."

Citizen Alternative: Demand Response

OPUC Guideline 7: Plans should evaluate demand response resources, including voluntary rate programs, on par with other options for meeting energy, capacity, and transmission needs (for electric utilities) or gas supply and transportation needs (for natural gas utilities).

Overview

There is little about demand response in the Idaho Power IRP ("Idaho Power 2017 Integrated Resource Plan" 2017) separate from rate programs, and no broad discussion of an advanced metering infrastructure²³ (AMI). Most disturbing is the confusion evident in the one section of the IRP [Appendix B: DSM Annual Report] where initiatives are discussed as part of the *Irrigation Peak Rewards* program [p. 140]:

To participate in the Automatic Dispatch Option, either an advanced metering infrastructure (AMI) or a cellular control device is attached to the customer's electrical panel that allows Idaho Power to remotely control the pumps.

A metering infrastructure is just that, an infrastructure. The advancement comes with the addition of a backend server hosting a database, virtual private network communications between the utility and its customers, and digital control surfaces that facilitate those communications at the service endpoint where the metering is done.

No one is going to attach that framework to a customer's electric panel. Only the node components and the associated software will reside on customer premises. The utility should get clear definitions in place so that it can better communicate with its producer-consumers. To do that, it must train its staff in an understanding of those terms, and consistency in their use.

Idaho Power: Demand Response Capability

Idaho Power has installed approximately 500,000 smart meters on residential sites. Advanced metering has saved countless miles of vehicular travel and the labor of reading meters for billing, connection and cancellations, as well as providing valuable information about power outages. The deployment of those meters is, however, only the first step in what is required to significantly enhance residential demand response savings.

The failure to build-out its metering Idaho puts Idaho Power at ever-increasing risk. It also costs its customers the savings they would receive from having digitally mediated demand response in place. As one example, research has shown that smart meters combined with time-of-use pricing can accomplish peak hour energy savings of over 10%²⁴.

²³ The NETL Modern Grid Strategy Powering Our 21st - Century Economy; Advanced Metering Infrastructure. (2008.)

²⁴ Jessoe, K. & Rapson, D. Commercial and Industrial Demand Response Under Mandatory Time-of-Use Electricity Pricing. *J. Ind. Econ.* **63**, 397–421 (2015).

Idaho Power: Demand Response Needed Upgrades

While Idaho Power often describes its future energy savings plans by saying that "...the landscape has been prepared..." the utility must take those next steps. That means build-out of the required information technology (IT), budgeting for the management of that technology, and the associated project management costs involved with full integration. That project management must include obtaining the commitment required of its producer-customers. While those elements require a high level of coordination and planning, the benefits can be very significant ²⁶.

Idaho Power: Demand Response Potential Benefits

Many utilities emphasize the research they have conducted into demand response, and their partnerships in nationally funded pilot programs for solar energy, smart grids and smart meters²⁷. Responding to criticism that Idaho Power has been slow to embrace alternative energy sources, however, the CEO responded at the Boise City Club that even though making large scale investments would earn the utility a return, they were unlikely to do so '"given that [the utility] continues to be long on energy" – or have more regular power generation than it usually needs.'

Leaving aside the fact that this hedge brings into question the need for 25% more power in 20 years, it also suggests that the utility lacks any organized effort to research and employ new energy saving technologies. Reinforcing this sentiment is the fact that the utility has openly stated that their research while "not organized or managed as a specific project, …actively monitors smart grid-related technology advancements, articles, research, reports, demonstration projects, and demonstration results as applicable." That sounds like an academic exercise not a planning effort.

What they have made clear is that "As energy generation, consumption, and management technologies continue to improve, additional opportunities for the deployment of smart gridenabled devices/appliances will become available... it may be possible to create new products and services to help Idaho Power manage and optimize its system and help its customers manage their energy use, consumption, and distributed generation preferences. The areas currently being monitored include the management and integration of EVs, distributed resources, and microgrids." [2017 Draft Smart Grid report.]

²⁵ With at least ten years of published research and results of pilot programs already available with details of substantial savings, Darrel Anderson, addressing the Boise City Club, nonetheless said that the utility is still "preparing the landscape for future studies of renewables."

²⁶ NV Energy (1,096,213 residential customers) has initiated dramatic voluntary time-of-use rates. One option available to their customers is a summer rate of 50 cents on-peak hour, vs. .05 cents off-peak hour for residential charges. At the end of the year, customers' bills are compared with the charge for regular (non time-of-use) rate and if time-of-use proves more expensive, the difference in charges is credited to their bills and they may choose to withdraw from the program.

²⁷ Delmarva of Delaware refers to California smart meter pilot studies and Maryland's success with AMI; Florida's federal grants expanded Florida's smart metering system in 2012 with dramatic results which PNM (New Mexico) refers to as catalyst for their successful residential energy savings program. Additionally PNM participated 10 years ago as one of 16 successful nationally funded pilot programs combining solar with battery storage.

In short, the utility is looking for the very business model that is rapidly being adopted by producer-consumers as they defect from the grid and build partnerships that short-circuit traditional utilities. That's what the future holds for Idaho Power if it persists in its goal of absolute control over the production and distribution of electricity. It needs to build partnerships with its customers, and quickly.

Idaho Power: Demand Response Future

With the electric utility industry in near turmoil, Idaho Power's tentative position in regard to the rapid and accelerating changes is risky at best and it has the potential to put the future of the utility in jeopardy. The time for action is now before events over-run their business model. Regulators must insist that Idaho Power conduct an in-depth analysis of energy efficiency and actual demand response projects, those that go well beyond Idaho Power's narrow one-size-fits-all definition of demand management. There is simply too much risk and significant cost associated with the status quo.

Section 4. Distributed Generation

OPUC Guideline 12: Electric utilities should evaluate distributed generation technologies on par with other supply-side resources and should consider, and quantify where possible, the additional benefits of distributed generation.

Lack of Prudency and resistance toward Distributed Generation

Related to Section 3 above, where tepid attempts have been made at energy conservation and efficiency, the company seems resistant to emerging models of distributed generation to the point of failing the prudency test according to a number of cases in front of the Commission.

"Prudence is determined by the reasonableness of the actions "based on information that was available (or could reasonably have been available) at the time²⁸." Prudent information on this new emerging business model is available to Idaho Power. However, they do not have a vision of how they can fit into this new business model. They have a corporate culture of disrupting PURPA solar and battery opportunities, avoiding distributed generation, not renewing PPA's, and destabilizing rooftop solar in their service territory.

STOP believes that Idaho Power is not making prudent decisions, in light of:

²⁸ "Prudence is determined by the reasonableness of the actions 'based on information that was available (or could reasonably have been available) at the time.'" (In re PGE, UE 102, Order No. 99-033 at 36-37.) See also In re Northwest Natural Gas, UG 132, Order No. 99-697 at 52: ("In this review, therefore, we must determine whether the NW Natural's actions and decisions, based on what it knew or should have known at the time, were prudent in light of existing circumstances.")

- 1. A recent BPA decision. The cancellation of the I-5 Corridor Reinforcement Project²⁹, a 500KV transmission line, is an example. As the BPA administrator said in his decision letter, "Bonneville is committing to taking a forward-looking approach with its investment decisions, and the region can be certain that BPA will seek first to use efficiencies and build at the smallest scale possible to meet our customers' needs, ensuring Bonneville remains a reliable engine of economic prosperity and environmental sustainability in the Northwest."
- A recent Washington State Utilities and Transportation Commission Draft Report and Policy Statement on Treatment of Energy Storage Technologies in Integrated Planning and Resource Acquisition³⁰ (<u>DOCKETS UE-151069 AND U-161024</u>), the Washington Commission discussed a framework for the future.

In the report, Section III titled STATEMENT OF THE REGULATORY ISSUE TO BE ADDRESSED on page 7 in Sections 26, 27, and 28 they said:

This requires us to look not just at the bulk power system that is the subject of integrated resource plans, but at the distribution grid, where state policies and declining technology costs are likely to both create challenges and offer solutions over time. Customer-sited generation facilities and growing demand to charge electric vehicles, while limited in Washington at present, have the potential to alter customer usage patterns dramatically and require distribution system upgrades to provide the flexibility needed to meet those changing demands.

Where distribution system upgrades were once a relatively simple question of building additional wires, poles, and transformers, distributed energy resources now allow utilities to apply the resource portfolio approach historically used in integrated resource planning to distribution planning. Despite that point of commonality, however, resource planning on the distribution system remains a fundamentally different process than integrated resource planning. Where an IRP considers the costs and benefits of resources at a system or portfolio level, more granular distribution planning analyzes the costs and benefits of resources on a locational basis, with the potential for hundreds of finite locations with different characteristics. IRP models are not designed to do the type of locational analysis that distribution planning requires, and attempting to incorporate the myriad additional variables associated with various locations on the distribution system into an IRP model is simply infeasible.

²⁹ https://www.bpa.gov/Projects/Projects/I-5/Documents/letter I-5 decision final web.pdf

https://www.utc.wa.gov/docs/Lists/Commission%20Calendar/Attachments/2058/U-161024%20UE-151069%20DRAFT%20Energy%20Storage%20Policy%20Statement.pdf

We therefore intend to address the question of energy storage modeling on two levels. In this policy statement, we identify IRP modeling refinements and competitive procurement practices to ensure that energy storage is fairly evaluated and procured alongside other resources at the system level. In the IRP rulemaking, we intend to develop rule language to ensure that energy storage is fairly evaluated and procured alongside other resources – such as demand response, energy efficiency, distributed generation and infrastructure upgrades – at the distribution level.

STOP believes these first 2 points lay out a new prudency where utilities should: 1) seek first to use efficiencies and build at the smallest scale possible to meet customers' needs, ensuring utilities remain a reliable engine of economic prosperity and environmental sustainability; and 2) distributed energy resources should allow utilities to apply the resource portfolio approach historically used in integrated resource planning to distribution planning.

3. Three cases that demonstrate Idaho Power's self-serving thinking regarding solar and battery PURPA opportunities, and disruption of net metering instead of prudent, forward-thinking are:

<u>CASE NO. IPC-E-15-01</u> (ORDER NO. 33357) on August 2015 where Idaho Power's strategy to weaken PURPA solar is demonstrated by the Idaho Public Utility Commission (IPUC) decision. In this case, the Idaho Commission section at p 24 it was stated ...

"Finally, if the goal of PURPA was to "encourage" the development of renewable resources, Idaho has made significant advancements toward that goal. Both Idaho Power and PacifiCorp presented persuasive evidence of capacity surpluses. These two utilities have demonstrated that their supply of PURPA and non-PURPA power exceeds their current average loads. Tr. at 111, 117, 931. The abundance of PURPA generation extends the utilities' capacity surpluses to 2024 for Idaho Power and 2028 for PacifiCorp.

Where on page 32, in Ultimate Findings and conclusions, "IT IS HEREBY ORDERED that Idaho Power's Petition to reduce the length of its IRP-based PURPA contracts from 20 years to two years is granted."

This effectively shut down the development of many MW of solar resources in the company's service area. In the company's 2015 IRP at page 9, Uncertainty Related to PURPA Solar, the company complains,

The IRP load and resource balance includes 461 MW of solar PV from PURPA projects scheduled to be on-line by year-end 2016. The energy and peak-hour

capacity of these projects was included in the PURPA forecast at the time the forecast was prepared. The risk of relying on these signed contracts is exemplified by the fact that 141 MW of the 461 MW were recently terminated due to inaction by the PURPA developers. The removal of the 141 MW of solar capacity increases peak-hour capacity deficits by approximately 75 MW.

Secondly, in <u>CASE NO. IPC-E-I7-01</u> Order 33785, Idaho Power files for a declaratory order regarding proper contract terms, conditions, and avoided cost pricing for battery storage. In this case, the IPUC in a <u>press release</u> says, "Since the facilities proposed by Franklin and Black Mesa utilize solar as the primary energy source, the commission determined that the projects would only be eligible for two year, negotiated contracts."

Idaho Power further strategically reduced the role of battery storage, as Redwood Energy LLC asserts, battery storage "is a dispatchable system that will offer ancillary grid services such as voltage support, load shifting, reserve capacity, load-balancing, [and] firming of variable generation or time-shifting to match load³¹."

Third, in <u>Case No. IPC-E-17-13</u> the company requests to Establish New Schedules for Residential and Small General Service Customers with on-site Generation. This is an attempt to change the way net metering works and depending on the ruling in this case it could create serious disincentives for rooftop solar and others wishing to install on-site generation to reduce load on the system. Or, it could lead to grid defection--customers leaving the grid entirely.

STOP believes these 3 cases show: 1) the company did not want PURPA solar then complained about the termination of these contracts due to inaction by the PURPA developers. This is exactly what the company intended by its actions; 2) the company did the same with PURPA battery storage with its ancillary services; and 3) has filed to significantly alter how net metering has worked in Idaho and in most of the country.

This demonstrates a conscious effort by the company to not deploy the most prudent business method/resources for the ratepayer. The company appears to not want to use PURPA involving solar with battery storage and their ancillary services, or on-site generation, with their avoided costs to ratepayers, because Idaho Power cannot maximize its profits by building these resources themselves. If the company serves in the public interest the rate payers must win out over the shareholder. It goes to the basics of the <u>Build vs Buy Bias</u> OPUC UM 1276 that should be settled.

4. Battery storage gets minimal attention as the company only considers it as a "storage resource." The company refused to include detailed battery storage analysis in any of the portfolios the 2017 resource plan after being asked several times by Integrated Resource Plan Advisory Council (IRPAC) members. When in fact, batteries can offer many more ancillary services³² to the grid and will be a huge asset in supporting peak loads especially in their identified localities. These ancillary services would add to grid stabilization, particularly given the volume of expected renewable resources being added to an increasingly decentralizing grid.

Even if batteries do not currently yield the "least-cost" alternative, it is commonly known that prices are dropping rapidly. To exclude detailed analysis in their planning at this time is not in compliance with OPUC Guideline 4 (e) that states the IRP Plan Components need "identification and estimated costs of all supply-side and demand-side resource options, taking into account anticipated advances in technology."

5. Distributed generation was a topic at a work session held at an IRPAC meeting. The only mention of distributed generation is in the IRP portfolios with Solar PV/Natural Gas and implementation is beyond the immediate action plan. The soonest implementation being portfolio 11 with solar next to a reciprocating engine in 2023. The company's statement to Guideline 12 Distributed Generation is on Page 158, 2017 Integrated Resource Plan—Appendix C stating such.

The ongoing price declines and technological advances in energy generation and distribution could mean delaying big investments and could be a better & more prudent strategy. Yet, the 2017 IRP pays minimal attention to distributed generation technologies.

6. And finally, the company in its 2017 IRP mentions on p 95, that it will not be renewing many of its PPA's within this planning period.

STOP believes that Idaho Power is not providing a prudent analysis of the future of its industry, including the valuation of battery storage, ancillary services, solar and Combined Heat and Power - CHP (at peak localities), and other distributed generation technologies in this IRP. The company is gutting the benefits of PURPA, attempting to significantly alter how net metering works thus creating disincentives to customers for energy efficiency, and cancelling many of its PPA's. Therefore is not in compliance with OPUC Guideline 12.³³

³² http://energystorage.org/system/files/attachments/irp primer 002 0.pdf

³³ **Guideline 12: Distributed Generation.** Electric utilities should evaluate distributed generation technologies on par with other supply-side resources and should consider, and quantify where possible, the additional benefits of distributed generation.

Distributed Generation - Industrial

As mentioned above, combined heat and power (CHP) systems³⁴ are scantly considered in the IRP. A measly 35 MW CHP project is discussed in table 6.3 Transmission assumptions and requirements on p 69 but no implementation schedule is found. The company needs to do more to look to local producers to meet load where no backbone upgrades are needed for distributed energy to meet load.

Combined heat and power (CHP) systems, also known as cogeneration, generate electricity and useful thermal energy in a single, integrated system. CHP is not a technology, but an approach to applying technologies. Heat that is normally wasted in conventional power generation is recovered as useful energy, which avoids the losses that would otherwise be incurred from separate generation of heat and power. While the conventional method of producing usable heat and power separately has a typical combined efficiency of 45 percent, CHP systems can operate at levels as high as 80 percent.

Idaho Power does not work well with industrial customers/users that would like to take advantage of Combined Heat and Power (CHP) cogeneration partnerships to together meet more of Idaho Powers need.

Major Customers with Thermal Loads Such as a Potato Plants use Natural Gas to Fire Boilers and Produce Steam. If Idaho Power were to incorporate CHP at the major customer locations the Natural Gas service load to the major customer would shifted to the CHP plant. The CHP plant would provide the utilities to the major customer, Idaho Power would benefit by freeing up resources on the transmission and distribution system serving the major customer. The environment benefits from the improved efficiency and cleaner burning turbines vs. old boilers.

- Idaho Power provides and maintains infrastructure to serve each major customer, therefore, CHP does not require additional distribution or infrastructure if sized to the major customer load. This is a 1:1 energy offset with very little cost to Idaho Power.
- Idaho Power could offer a favorable CHP energy rate and Steam / Utility Supply agreement with Major Customers as an incentive to partner or build CHP. This would mitigate investment risk and provide additional revenue streams for Idaho Power.
- Idaho Power could petition the PUC to include a measure similar to the custom efficiency tariff which would collect funds to deploy CHP through the rate classes intended. This is a widely accepted practice endorsed by the major customer already.
- Idaho Power is not at any greater risk of load loss as there are no guarantees any major customer even without CHP continue to operate or require load. Idaho Power is still obligated to maintain and provide the resources to supply power to the major customer.

³⁴ http://aceee.org/topics/combined-heat-and-power-chp

- If the CHP customer were to terminate operations Idaho Power would still have an operational Gas Turbine Facility no different than the current facilities they operate. Additionally, Idaho Power could use a CHP plant and its thermal capacity to provide storage capacity for other technologies, Solar Thermal and Wind can be coupled with a CHP plant and provide export energy out of the distribution beyond the served load.
- Example: Major Food Processor consumes 10MW of Power and Idaho Power Builds or Contracts for a 10MW CHP plant to serve the Food Processor electricity and steam. When operating, 10MW of Distribution capacity is freed up due to the Food Processor being parasitic to the CHP plant. There would be capacity to allow solar or wind to export out of that distribution point up to the 10MW parasitic.
- Additionally, Solar Thermal and Solar PV could help peak the efficiency of the CHP plant through generation, preheating and storage which would allow the CHP plant to export energy out of the substation serving the major customer load. This could represent a free 10MW export potential.
- CHP attached to major thermal loads provides a low cost mechanism for Idaho Power to relieve near or at capacity distribution and transmission by distributing generation into areas with the greatest impact.
- An additional benefit of CHP is almost always a significant reduction in real power losses due to lighter loadings on the distribution system.

The cost to deploy CHP is far less than the cost to build stand alone generation as there are multiple synergies and available assets at major customer locations already in place.

While Idaho Power, in the 2017 IRP on p 41 asserts some of the advantages, disadvantages, and costs. It also states ...

"To find ways to make CHP more economical, Idaho Power is committed to working with individual customers to design operating schemes that allow power to be produced when it is most valuable, while still meeting the needs of the steam host's production process. This would be difficult to model for the IRP because each potential CHP opportunity could be substantially different."

A promising technology is CHP wrapped around an above-ground compressed air energy storage installation. This has never been done before, that we know of, but the technology is off-the-shelf and the economics could probably work given the right host.

STOP asks the Commission to query the individual customers the company has worked with to evaluate their satisfaction and outcome(s) of this cooperation as we are unaware of any CHP contracts currently in place.

STOP asks the Commission not to acknowledge this IRP and direct Idaho Power to analyze the full benefits and valuation of all distributed generation; and, the cost-benefit of these services.

STOP asks the OPUC to encourage Idaho Power to partner with its residential and industrial customers as a prudent way forward before building new expensive infrastructures.

Furthermore, STOP offers the following Citizen's Alternative.

Citizen Alternative: Distributed Generation.

Overview

To take advantage of rapidly emerging distributed generation (DG) provided by business and residential customers within its service area, Idaho Power should re-focus its business model, provisioning its grid resources to partner with this new class of producer-consumers. The cost of providing service to those users must be balanced by a thorough valuation of the ancillary services they provide, including those from storage³⁵. As part of this process, the utility has to disaggregate its customer charge into its constituent components in order to model future services from DG and include the value of those components provided by those resources. This should be a key part of all future 20-year integrated resource plans.

Trends

Over the last ten years Idaho Power's electric load has been flat, mirroring the trend at the national level³⁶ [Figure 1]:

³⁵ Burwen, John. 2016. "Advanced Energy Storage in Integrated Resource Planning: Cost Inputs and Modeling Approaches." Energy Storage Association. http://energystorage.org/IRP.

Fickling, Meera. 2017. "Per Capita Residential Electricity Sales in the U.S. Have Fallen since 2010." Government. U.S. Energy Information Administration. July 26, 2017. https://www.eia.gov/todayinenergy/detail.php?id=32212.

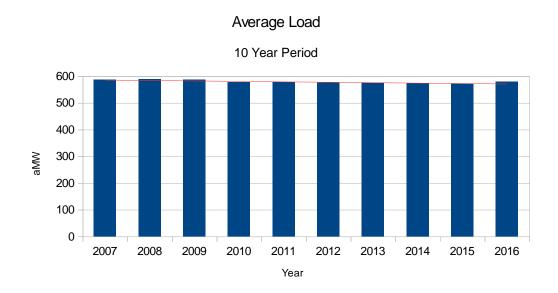


Figure 1 - Idaho Power average load from 2007-1016

Population growth has been matched, step-by-step, by a decline in the average customer load [Figure 2]:

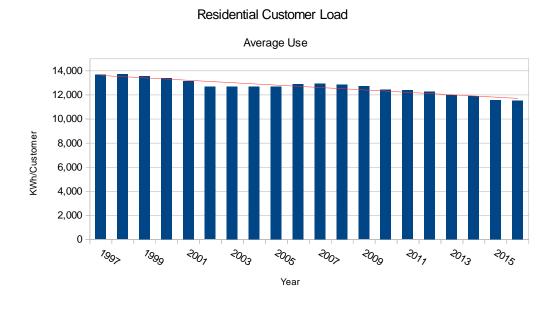
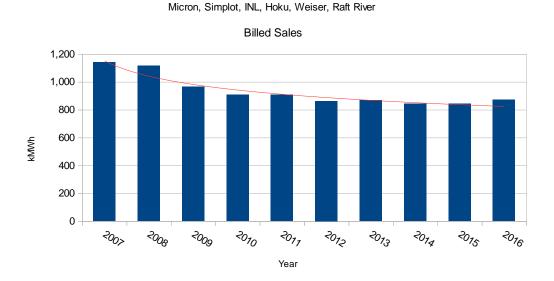


Figure 2 - Idaho Power residential customer load 1997-2015

That downward trend is also evident in the utility's additional load from its industrial and regional customers as they implement conservation and build efficiency [Figure 3]:



Customer Load from

Figure 3 - Idaho Power additional customer load 2007-2016

This downward pressure is expected to accelerate. Residential and commercial solar arrays with storage enabled micro-grids will surface a constellation of standalone power resources, as will battery equipped industrial co-generation facilities. The excess capacity from these resources can provide utility peaking power on a near instantaneous basis. They should be tapped by the development of an advanced metering infrastructure (AMI)³⁷, and by the strategic placement of additional battery storage to supplement and moderate those coming on-line from the producer-consumer class.

Business Models for Distributed Generation

Attached storage will lead to a re-working on both the supply and demand sides. The utility should adapt to these changes over the next two years by developing a new line-of-business, one that has them acting as the broker for excess DG resources. This will require continuously recording power production and storage, and modeling their diurnal and seasonal availability. In order to facilitate this effort to the greatest extent possible, Idaho Power should leverage an AMI as the primary vehicle for collecting and analyzing information about grid-attached distributed generation.

³⁷ "The NETL Modern Grid Strategy Powering Our 21st-Century Economy: Advanced Metering Infrastructure." 2008. https://www.smartgrid.gov/document/netl modern grid strategy powering our 21st century economy ad vanced metering infrastructur.

Control surfaces³⁸ at the endpoints of digital networks running in parallel to power flows are transforming the utility business³⁹. Most of the Idaho Power service area has excellent solar potential and while the utility will see a drop in power demand, it will also see an increase in power available from producer-consumers via those endpoints. Adapting to this transformation, Idaho Power should plan to increase its purchases of needed power and services from producer-customers. The company should also leverage its electric grid in the brokering of excess power resources as part of this business model.

Valuation of Distributed Generation

First, storage resources offer many benefits that must be included in future IRP calculations. Once surfaced, the ancillary services provided by storage can be valued using a model developed by Portland General Electric⁴⁰.

Second, the response from strategically placed battery storage mediated by networked intelligence is for all practical purposes instantaneous with no delay at all. This greatly simplifies the management of grid power flows, while reducing costly line losses. Mining the data about these management transactions can surface that value.

Third, a properly provisioned digital grid will enable electricity produced in the service area to propagate quickly and efficiently, allowing real-time markets for that power to develop and thrive. That's another benefit that can be quantified by mining the data from Idaho Power's AMI.

Lastly, though they are more difficult to quantify, the most important benefits of DG are resilience and grid security⁴¹. The growth of distributed generation in the Idaho Power service area can benefit all users through increased operational stability. This should be a future target for valuation by mining data over the longer term.

³⁸ These are network-attached digital devices including software-enabled smart meters and smart inverters. "Advanced Inverter Functions to Support High Levels of Distributed Generation." 2014. Technical NREL/BR-6A20-62612. Golden, CO: National Renewable Energy Laboratory. https://www.nrel.gov/docs/fy15osti/62612.pdf.

Cardwell, Diane. 2017. "Utility Helps Wean Vermonters From the Electric Grid." *The New York Times*, July 29, 2017, sec. Energy & Environment. https://www.nytimes.com/2017/07/29/business/energy-environment/vermont-green-mountain-power-grid.html.
 Flexibility benefits from storage resources are combined with the value of the online capacity from those

Flexibility benefits from storage resources are combined with the value of the online capacity from those resources for a complete accounting of storage and ancillary services:

Net cost of capacity = Total installed cost – Operational benefits (flexibility operations & avoided costs) The model is described in "Advanced Inverter Functions to Support High Levels of Distributed Generation." 2014. Technical NREL/BR-6A20-62612. Golden, CO: National Renewable Energy Laboratory. https://www.nrel.gov/docs/fy15osti/62612.pdf.).

⁴¹ Wellinghoff, Jon. 2015. "Grid Security Is Tenuous, More Microgrids and DG Needed, Says Former FERC Chairman." Technology. *Microgrid Knowledge* (blog). February 23, 2015. http://microgridknowledge.com/gridsecurity-tenuous-microgrids-dg-needed-says-former-ferc-chairman/.

Idaho Power must invest in the digital assets necessary to identify, analyze, and value these benefits. It short, it needs to build a very different relationship with its customers going forward, one that partners with producer-consumers.

Section 5. Conclusion

"Idaho Power, a company culture out of step with Oregon"

STOP reiterates one last point in the Substantive Requirements of OPUC Guideline 1d, that the:

"the plan must be consistent with the long-run public interest as expressed in Oregon and federal energy policies."

The insecurity of a centralized transmission system is not in our best public interest. If <u>one large transmission line goes down</u> due to terrorism or forest fire, we have entire cities blacked out and vulnerable. With distributed generation some areas would still have power. This is especially important for hospitals, local governmental units, emergency responders, our military bases and military preparedness in general.

Distributed generation has other advantages including reliability which is one of Idaho Power's values on their Vision, Values and Mission page. A large transmission line like B2H sited directly next to the current 230 corridor, does not offer reliability if a forest fire or terrorism (above) were to take out the line.

Idaho Power's dubious interest in avoiding the federal transmission corridor and apparent lack of full disclosure of its capacities, possibly to create a new corridor seems out of step with the current trends in transmission. The cancellation of the <u>I-5 Corridor Reinforcement Project</u> referenced above is an example.

BPA has not committed any resources other than the initial environmental and permitting studies for the B2H. BPA appears more in step with the long-term public interests of the citizens of the northwest and Oregon. Comparatively, Idaho Power appears to be taking a big risk; and when it fails, their customers in Malheur County will be stuck with the bill. B2H will be a stranded asset and we/they'll be paying for it for a long time.

STOP encourages the OPUC to order Idaho Power to re-consider its out-dated, centralized grid planning at ratepayer expense.

The OPUC should not acknowledge the 2017 IRP until all reasonable alternatives to long distance transmission have been investigated, including (but not least) Idaho Power's existing transmission resources and capacities.

In the 2017 IRP, Idaho Power maintains a traditional utility model for building new and having a high rate of return on investment, over 6%, on a 21% share of a \$1.2 billion plus transmission line at the expense of rate payers. The emerging utility business model embraces new

technologies that include renewable resources, battery storage with ancillary services, distributed grids, and greater energy efficiencies.

Idaho Power and its corporate culture are not in step with today's business model or Oregon's long history of energy conservation and innovation.

STOP offers "citizen alternatives" rooted in Oregon's innovation and pioneering spirit. It's time for Idaho Power to get on board—Wagons Ho!

STOP believes that our vision of the energy future is more in alignment with the long-term interest of Oregonians and the public at large. We believe that the Commission will agree. Idaho Power can do a better job at developing residential and commercial conservation programs including smart metering, investing in their own renewables and battery storage, and partnering with industrial customers before building new transmission lines. New jobs and careers can be created rather than temporary road building and construction of transmission towers.

Help us blaze the trail – toward to a new energy future!

Oregon Natural Desert Association | Hells Canyon Preservation Council | The Stop B2H Coalition | Oregon Wild

December 23, 2016

VIA U.S. CERTIFIED MAIL, RETURN RECEIPT REQUESTED AND EMAIL (protest@blm.gov)

Director (210) Attn: Protest Coordinator

P.O. Box 71383

Washington, D.C. 20024-1383

Re: Boardman to Hemingway Transmission Line Project

Dear Director Kornze:

Please accept this letter on behalf of the undersigned as both a protest of the Proposed Land Use Plan Amendments for the Boardman to Hemingway Transmission Line Project (B2H Project) and comments on further issues to be addressed and deficiencies in the B2H Project Final Environmental Impact Statement (FEIS).

While we recognize the efforts made by BLM, other agencies and many different stakeholders to design a B2H alignment with minimum environmental impacts, we urge BLM to take every possible additional measure to avoid impacts wherever possible and ensure that residual environmental impacts identified in the planning process have been thoroughly minimized and mitigated.

Our organizations support responsible renewable energy development and associated responsible transmission development on public lands as part of a strategy to limit the negative effects of climate change. Investing in properly sited transmission systems can protect the environment, promote economic development, diversify the power system and keep the region economically competitive. However, the impact of these transmission systems largely depends on the location of the project, the specific design of the final alignment, and mitigation actions. Some important wildlands and wildlife habitat are inappropriate for development of any kind, and wherever development occurs, it should be done in a manner that avoids, minimizes and mitigates impacts through rigorous compensatory mitigation.

We urge BLM to review and resolve the following protest points regarding the proposed land use plan amendments and to evaluate and revise the environmental impact statement for the B2H Project to remedy the additional deficiencies identified in the FEIS.

PROTEST

Pursuant to 43 C.F.R. § 1610.5-2, the Oregon Natural Desert Association, Hells Canyon Preservation Council, Stop B2H Coalition, Jim Kreider, Fuji Kreider and Gail Carbiener and Oregon Wild hereby protest the Proposed Land Use Plan Amendments for the B2H Project. This

protest addresses issues raised by the undersigned and others in comments during the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321–4370h process for the B2H Project.

In accordance with the Department of the Interior's land use planning regulations, this protest contains: (1) a description of the interests of the protesting parties; (2) a statement of the issues being protested; (3) a statement of the parts of the Proposed RMPA being protested; (4) a copy of documents addressing the issues submitted during the planning process; and (5) a concise statement explaining why the State Director's decision is wrong.

I. INTERESTS OF PARTIES

The Oregon Natural Desert Association (ONDA) is a non-profit, public interest organization dedicated to the conservation of eastern Oregon's public lands. Founded in 1989, ONDA's mission is to protect, defend, and restore Oregon's high desert. ONDA has a long history of interest and involvement in BLM and Forest Service activities with respect to sage-grouse habitat management, grazing, management of energy generation and transmission, riparian areas, water quality, fish and wildlife, and wilderness. ONDA's staff and members regularly use and enjoy the public lands and waters throughout eastern Oregon for observation, research, aesthetic enjoyment, and other recreational, scientific, and educational activities.

Hells Canyon Preservation Council (HCPC) is a non-profit conservation organization based in La Grande, OR with approximately 1,000 supporters. HCPC's mission is to protect and restore the inspiring wildlands, pure waters, unique habitats and biodiversity of the Hells Canyon-Wallowa and Blue Mountain Ecosystems through advocacy, education and collaboration, advancing science-based policy and protective land management.

The Stop B2H Coalition is a grass roots organization of concerned citizens primarily from Union and Baker Counties in Oregon who are concerned about the impacts of the proposed Boardman to Hemingway transmission line on the lands and public resources in Oregon. Jim Kreider, Fuji Kreider, and Gail Carbiener are members of the Stop B2H Coalition who have participated extensively in the public processes related to the proposed project, including by filing individual comments on the draft Environmental Impact Statement and proposed Land Use Plan Amendments.

Oregon Wild is a charitable, non-profit corporation headquartered in Portland, Oregon with approximately 17,000 members and supporters who share our mission to protect and restore Oregon's wildlands, wildlife, and waters as an enduring legacy. We seek to protect the state's remaining old-growth forests and roadless areas, and restore fully-functioning ecosystems and watersheds with a full complement of native species.

Unless revised as requested below, these organizations and their members will be injured and adversely affected, within the meaning of 43 C.F.R. § 1610.5-2(a), by approval of the Proposed Land Use Plan Amendments for the B2H Project. The Proposed Land Use Plan Amendments directly affect these organizations' and their members' interests, which are injured by BLM's and the Forest Service's failure or refusal to comply with federal laws and regulations in the Proposed Land Use Plan Amendments, and by the agencies' failure or refusal to manage the

planning area in a manner that will meaningfully protect the human environment along the alternative routes for the B2H Project. The interests of the protesting organizations and their members have been and will continue to be injured and harmed by the agencies' proposed actions and/or inactions as protested herein.

These organizations and their members have participated throughout the NEPA process for the B2H Project, including by submitting comments before and during scoping and on the Draft EIS. We incorporate our previous comments into this protest, as if fully set forth herein.

II. STATEMENT OF LUP PROTEST ISSUES

The above-named organizations (hereafter referred to collectively as "ONDA") protest the following issues, each of which was raised for the record during the planning process:

- 1. The proposed amendments of the BLM Southeastern Oregon Resource Management Plan (SEORMP) fail to protect scenic quality of resources within the BLM Vale District associated with the National Historic Oregon Trail Area of Critical Environmental Concern (ACEC), the Owyhee River Below the Dam ACEC, the Owyhee River Below the Dam Suitable Wild and Scenic River Segment and other lands within the Vale District.
- 2. The proposed amendments of the BLM Baker Resource Management Plan fail to protect scenic quality of resources within the BLM Vale District associated with areas near the National Historic Oregon Trail Interpretive Center, areas of Burnt River Canyon and other lands within the Vale District.
- 3. The proposed modifications of the Wallowa-Whitman National Forest Land and Resource Management Plan (LRMP) regarding Eastside Screens (Regional Forester Amendment #2 for timber sales) and PACFISH/INFISH standards in order to ensure consistency of the proposed B2H alternatives and variations with the LRMP fail to protect forest resources including wildlife habitat and aquatic resources.

III. STATEMENT OF LUP PROTEST REASONS

1. Amendment of the BLM Southeastern Oregon Resource Management Plan

The B2H FEIS proposes modification(s) of the SEORMP regarding visual resource management (VRM) in order to grant a right-of-way for the Applicant's Proposed Action Alternative (Variation S5-B1), Agency Preferred Alternative (Variation S5-B2), Tub Mountain South Alternative, Malheur S Alternative, or Malheur A Alternative across BLM-administered lands managed under the SEORMP. Changes to VRM classifications and management standards are proposed for areas of VRM class II and III associated with the National Historic Oregon Trail ACEC and both the Owyhee River Below the Dam ACEC and Owyhee River Below the Dam Suitable Wild and Scenic River Segment.

These proposed modifications to the SEORMP VRM classifications and management standards would be necessary to allow the construction and landscape modification caused by one or more of the alternatives and/or variations of the B2H Project. The complexity of proposing LUP amendments simultaneously with environmental review of B2H Project alternatives confuses the FEIS document and hinders clear and thoughtful public input. BLM should clarify which, if any, of the proposed SEORMP Amendments would actually be adopted in order to receive accurate public comment. Likewise, BLM should clearly specify which of the proposed SEORMP amendments will not be adopted so as to avoid future confusion. Most importantly, BLM should avoid any impacts from the B2H Project inconsistent with SEORMP provisions for VRM classification and management designed to protect scenic quality within the Vale District.

Tub Mountain South Alternative (Agency Preferred Alternative)

The Tub Mountain South Alternative is the alignment of the Agency Preferred Alternative to the North of Vale, Oregon, running to the South and East of the Oregon Trail – Tub Mountain ACEC. This Alternative would intersect and impact VRM Class III areas along approximately 1.7 miles of the B2H Project in the vicinity of the National Historic Oregon Trail ACEC (FEIS at 3-2440). The SEORMP would be amended to modify approximately 51 acres of VRM Class II to VRM Class IV. Impacts to the scenic quality and views in the vicinity of the National Historic Oregon Trail would result from the proposed transmission line and its corresponding structures. Such impacts would be contrary to the objectives of the ACEC, the important historic values of the Oregon Trail and the VRM Class III designation in this area, significantly impacting the scenic character of the area and creating a prominent development that would necessarily attract the attention of any observers and recreationists in the area. The proposed amendment to the SEORMP to downgrade VRM classification and management in this area to VRM IV would undermine the purpose of having VRM classes in areas of high scenic quality with high recreation use.

Applicant's Proposed Action Alternative (Variation S5-B1)

Variation S5-B1 is the alignment of the Applicant's Proposed Action Alternative across the Owyhee River in an area determined by the BLM to be suitable for designation under the National Wild and Scenic Rivers Act of 1968 (WSRA), 16 U.S.C. §§ 1271–1286, and a National Wild and Scenic River (WSR) for a distance of approximately 2.5 miles (FEIS at 2-159). Development of the B2H Project in this area would result in high impacts to views in the suitable WSR segment, Owyhee Below the Dam ACEC as well as nearby, associated recreation sites. High impacts would occur on 3 visual analysis units (VAUs) through the introduction of skylined transmission structures which would dominate scenic quality. The introduction of the B2H Project would lower scenic quality scores in the Owyhee Tunnel VAU. High impacts on views associated with residences, recreation and travel routes would occur (FEIS at 3-1348).

As we indicated in comments during the B2H review process, high and unacceptable impacts to scenic quality and views would result from any alignment crossing the Owyhee River Below the Dam WSR segment and ACEC. In 2002, BLM in the SEORMP identified the Owyhee River Below the Dam as suitable for Congressional designation as a Wild and Scenic River, due to its remarkable scenery, recreation, fish, and wildlife. DEIS at 3-447. These values must be protected

pending designation by Congress, according to the Wild and Scenic Rivers Act and RMP direction. *Id.*; 16 U.S.C. § 1283(a).

A transmission line and its corresponding structures would be contrary to the objectives of the WSR suitability determination and the VRM Class II designation in this area, significantly impacting the scenic character of the area and creating a prominent development that would necessarily attract the attention of any observers and recreationists in the area. The proposed amendment to the SEORMP to downgrade VRM classification and management in this area to VRM IV would undermine the purpose of having VRM classes in areas of high scenic quality with high recreation use. Simply opting to reclassify the VRM class of the WSR segment and ACEC fails to protect the outstandingly remarkable values of the Owyhee River and the visual resources of the area.

In addition, the Owyhee River Below the Dam ACEC is identified as an avoidance area for new rights of way in the SEORMP and new rights of way within this area should be avoided but may be granted if there is minimal conflict with identified resource values and impacts can be mitigated (FEIS at 3-918). As evidenced by the necessity of the proposed SEORMP amendment for Variation S5-B1 this alignment fails to meet the existing RMP avoidance requirement to protect the resource values of the ACEC and should therefore not be selected and the associated SEORMP amendment should not be adopted.

Agency Preferred Alternative (Variation S5-B2)

This route variation (Link 5-45; 2.8 miles) is an option developed by BLM outside the area determined to be suitable for WSR designation (FEIS at 2-159). While this alignment falls outside of the suitable WSR segment, and is therefore a portion of the agency preferred alternative, it still crosses a small area (0.1 miles) of VRM Class II in the Owyhee River Below the Dam ACEC resulting in a proposed SEORMP amendment from VRM Class II to VRM Class IV in a portion of the ACEC.

The Owyhee River Below the Dam ACEC is identified as an avoidance area for new rights of way in the SEORMP. New rights of way within this area should be avoided but may be granted if there is minimal conflict with identified resource values and impacts can be mitigated. *Id.* As evidenced by the proposed SEORMP amendment for Variation S5-B2 this alignment also fails to meet the existing SEORMP requirement to protect the resource values of the ACEC. While we agree that this alignment is preferable to Variation S5-B1 or other alignments with greater impacts to visual resources, this alternative also fails to meet the existing RMP avoidance requirement and would result in impacts to visual resources within the Owyhee River Below the Dam ACEC that would not be avoided. If this route variation is selected as part of the agency preferred alternative and Record of Decision, BLM should provide compensatory mitigation in the form of VRM Class II designations in an area of similarly important visual quality and recreation use in the Vale District or another form of compensatory mitigation to offset the impacts to ACEC resources.

Malheur S and Malheur A Alternatives

Both the Malheur S and Malheur A Alternatives cross the Owyhee River in the Owyhee River Below the Dam WSR Suitable Segment and Owyhee River Below the Dam ACEC closer to the Owyhee Dam than Variation S5-B1 and S5-B2. Both alternatives would result in high and unacceptable impacts to views in the suitable WSR segment, the Owyhee Below the Dam ACEC as well as nearby, associated recreation sites.

The analysis of effects from the proposed SEORMP Amendments for the Malheur S and Malheur A Alternatives in the FEIS inadequately characterizes the full extent of visual impacts to this important area and critical resources from the proposed B2H Project. Even more so than Variations S5-B1 and S5-B2, construction of the transmission line and its corresponding structures along these alignments would be contrary to the objectives of the WSR suitability determination and the VRM Class II designation in this area, significantly impacting the scenic character of the area and creating a prominent development that would necessarily attract the attention of observers and recreationists in the area. The proposed amendment to the SEORMP to downgrade VRM classification and management in this area to VRM IV would undermine the purpose of having VRM classes in areas of high scenic quality with high recreation use. Simply opting to reclassify the VRM class of the WSR segment and ACEC fails to protect the outstandingly remarkable values of the Owyhee River and the visual resources of the ACEC and area.

As evidenced by the necessity of the proposed SEORMP amendment for the Malheur S and Malheur A Alternatives, this alignment fails to meet the existing RMP avoidance requirement to protect the resource values of the ACEC. Accordingly, this alignment should not be selected and the associated SEORMP amendment should not be adopted.

Requested Remedy: To remedy these failures, BLM should further explore micro-siting options to avoid the Owyhee Below the Dam ACEC as part of any alignment, focusing particularly on additional micro-siting modifications to the Agency Preferred Alternative (Variation S5-B2) that would eliminate the need for amendment of the SEORMP to modify VRM classifications in order to select the Agency Preferred Alternative. BLM should also further explore micro-siting options to avoid the Oregon Trail – Tub Mountain ACEC as part of any alignment, focusing particularly on additional modifications to the Agency Preferred Alternative to completely avoid the area and eliminate the need for amendment of the SEORMP to modify VRM classifications in order to select the Agency Preferred Alternative.

In addition, BLM should eliminate from further consideration all proposed SEORMP amendments to support FEIS Alternatives and Variations that would necessitate crossing or impacting the Owyhee River Below the Dam WSR Suitable segment and the Owyhee River Below the Dam ACEC. If BLM makes the modifications to the Agency Preferred Alternative to avoid the Owyhee Below the Dam ACEC discussed above, then the agency should select the Agency Preferred Alternative for Variation S5-B2 and ensure appropriate compensatory mitigation of any remaining impacts to visual resources impacted by the B2H Project.

2. Amendment of the BLM Baker Resource Management Plan

The B2H FEIS proposes modifications of the Baker RMP regarding VRM management in order to grant a right-of-way for the Applicant's Proposed Action Alternative (Variation S3-B1), Flagstaff B – Burnt River West Alternative (Variation S3-C5 the Agency Preferred Alternative) and the Flagstaff B – Durkee Alternative (Variation S3-C6) across BLM-administered lands managed under the Baker RMP. Changes to VRM classifications and management standards are proposed for VRM Class II and III areas associated with the National Historic Oregon Trail Interpretive Center, areas of Burnt River Canyon, and other lands within the planning area.

Applicant's Proposed Action Alternative (Variation S3-B1)

Variation S3-B1 is the alignment of the Applicant's Proposed Action Alternative to the East of the National Historic Oregon Trail Interpretive Center through areas of VRM Class III. Significantly, this alignment also crosses through a large swath of Greater sage-grouse Priority Habitat Management Area (PHMA) habitat in the Sage-grouse Baker Priority Area of Conservation (PAC). This alignment would result in high and unacceptable impacts to sage-grouse and their habitat while also creating impacts to the important visual resources associated with the National Historic Oregon Trail and Interpretive Center.

A transmission line and its corresponding structures would be contrary to the objectives of the VRM Class III designation in this area, significantly impacting the scenic character of the area and creating a prominent development that would necessarily attract the attention of any observers and recreationists in the area. The proposed amendment to the SEORMP to downgrade VRM classification and management in this area to VRM IV would undermine the purpose of having protective VRM classes in areas of high scenic quality with high visitation and recreation use, in addition to the critical wildlife habitat values of the area. Simply opting to reclassify the VRM class of this area fails to protect the important historical and wildlife values of the area and would degrade the visual resources of the area.

Flagstaff B – Burnt River West Alternative - Agency Preferred Alternative (Variation S3-C5)

The Flagstaff B – Burnt River West Alternative is the Agency Preferred Alternative along Variation S3-C5 and runs to the west of the Interpretive Center after diverging from the Interstate 84 corridor to the south. Areas of VRM Class II lands in Burnt River Canyon would be amended to VRM Class IV to accommodate high levels of visual change associated with the B2H Project. This alternative would change the management of at least 23 acres from retaining landscape character to allowing major modification of the landscape character in areas within extremely close proximity to the National Historic Oregon Trail, the Interpretive Center, and the Oregon Trail-Flagstaff Hill ACEC.

The paucity of alternatives in the FEIS that would avoid scenic quality impacts to the National Historic Oregon Trail and Interpretive Center is concerning. The result is two potential amendments to the Baker RMP that result in an untenable choice between significant impacts to the scenic quality of the nationally important resources of the Oregon Trail and Interpretive Center, or equally significant impacts to the habitat of the imperiled and already tenuous population of Greater sage-grouse in the Baker PAC. The lack of other proposed Baker RMP

amendments in this area suggests that one of these two objectionable alternatives would become the eventual decision for the B2H Project. Neither alternative is an acceptable approach and BLM must identify alternate solutions to avoid these impacts.

Requested Remedy: For the Applicant's Proposed Action Alternative (Variation S3-B1) BLM should identify additional alternative routes in a supplemental analysis and proposed land use amendment(s) that would avoid the unacceptably high visual resource impacts to the Oregon National Historic Trail and Interpretive Center and significant impacts to the critical sage-grouse population and habitat in the Baker PAC.

For the Flagstaff B – Burnt River West Alternative, the Agency Preferred Alternative along Variation S3-C5, BLM should identify additional alternative routes in a supplemental analysis and proposed land use amendment(s). Additional alternatives should either avoid the unacceptably high visual resources impacts to the Oregon National Historic Trail and Interpretive Center or identify further mitigation measures, such as powerline burial in this segment of the B2H Project, to minimize the impacts to the scenic quality and views associated with the Oregon National Historic Trail and Interpretive Center.

3. Amendment of the Wallowa-Whitman National Forest LRMP

The B2H FEIS proposes modifications of the Wallowa-Whitman National Forest (WWNF) Land and Resource Management Plan (LRMP) regarding Management Area Allocations, Visual Resources Management, Eastside Screens (Regional Forester Amendment #2 for timber sales) and PACFISH/INFISH standards in order to ensure consistency of the proposed B2H alternatives and variations with the LRMP. We protest the proposed amendments to the Eastside Screens and PACFISH/INFISH standards.

Eastside Screens

We object to the proposed Plan Amendment that would remove protection for 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 FEIS indicates, the WWNF has already approved eleven site-specific amendments to the Eastside Screens and more are planned. Although the FEIS cites a specific number of trees greater than 21 inches dbh that have been removed by the previous amendment, the FEIS 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. Although

we asked for this information in our comments (FEIS at K9-119), it was not provided anywhere in the FEIS, including in Section 3.2.6 referred to in the response to comments.

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 below.

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, without the proposed plan amendment. But without specific information regarding how many of such trees are likely to be lost, the proposed amendments to the Eastside Screens do not satisfy the "hard look" required under NEPA, and should not be approved to the detriment to the health of the forest and wildlife that depend on mature stands of older timber.

PACFISH/INFISH

As we explained in our comments on the Draft EIS, the U.S. Fish and Wildlife Service maintains that conservation of bull trout and other salmonids depends upon the PACFISH and INFISH programs, which contain essentially equivalent management standards that have been adopted into the WWNF LRMP. FEIS at K6-144. However, the proposed amendments to the WWNF LRMP weaken or eliminate PACFISH and INFISH standards for portions of proposed and alternative transmission line routes. The potential harm to fish listed under the Endangered Species Act (ESA), 16 U.S.C. §§ 1531–43, as a result of the elimination of PACFISH and INFISH protections at various points along the routes, and the agencies' failure to analyze in the FEIS whether the elimination of these protections is consistent with the agencies' obligations under the ESA, and failure to evaluate important issues related to these proposed amendments in the FEIS, make the proposed amendments to the WWNF LRMP unlawful.

The FEIS, including Section 3.4 regarding Plan Amendments, nowhere evaluates whether elimination or weakening of PACFISH and INFISH protective standards ensures that there will be no jeopardy to listed fish species—presumed to be present at all points where the protective standards would be eliminated—and no destruction or modification of designated critical habitat. The FEIS's section on the regulatory framework for Fish Resources (Section 3.2.5.2) recites the significance of PACFISH and INFISH and the related ESA biological opinions to "provide the components (goals, objectives, standards, guidelines, and hierarchical analysis) needed to protect and conserve steelhead, salmon, and inland native fish and their habitats on BLM- and USFS-

administered lands." FEIS at 3-600. The FEIS presumes that fish species are present in all affected watersheds. FEIS at 3-607.

But the Effects Analysis regarding Fish Resources only addresses the relevance of PACFISH/INFISH in the context of the project's Design Feature 15, "Reduce Impacts to Riparian Areas." FEIS at 3-607 to 3-608. The FEIS states that "surface-disturbing activities would be avoided in defined segments of Riparian Conservation Areas." FEIS at 3-607 to 3-608. The remainder of that subsection describes the distance setbacks from fish-bearing streams and other affected waterways. But these supposed protections are false statements given that, in Section 3.4, the proposed Plan Amendments strip out the PACFISH and INFISH standards for all places where transmission line routes would cross Riparian Habitat Conservation Areas (RHCAs or RCAs). FEIS at 3-2494 to 3-2502.

Timber Management standard TM-1 that prevents logging within an RHCA would be suspended to allow tree cutting within the transmission line right-of-way, removing shade that is critical to keeping fish streams cool and increasing sedimentation to the detriment of listed fish. Lands standard LH-3 would be amended to authorize the project despite its contribution to the non-attainment of Riparian Management Objectives (RMOs) that define good habitat conditions for anadromous and inland fish. The RMOs themselves—particularly the one for temperature, perhaps the most important limiting factor for fish survival and recovery—would be amended to allow the project to proceed. None of these proposed amendments would "reduce impacts to riparian areas," but rather would dramatically increase risks to listed fish present at or near the locations that the proposed route or alternatives cross RHCAs.

All of the alternatives for the B2H Project being evaluated in the FEIS have the potential to adversely affect the region's sensitive aquatic resources, particularly the most northern segments which cross important habitat for federally 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.*, Birch Creek, Grande Ronde River) (data from StreamNet downloaded 12/2016).

Although the FEIS attempts to address these obvious adverse effects on a federally protected species, it leaves an unacceptable amount of uncertainty regarding actual site-specific avoidance and mitigation strategies. Throughout the discussion of mitigation measures the document uses terms "as much as possible/practicable" or "to the extent practicable"—thus leaving the door open for the application of a lesser standard. It is not clear how the determination of "practicable" is made or how much non-ecological factors such as cost go into that determination. Without an adequate consideration of how mitigation measures might off-set the elimination of the PACFISH and INFISH standards, the proposed Plan Amendments based on the FEIS would be unlawful.

The FEIS 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.

Climate Change Considerations for the B2H Project

The proposed amendments to the WWNF LRMP to remove PACFISH and INFISH protections in several RHCAs affected by the B2H Project also are unlawful because they fail to consider the removal—especially of the protective temperature RMO—in the context of climate change. 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. The discussion in Chapter 3 on the Affected Environment should include not only a description of conditions today but also recognition of the changes occurring across the landscape as disturbance events such as fire, drought, and flooding increase in frequency and intensity.

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 than is acknowledged in the FEIS. 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 microhabitats due to sedimentation or channel or streambank alterations will reduce available cold water refugia for local salmonids. As noted above, 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 flows.

Watershed-scale Cumulative Effects

The proposed amendments to the WWNF LRMP to remove PACFISH and INFISH protections are also unlawful because the design and mitigation measures for fish resources described in Chapter 3.2.5 in the FEIS 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).

The West and East Forks of Birch Creek provide a good example of the cumulative effects issue. In this watershed the agency preferred alternative includes four crossings of steelhead spawning

habitat within a single watershed. Although the FEIS describes mitigation measures for individual crossings of steelhead streams it never considers the impact of multiple crossings on a metapopulation within a watershed. Furthermore, the FEIS applies very different standards to perennial verses intermittent streams regardless of whether or not they are within a watershed occupied by a sensitive species such as steelhead. Intermittent streams are important to local fisheries and should be managed appropriately, particularly when they are associated with perennial streams that support populations of native fish (Wigington *et al.* 2006). 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.

Consequences of Deficiencies in the NEPA document and ESA Issues

Because the agencies have provided incorrect information in the FEIS regarding the effects on fish resources by promising protection in part of the FEIS while eliminating it in another, the proposed amendments to the LRMP to remove PACFISH and INFISH protections violate NEPA and the agencies' obligation to provide accurate, high-quality information to the public. A revision and supplemental EIS are necessary to *accurately* explain to the public how fish will be impacted by the elimination of PACFISH and INFISH standards at certain points along the transmission line, and make clear that the putative set-backs and supposed "minimization of impacts to riparian habitat based on design features" described in Section 3.2.5 will not actually occur because of the proposed amendments to the PACFISH/INFISH standards.

In addition, in a NEPA document evaluating potential land use plan amendments, "the statutory objectives underlying the agency's action work significantly to define its analytic obligations." *Or. Natural Desert Ass'n v. BLM*, 625 F.2d 1092, 1109 (9th Cir. 2010). The protective measures in the PACFISH and INFISH amendments to the WWNF LRMP are intended to insure that activities taken on the Forest do not jeopardize the continued existence of fish species listed as threatened or endangered under the ESA or destroy or adversely modify their critical habitat. To this end, the Forest Service consulted with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service on PACFISH and INFISH and determined the implementation of those amendments would avoid jeopardy.

Because the Forest Service has an independent obligation under ESA § 7(a)(2) to insure against jeopardy or adverse modification to critical habitat—which would include the removal of the protective PACFISH/INFISH standards proposed here—the FEIS, including Section 3.4, should have evaluated whether the proposal to amend out these standards to allow this project to be built would comply with the Forest Service's ESA obligations. Because it appears that the elimination of PACFISH/INFISH standards *will* result in the destruction or adverse modification of designated critical habitat, the WWNF will be in violation of ESA § 7(a)(2) if it approves the proposed Plan Amendments.

ESA § 7(a)(2) requires a federal agency to "insure that any action authorized, funded, or carried out" by the agency "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species." ESA § 7(b) requires a federal agency to complete formal consultation if the agency determines that any action on its part "may affect" any listed species or critical habitat. Consultation, or reinitiation of consultation, under ESA § 7 is required when a land use plan amendment may affect a listed species. *Cottonwood Envtl. Law Ctr. v. U.S. Forest Serv.*, 789 F.3d 1075, 1084–85 (9th Cir. 2015); *see W. Watersheds Proj. v. Kraayenbrink*, 632 F.3d 472, 496 (9th Cir. 2010). Besides failing in the FEIS to evaluate whether elimination of PACFISH and INFISH protection would comply with the Forest Service's ESA § 7(a)(2) obligation, BLM and the Forest Service must consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service to obtain biological opinions regarding this project before making any decision to grant a right-of-way.

PACFISH/INFISH Summary

To summarize:

- PACFISH/INFISH standards should be applied throughout the project area on all streams supporting native salmonids.
- The failure to evaluate whether the removal of PACFISH/INFISH protections where the proposed or alternative routes cross RHCAs complies with the agencies' obligations under the Endangered Species Act is a violation of the ESA, and the inclusion of contradictory information in the FEIS claiming that PACFISH and INFISH riparian protections are part of a "design feature" that will "minimize impacts to riparian habitat" violates NEPA. The action agencies here must obtain biological opinions from the federal consulting agencies before making any decision regarding a grant of a right-of-way for the project.
- In applying the mitigation hierarchy, more effort should be made to avoid sensitive aquatic resources such as steelhead spawning habitat.
- Where mitigation strategies are required, the agencies need to provide more certainty and fewer caveats regarding standards.
- Assessment of impacts should incorporate the exacerbating effects of climate change.
- Cumulative effects at the watershed scale should be evaluated, including project impacts on the entire drainage network, not just perennial streams.
- Because the elimination of PACFISH/INFISH standards protections poses risks to fish in the affected waterbodies, the Forest Service should not adopt the proposed plan amendments.

Requested Remedy: The Forest Service should reject the proposed amendments to the Eastside Screens and the PACFISH/INFISH standards because they are inconsistent with long-standing

protections for large and old growth trees and imperiled fish on the WWNF, and because the full impacts of these potential amendments were not properly evaluated, in violation of NEPA and the ESA.

FEIS COMMENTS

The undersigned organizations provide the following comments and concerns in accordance with NEPA, 40 C.F.R. § 1503.1(b), which provides that the public may make further comments on a final environmental impact statement before the final decision is issued. We ask that you consider these further comments and make the requested additional analyses and changes to the project prior to issuing a final decision.

1. Lands with Wilderness Characteristics

As indicated in our scoping comments, under a court-approved settlement agreement reached in 2010, BLM is precluded from approving any activity on lands that have been identified as having wilderness characteristics, where that activity would disturb the surface of the land and would either cause the wilderness unit to shrink, or cause the unit to no longer meet the criteria for wilderness character. DEIS 3-444; *Or. Natural Desert Ass'n v. BLM*, No. 3:03-cv-1017-JE, Settlement Agreement Between Oregon Natural Desert Association, Committee for the High Desert, Western Watersheds Project, and BLM (D. Or. June 7, 2010). BLM correctly summarizes this agreement in the FEIS stating that: "Until BLM complete [*sic*] the RMP amendment for the SEORMP, the settlement agreement precludes the BLM from approving any surface-disturbing activity on lands that the BLM has identified as having wilderness characteristics if the BLM finds that the project would either diminish the size of the inventory unit or cause the entire inventoried unit to no longer meet the criteria for wilderness character." FEIS at 3-1140.

However, in the Executive Summary and elsewhere in the document, the FEIS indicates that Variation S5-A2 crosses areas of Lands with Wilderness Characteristics (LWC) in Link 5-20. FEIS at S-21, S-44, S-50, 2-156. Link 5-20 would, in fact, cross the Double Mountain LWC unit identified in the BLM Vale District Inventory of Lands with Wilderness Characteristics. (BLM 2015) The existence of a non-viable alternative that would contravene the Settlement Agreement is concerning. However, we acknowledge that the Applicants Proposed Action Alternative that includes Variation S5-A1 and the Malheur S Alternative would not cross LWC Units and would comport with the Settlement Agreement.

The descriptions of the Affected Environment for the Malheur A Alternative and the environmental consequences from the Malheur A Alternative provide contradictory and confusing information with respect to the Double Mountain LWC Unit. Table 3-395 indicates that the Malheur A Alternative *does* cross the Double Mountain Unit. FEIS at 3-1148. The environmental consequences section just a few pages later indicates that the Malheur A Alternative *does not* cross any lands with wilderness characteristics units. FEIS at 3-1153. This discrepancy needs to be corrected and clarified for the public. Notwithstanding the needed clarification, if the Malheur A Alternative does cross and impact the Double Mountain LWC unit, BLM is similarly precluded from approving any activity on lands that have been identified

as having wilderness characteristics, where that activity would disturb the surface of the land and would either cause the wilderness unit to shrink, or cause the unit to no longer meet the criteria for wilderness character and the Malheur A Alternative is also a non-viable alternative with this alignment in this segment.

2. Citizen Proposed Wilderness

Under the Proposed Action, the transmission line crosses into two areas the Oregon Natural Desert Association has found to contain wilderness characteristics but that BLM did not identify in its own LWC inventory. These areas are Deer Butte (Pinnacle Point) and Double Mountain (Sagebrush Gulch). The Oregon Natural Desert Association found these roadless areas to be of sufficient size, in a natural condition, with outstanding opportunities for solitude, and with outstanding opportunities for primitive and unconfined recreation, so as to qualify as a wilderness. BLM in its preliminary findings has not found these areas to contain all inventory characteristics to be considered LWCs or adjusted proposed boundaries to exclude portions of these areas from LWC units. Nevertheless, we caution against development on these lands.

The Oregon Natural Desert Association continues to stand by its inventory that demonstrates that all portions of the Pinnacle Point and Sagebrush Gulch units possess wilderness characteristics and that impacts to these resources must be avoided. BLM's finding that Pinnacle Point fails to provide outstanding opportunities for primitive recreation due to the use of motorized vehicles to support fishing opportunities is an incorrect application of the primitive recreation standard; the unit clearly possesses all of the recreation characteristics of an LWC unit. In addition, any impacts to the Sagebrush Gulch (Double Mountain) unit must be strictly avoided under any alternative so as not to impact the area's wilderness character.

Apart from the importance of preventing impacts to areas of citizen proposed wilderness units, until it completes the RMP amendments, the BLM shall not implement any projects in the respective RMP planning areas that fall within either (a) an inventory unit determined by BLM to possess wilderness character, where such action would be deemed by BLM to diminish the size or cause the entire BLM inventory unit to no longer meet the criteria for wilderness character, or (b) a unit identified in ONDA's April 1, 2005 or February 6, 2004 citizen inventory reports as having wilderness character, but where BLM has not yet completed its inventory update, where the action would be deemed by BLM to diminish the size or cause the entire ONDA inventory unit to no longer meet the criteria for wilderness character. (Emphasis added) DEIS 3-444; Or. Natural Desert Ass'n v. BLM, No. 3:03-cv-1017-JE, Settlement Agreement Between Oregon Natural Desert Association, Committee for the High Desert, Western Watersheds Project, and BLM (D. Or. June 7, 2010).

In 2015 BLM undertook a comprehensive review (LWC review) of the level of compliance with wilderness characteristics inventory policy and direction in the Vale District and Lakeview District (BLM 2015). This review resulted in findings and recommendations that both the Vale and Lakeview Districts should conduct during maintenance of their respective LWC inventories. In particular, the LWC review details deficiencies in the documentation of wilderness characteristics found in the Deer Butte (OR 036-053) LWC unit and additional documentation

that would be needed to determine the unit does not have wilderness characteristics. BLM 2015 at 18.

What is not made clear to the public in the FEIS or anywhere else is whether BLM has completed updates and maintenance of the Vale District LWC inventory to complete its inventory update" in accordance with the settlement agreement. If these updates have been completed, then the FEIS must disclose and describe the additional information and findings and indicate where that information is available. The Wilderness Inventory Unit Index of Documents for the Deer Butte LWC Unit (OR-036-053) referenced in the FEIS and available on the BLM website appears to have last been updated in 2011, prior to the 2015 LWC review, suggesting that BLM has *not* completed its inventory update in accordance with the Settlement Agreement. BL, 2011.

If, in fact, BLM has not yet completed its LWC inventory update for the SEORMP planning area, BLM must analyze and disclose the effects of any proposed alignment of the B2H Project crossing a unit identified in ONDA's citizen inventory reports as having wilderness character. And if the B2H Project would diminish the size or cause the entire ONDA inventory unit to no longer meet the criteria for wilderness character, then BLM is precluded from approving any surface-disturbing activity in that unit. The FEIS must provide additional disclosure, analysis, and information about the LWC inventory and ensure conformance with the Settlement Agreement.

3. Greater Sage-Grouse

The B2H Project presents significant and unacceptable risks for the survival of the Baker population of Greater sage-grouse. All proposed alignments and variations cross at least some area of PHMA and/or General Habitat Management Area (GHMA) sage-grouse habitat. All but five of twenty different alternatives and variations cross at least some area of PHMA sage-grouse habitat. FEIS at 3-551. Residual impacts on Greater sage-grouse are anticipated to be high where the project crosses PHMA, and moderate where it crosses GHMA, from adverse effects such as fragmentation and loss of habitat, increased avian predation, habitat avoidance, and loss of genetic connectivity between neighboring populations of grouse. Despite these dire conclusions about the residual impacts of the B2H Project on the severely threatened Baker population of sage-grouse, the FEIS indicates reliance on unclear seasonal restrictions, habitat avoidance, and to-be-determined compensatory mitigation in order to ameliorate adverse effects. FEIS at 3-566.

The public provided clear comments in response to the DEIS on the importance of genetic connectivity; yet, the FEIS continues to pay scant attention to the importance of this issue to sage-grouse and fails to provide meaningful analysis of the impacts the B2H Project would cause in the form of sage-grouse habitat fragmentation and loss of connectivity—both connectivity between seasonal habitats and, critically, genetic connectivity among neighboring populations, including how such impacts have or could be avoided.

Sage-grouse migrate across corridors that connect neighboring areas of habitat the birds need to survive. Oregon Department of Fish & Wildlife (ODFW), Greater Sage-Grouse Conservation Assessment and Strategy for Oregon (2011), at 10. Specifically, the sage-grouse's life cycle

revolves around the seasons. In the spring, the birds breed at relatively open sites of low grasses called "leks." The hens then disperse to nest under taller stands of sagebrush, which are used both as food and as concealment from predators. In the summer months, the sage-grouse move to areas with natural springs and wet meadows. *See* Clait E. Braun, John W. Connelly & Michael A. Schroeder, "Seasonal Habitat Requirements for Sage-Grouse: Spring, Summer, Fall, and Winter," in USDA Forest Service Proceedings, at 38–40 (N.L. Shaw, S.B. Monsen & M. Pellant, eds., 2005). In winter, the focus returns to using sagebrush for food and cover, which means finding sagebrush that isn't buried by snow. *Id.* If a population of sage-grouse is cut off from accessing a seasonal habitat, the very survival of that population is placed in peril. The ODFW has determined that winter habitat is "critical to the persistence of the species" and "essential for greater sage-grouse populations."

Migration across connectivity corridors also allows local sage-grouse populations to intermix—which is key to promoting genetic diversity and protecting against inbreeding that is detrimental to the species' survival. *See* Steven T. Knick & Steven E. Hanser, "Connecting Pattern and Process in Greater Sage-Grouse Populations and Sagebrush Landscapes," in Greater Sage-Grouse: Ecology and Conservation of a landscape and its Habitats (Steven T. Knock & John W. Connelly, eds., 2011). According to the U.S. Fish and Wildlife Service, "maintaining habitat connectivity and sage-grouse population numbers are essential for sage-grouse persistence." 12-Month Findings for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered, 75 Fed. Reg. 13,910, 13,923 (Mar. 23, 2010).

As explicitly acknowledged in the FEIS, regional connectivity between leks and populations may represent a fundamental source of genetic recombination and metapopulation structure that supports the long-term viability of the species. Additionally, connectivity between leks has been shown to be important for population sustainability. FEIS at 3-511. Confusingly, the FEIS also states that ODFW assumes that Greater sage-grouse populations east of Interstate 84 are closed to immigration or emigration (*i.e.*, "closed populations") despite later indicating that, in fact, there *is evidence* of sage-grouse movements to Idaho. FEIS at 3-470. While citing evidence of physical and genetic connectivity between the Baker population and adjacent populations in Idaho, the FEIS also clearly indicates the already low level of connectivity, low level of resilience, and high level of risk for the Baker population from development. FEIS at 3-470.

And still, despite clear public comments on the issue of genetic connectivity and references in the FEIS itself to the body of scientific and expert agency literature on the importance of genetic connectivity, the FEIS continues to imply that the Baker population of sage-grouse is already isolated and therefore largely ignores analysis of effects to genetic connectivity from the B2H Project. The FEIS must be revised to include more robust information and analysis of the effects to the genetic connectivity of the Baker sage-grouse population in order to have an informed basis for selecting among the route alternatives and variations. Sacrifice of the Baker sage-grouse population is not an acceptable outcome.

4. Mitigation

The FEIS's evaluation of mitigation is inadequate. Many commenters took issue with the DEIS's failure to include a detailed, site-specific plan for mitigating harm to sage-grouse and other

resources as well as the lack of any analysis of whether potential mitigation is likely to be effective. The FEIS does not address this concern; the Mitigation Framework in Appendix C still calls for a Compensatory Mitigation Plan to be developed in the future.

An agency which relies on an EIS in its decision making must include an assessment of whether proposed mitigation measures can be effective in reducing or eliminating harm from the project. "Implicit in NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' is an understanding that the EIS will discuss the extent to which adverse effects can be avoided." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351–52 (1989) (quoting 42 U.S.C. § 4332(2)(C)(ii)). "An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective." *S. Fork Band Council of W. Shoshone v. U.S. Dep't of the Interior*, 588 F.3d 718, 727 (9th Cir. 2009). Because NEPA requires a discussion of the extent to which adverse effects can be avoided, "[a] mitigation discussion without at least *some* evaluation of effectiveness is useless in making that determination." *Id.* As a result, "[a] mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA." *Neighbors of Cuddy Mtn. v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998).

FLPMA, NEPA and BLM guidance require the agency to include adequate compensatory mitigation to address impacts to LWC and greater sage-grouse. Secretarial Order 3330, the report to the Secretary of Interior from the Energy and Climate Change Task Force and BLM's current mitigation guidance (IM No. 2013-142 and Draft Manual Section 1794) all direct BLM to incorporate mitigation strategies into planning. More recent guidance in the form of the Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment (2015) and the Department of the Interior's Landscape-Scape Mitigation Manual (2015) also emphasize the importance of mitigation in BLM planning and decision-making. Key elements of these policies are summarized below and should be incorporated into BLM's mitigation planning for the B2H Project:

- <u>Landscape-scale approach:</u> land use planning for conservation and energy development as well as analysis of proposed development and consideration of mitigation must use a landscape-scale approach to focus development in low-conflict areas and prioritize conservation in areas with important and sensitive resources and values.
- <u>Mitigation hierarchy:</u> the mitigation hierarchy of avoid, minimize, and offset through compensatory mitigation must be employed sequentially, with an emphasis on avoidance as the most important and effective step in the hierarchy.
- <u>"Irreplaceable resources":</u> avoidance is the most appropriate tool for addressing "irreplaceable resources," "resources recognized through existing legal authorities as requiring particular protection from impacts and that because of their high value or function and unique character, cannot be restored or replaced."
- No net loss of important resources and values: mitigation must achieve a goal of no net loss of important resources and values, with a net benefit goal as required or appropriate.
- <u>Climate change impacts and resilience:</u> agencies must identify and promote mitigation measures that help address climate change impacts and resilience.

- <u>Compensatory mitigation standards:</u> compensatory mitigation (generally comprising of acquisition, restoration or preservation of resources and values) must be:
 - <u>Durable</u>: protected against non-conforming uses like development and lasting as long as the impacts);
 - Additional: demonstrably new conservation benefits that would not occur without mitigation;
 - O Be developed based on the best available science: including for determining equivalency of impacts and mitigation benefits;
 - o <u>Provide for public transparency:</u> including tracking locations of impacts and mitigation actions; and
 - o Include monitoring and adaptive management.

BLM's mitigation guidance also specifically provides for BLM to compensate for impacts of a BLM authorization by conditioning that authorization on compensatory mitigation and specifically identifies major electric transmission projects as a type of project that may be appropriate for compensatory mitigation. Draft MS-1794 at 1.6(D).

Despite this guidance, Appendix C of the FEIS lacks the specificity to meaningfully address potential future requirements for compensatory mitigation. Evaluating compensatory mitigation in this type of EIS is consistent with NEPA, agency guidance and relevant case law. NEPA requires that BLM discuss mitigation measures in an EIS. 40 C.F.R. §§ 1502.14, 1502.16. NEPA requires BLM to "rigorously explore and objectively evaluate" a range of alternatives to proposed federal actions. *See* 40 C.F.R. §§ 1502.14(a), 1508.25(c). This evaluation extends to considering more environmentally protective alternatives and mitigation measures. *See, e.g., Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1122–23 (9th Cir. 2002) (and cases cited therein).

Additionally, in the context of evaluating alternatives for mitigation of impacts from designating this corridor and approving transmission projects, the consideration of more environmentally protective alternatives is also consistent with the FLPMA requirement that BLM "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." 43 U.S.C. §1732(d)(2)(a). LWC (as well as sage-grouse habitat) are an important resource deserving protection under FLPMA. See, Manual 6310; Ore. Natural Desert Ass'n v. BLM, 625 F.3d 1092, 1098 (9th Cir. 2010) ("...wilderness characteristics are among the "resource and other values" of the public lands to be inventoried under § 1711").

Considering alternatives to mitigate impacts from the proposed action outside the area of impact should be included in a reasonable range of alternatives. As stated above, BLM's current guidance provides for compensatory mitigation for addressing impacts from large development projects that have substantial undesirable cumulative effects that cannot be sufficiently mitigated onsite, such as major electric transmission projects. Draft MS-1794 states that "BLM will consider and analyze proposals for mitigation through the NEPA process." Draft MS-1794 at 1.6(D)(17)(a). The agency guidance directs that when compensatory mitigation may be necessary, but the applicant proposes none, "BLM will analyze the applicant's proposed action

and the proposed action with mitigation, in separate alternatives." Draft MS-1794 at 1.6(D)(17)(e).

Although BLM asserts that the Compensatory Mitigation Plan to be developed in the future will result in net protection to sage-grouse, the failure to evaluate the effectiveness of an *actual* plan in the FEIS—coupled with BLM's exemption of the B2H line from the Oregon Greater Sage-grouse Resource Plan Amendments—violates the agency's obligation under NEPA to assess whether or not the proposed mitigation actually will be effective. This precludes meaningful agency analysis and public participation.

5. Procedural Flaws in the NEPA Process

The process by which BLM prepared and issued the DEIS and FEIS did not satisfy the letter and spirit of NEPA because BLM did not in all instances provide a meaningful opportunity for affected citizens to participate. This is particularly true for landowners in Oregon, because a number of BLM agency decisions and questionable actions excluded Oregon citizens from fully participating in the development of the FEIS issued on November 26, 2016.

NEPA's "public comment procedures are at the heart of the NEPA review process" and reflect "the paramount Congressional desire to internalize opposing viewpoints into the decision making process to ensure that an agency is cognizant of all the environmental trade-offs that are implicit in a decision." *Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 508 (9th Cir. 1988); *Cal. v. Block*, 690 F.2d 753, 770–71 (9th Cir. 1982). It is only at the stage when the draft EIS is circulated that the public and outside agencies have the opportunity to evaluate and comment on the proposal. 690 F.2d at 771.

Consequently, an agency's failure to disclose a proposed action before the issuance of a final EIS defeats NEPA's goal of encouraging public participation in the development of information during the decision-making process.

Oregon landowners and residents in particular are likely to be subjected to the impacts of this line without having had adequate notice or meaningful opportunities to lodge their concerns, which include:

a. The only notice that comments on the DEIS would be required for eligibility to comment on the FEIS was published in the Federal Register. The average citizen is not aware that the Federal Register exists and most certainly does not consult it regularly. BLM notes on "How to Participate" could easily and appropriately have included that requirement.¹

HOW TO PARTICIPATE

Your input helps agencies make informed project decisions. BLM, USFS, ODOE and Idaho Power encourage you to participate in the Boardman to Hemingway Transmission Line Project by:

- Submitting comments during official comment periods.
- Attending <u>public meetings</u>.

¹ From 2014 B2H web site:

- b. During the period December 2014 through November 2016, confusing information on a myriad of preferred and alternate routes with variations was periodically available; however, potentially impacted individual landowners were not notified unless they specifically had requested information. Idaho Power disclaimed responsibility for notifying Oregon property owners about the transmission line route because Oregon is not part of its service territory.²
- c. How were landowners supposed to know that they should be concerned about the DEIS? Some were unaware of the planned the B2H Project. Furthermore, the maps provided were mystifying, without available local landmarks. Even the Union County staff in charge of land use planning found the maps inadequate. Some landowners received notices that their property might be affected for the first time after the FEIS was complete based on routes and variations chosen, giving them no meaningful notice or opportunity to comment on the proposal. Some landowners whose land is within the 2,070 feet of a route never received notification. BLM thus provided inadequate notice and opportunity for the affected public to comment on the transmission line proposal at the DEIS and FEIS stages.
- d. The Agency Preferred Route was not announced until publication of the FEIS. To compound the problem, the FEIS apparently includes route segments that were not covered in any of the DEIS maps or documents. In such circumstances, the BLM should have first issued a supplemental DEIS to describe and seek public comment on the new Agency Preferred Route and new route segments, instead of proceeding directly to issue the FEIS without opportunity for additional public comment.
- e. The FEIS was issued on November 25, 2016 with a 30-day protest period for land use plan amendments, but no provision for formal public comment. During the DEIS meetings, Oregon residents were told that a comment period would follow publication of the FEIS. BLM took that approach in finalizing its FEIS for the Gateway West transmission line—and thus it is inexplicable that BLM did not provide a similar public comment period for the FEIS for the B2H Project, particularly given the new route segments that appear for the first time in the FEIS.
- f. The dates of the FEIS Protest Period and availability of the FEIS before BLM issues a Record of Decision November 26, 2016 to December 25, 2016 are inadequate to allow meaningful analysis and response to a 3,000 page document, especially since
 - Keeping informed by signing up for the project mailing list.
 - Reviewing project materials such as this website, agency review documents and newsletters.
 - Asking questions.

² Oregon Public Utility Meeting March 24, 2016 @ 29 m40s http://oregonpuc.granicus.com/MediaPlayer.php?view_id=1&clip_id=87

individuals and local government and organizations' staff traditionally take vacations during the Thanksgiving to Christmas holiday period, and inclement weather often cancels meetings.

- g. Furthermore, BLM did not provide specific information on required postmark dates knowing that the due date fell on the Christmas holiday. Post offices and commercial carriers in many of the more rural areas affected by the transmission line are closed on Saturdays and Sundays. Thus protest letters from La Grande must be delivered to the desk of the post office by 1:30 pm on Friday, December 23rd to be postmarked before December 25, reducing the Protest Period from 30 days to 27.
- h. Finally, it appears that the notice of availability of the FEIS was not published in the Federal Register until Monday, November 28, 2016 (81 Fed. Reg. 85,632). The "Dear Reader" letter included with the FEIS is dated November 25, 2016, which may mislead many members of the public to believe that their protests and the pre-ROD availability period for the FEIS ended on December 24 or December 25, rather than December 27. In light of the Federal Register publication date, BLM is legally obligated to consider any protests and comments that are submitted by December 27, 2016.

NEPA works "through the creation of a democratic decisionmaking structure that, although strictly procedural, is almost certain to affect the agency's substantive decision[s]." *Or. Natural Desert Ass'n*, 625 F.3d at 1099 (quotation omitted). An agency's obligation under NEPA to disclose information about environmental impacts, and to obtain feedback from the public that will lead to an informed agency decision, are central to this democratic decisionmaking. *Id.* at 1121 n.24. Agencies are supposed to *promote and encourage* public scrutiny, not place obstacles in the way of the public's ability to obtain high quality, accurate information about a proposed project and submit meaningful comments on the proposed alternatives.

The process that BLM and cooperating agencies, including Idaho Power, have followed in this case is an unfortunate failure of government transparency. It is doubtful that the agencies followed the letter of the law. The spirit of the law was most assuredly ignored. The release of the FEIS and land use plan amendments on the Friday after Thanksgiving for a protest period that ends on Christmas Day suggests an intent to thwart, rather than promote, public involvement and participation. BLM could simply have included the actual date that the protest was due and that the availability of the FEIS would expire in its "Dear Reader" letter and in its Federal Register notice of availability, rather than making the public guess based on the 30-day time frame that ran from an uncertain start date. These failures of the NEPA process and meaningful opportunities for citizens to be involved in the EIS process render any decision BLM makes with respect to the right-of-way unlawful unless BLM cures these problems by reopening the public process after preparing a draft supplemental EIS.

6. Purpose and Need.

Several comments on the DEIS contested whether Idaho Power (the applicant) had demonstrated that it truly needs to have the B2H transmission line built and asked BLM to evaluate and analyze the applicant's stated purpose and need for the transmission line. BLM improperly

disclaimed any responsibility for doing so, and thus improperly omitted an evaluation of whether Idaho Power truly has a need for the B2H line or whether, alternatively, it could achieve its energy goals with alternative technologies that would allow BLM to deny the right-of-way application.

BLM said, for example, that it "is not BLM's role or responsibility to verify an applicant's interests and objectives for a proposed project." FEIS at K6-128. This is wrong as a matter of law. In an EIS, an agency must "rigorously explore and objectively evaluate all reasonable alternatives' to a proposed plan of action that has significant environmental effects." *NRDC v. USFS*, 421 F.3d 797, 813 (9th Cir. 2005) (citing 40 C.F.R. § 1502.14(a)). In order to do so, the agency must first reasonably and objectively define the purpose and need of a proposed action. *See Simmons v. U.S. Army Corps of Eng'rs*, 120 F.3d 664, 666 (7th Cir. 1997) (citing *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 195–96 (D.C. Cir. 1991)). This includes evaluating whether a project proponent actually needs the project.

Federal agencies must "exercise a degree of skepticism in dealing with self-serving statements from a prime beneficiary of the project and to look at the general goal of the project rather than only those alternatives by which a particular applicant can reach its own specific goals." *Envtl. Law & Pol'y Ctr. v. U.S. Nuclear Reg. Comm.*, 470 F.3d 676, 683 (7th Cir. 2006) (quoting *Simmons*, 120 F.3d at 666). When the purpose and need of a project are overly narrow, the resulting range of alternatives is inadequate under NEPA. *See Envtl. Law & Pol'y Ctr.*, 470 F.3d at 684 (citing *Citizens Against Burlington*, 938 F.2d at 199). An agency cannot define the purpose of a project in such a way as to foreclose the ability of any alternatives to meet the stated purpose. *See Simmons*, 120 F.3d at 669. By (1) refusing to evaluate whether the applicant truly needs this project and (2) defining BLM's *own* purpose and need narrowly as simply responding to the application, and refusing to respond to comments asking BLM to correct these errors, BLM violated NEPA.

Regarding BLM's assertion that *its* only purpose was responding to the right-of-way application, and therefore that consideration of alternative forms of energy would not respond to BLM's purpose and need, *e.g.* FEIS at K6-127, such a narrow definition cannot preclude BLM from evaluating alternatives, like distributed generation and micro-transmission, that could satisfy the *applicant's* purported need, and thus allow the BLM to make an informed decision whether or not to grant the right-of-way. The chosen statement of purpose and need effectively dictates the range of alternatives evaluate in an EIS. *Id.* "[A]n agency cannot define its objectives in unreasonably narrow terms." *City of Carmel-By-The-Sea v. U.S. Dep't of Transp.*, 123 F.3d 1142, 1155 (9th Cir. 1997). "An agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative . . . would accomplish the goals of the agency's action, and the EIS would become a foreordained formality. *Nat'l Parks & Conservation Ass'n v. BLM.*, 606 F.3d 1058, 1070 (9th Cir. 2010). Moreover, an agency may not allow the economic needs and goals of a private applicant to define the purpose and need, and hence the inevitable outcome, of an EIS. *Id.*

A lawful alternatives analysis must "present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14; see Ctr. for

Biol. Diversity v. U.S. Dep't of the Interior, 623 F.3d 633, 646 (9th Cir. 2010) ("based on the information now reasonably available, the [agency] must make a meaningful comparison of the environmental consequences" of different alternatives). It must "[d]evote substantial treatment" to alternatives considered in detail "so that reviewers may evaluate their comparative merits." 40 C.F.R. § 1502.14(b). And the alternatives analysis must "[i]nclude reasonable alternatives not within the jurisdiction of the lead agency." Id. § 1502.14(c). The scope of an alternatives analysis depends on the goal of the proposed project, and requires evaluation of all feasible alternatives that are reasonably related to the project's purpose. City of Carmel-by-the-Sea, 123 F.3d at 1155.

BLM's repeated assertion in the responses to comments that it has no obligation to consider alternative generation and transmission that would be a practicable alternative to the B2H Project means that BLM did not adequately or accurately analyze the full range of reasonable project alternatives. See 40 C.F.R. § 1502.14(a). Many commenters noted that energy conservation and alternative sources of energy, including smaller-scale, distributed electricity generation and the use of local rather than long-distance transmission, would likely be able to meet Idaho Power's asserted need for additional energy resources. The FEIS presents no data supporting Idaho Power's purported need, and no analysis of whether that need is real. Accordingly, if BLM approves a right-of-way, it will have acted arbitrarily and in violation of NEPA.

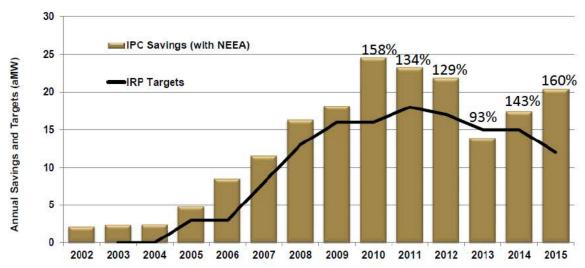
It defies not only the law but also common sense that an agency would approve a project that would destroy and degrade public resources without undertaking an evaluation whether that project actually is necessary to meet the applicant's supposed needs. If the BLM had done due diligence, as NEPA requires, it would have ascertained that Idaho Power's "need" is overstated and capable of being satisfied without the B2H Project.

Since the preparation of the DEIS in early 2015, significant new information has become available regarding Idaho Power's need for the B2H Project, which BLM should evaluate along with other relevant information regarding need in a supplemental EIS. Idaho Power has been in the process of developing its 2017 Integrated Resource Plan (IRP). Comparing the 2017 IRP to the 2015 IRP, one can see that the demand side reduction in the company's power needs—achieved through energy efficiency and conservation—is now much greater than in the 2015 IRP that was discussed in the DEIS but not updated in the FEIS. As a result, Idaho Power no longer has any "need" for power at the levels described in the FEIS.

The following slides produced by Idaho Power for its 2017 IRP Advisory Council meetings demonstrate this. Some data has been superimposed for comparison purposes. The slide below (Program Performance – Incremental IRP Targets) demonstrates how Idaho Power continuously underestimates it demand side savings. Since 2010, Idaho Power has under reported its demand side saving by a rounded 137%—the difference between the IRP targets for energy efficiency and the actual energy efficiency savings through initiatives in conjunction with the Northwest Energy Efficiency Alliance (NEEA). If these energy efficiency and conservation savings, now reflected in the 2017 IRP, were to be incorporated into the company's "need" calculation, there would be a significant reduction in Idaho Power's power need. Although the FEIS discloses Idaho Power's alleged power need based on the 2015 IRP, it does not disclose or evaluate any information regarding the new data from the 2017 IRP proceedings.

Program Performance – Incremental IRP Targets





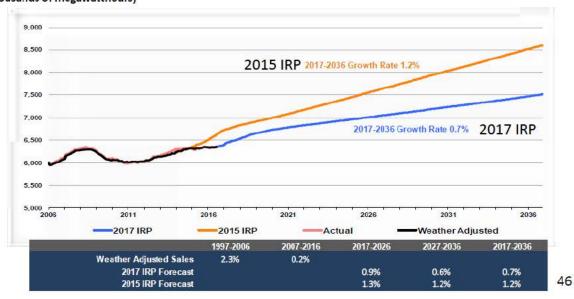
33

In addition, forecast customer demand has decreased significantly since the 2015 IRP. The next two slides (Commercial and Industrial Sales Forecast and Residential Sales Forecast) show that the 2017 IRP is forecasting reductions in commercial/industrial and residential energy consumption over the next 20 years, compared to the consumption forecasts in the 2015 IRP. The Commercial and Industrial Sales forecast shows that the expected rate of increase in the consumption of energy between 2017 and 2036 in the 2017 IRP has fallen by over 40% compared to the 2015 IRP, from 1.2% to only 0.7%. The Residential Sales forecast, while showing the same forecast rate of growth in both IRPs, now shows a different, lower starting point for energy demand in 2017, based on the weather adjusted calculation. This too results in lower estimated energy use among residential customers than when the supposed "need" described in the FEIS was calculated based on the 2015 IRP.



Commercial and Industrial Sales Forecast

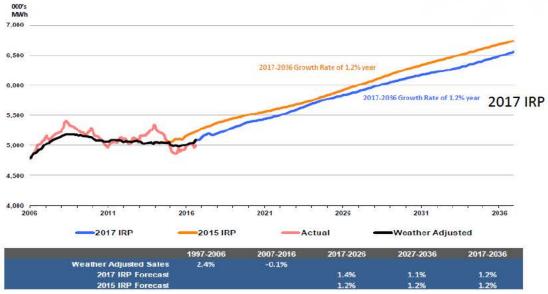




S2

Residential Sales Forecast

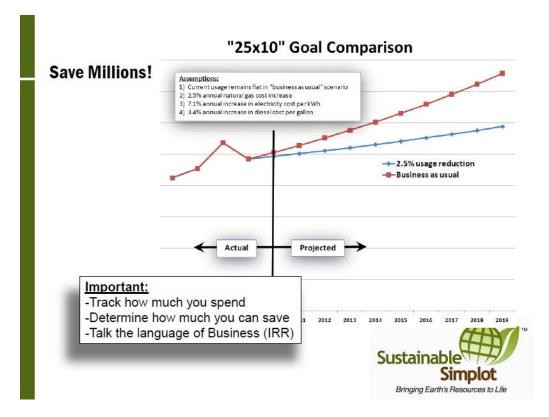




4

In addition, many of Idaho Power's largest industrial customers in the food processing industry are implementing Energy Efficiency programs that are not calculated into Idaho Power's "need."

At the November 2016, Idaho Power IRP meeting, members of the food processing industry raised serious questions to Idaho Power's projected supply demand due to the energy efficiency programs they are implemen³ting. For example, Simplot—one of Idaho Power's largest customers—is *reducing* its anticipated energy usage by 25% over 10 years, as illustrated in a presentation made by Simplot to the Western Governors' Association in 2011:



These revised demand figures demonstrate that the expected growth rates set out in the FEIS (e.g. at 1-12 and 1-13) are no longer correct and cannot be relied on by BLM to approve this project. Given that this information is readily available from the project applicant and other publicly available sources, BLM should have done due diligence to realize that Idaho Power's "need" is overstated and has declined dramatically between the 2015 IRP described in the FEIS and the 2017 IRP currently in process, and that the applicant's purported "need" can be met by methods other than the B2H transmission line. Given the 300 mile project length with its accompanying 250 foot right of way, the potential exists for upwards of 9,000 acres of environmental disturbance just from the footprint of the project, not taking into account the effects on visual resources and transmission-line-avoidant wildlife such as sage-grouse that spill over onto hundreds of thousands of acres adjacent to the right-of-way. The resulting impact on the environment would be significant. The evaluation of Idaho Power's actual power needs—and whether or not the B2H transmission line is truly needed—should therefore be a primary focus for the BLM.

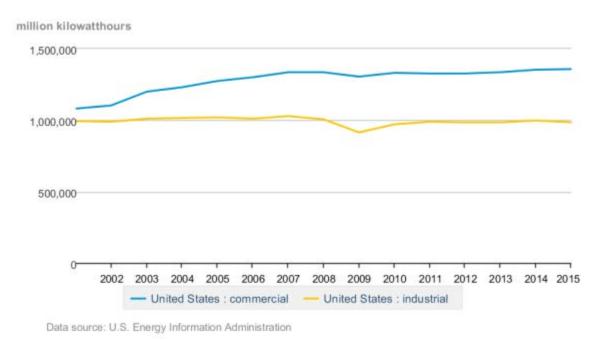
_

³ https://www.westgov.org/component/docman/doc_download/1410-iee-simplot (accessed on 23rd December 2016).

Based on the new information in the 2017 IRP, Idaho Power's projected growth in demand of 20% over the next 20 years that is reflected in the FEIS is certainly inaccurate. It also flies in the face of nationwide trends and the company's own sales data. As reflected in the next chart (Retail Sales of Electricity, annual), the U.S. Energy Information Administration has recorded a drop in overall commercial and industrial electricity demand for five of the last eight years. In the words of that study:

"The flattening of total electricity sales reflects declining sales in the industrial sector and little or no growth in sales to the residential and commercial building sectors, despite growth in the number of households and growth in commercial building space."4

Retail sales of electricity, annual



United States Commercial and Industrial electricity demand (2001 - 2015)

Idaho Power's figures reflect that same trend with a flattening of demand over the last three years. ⁵ That trend is projected to accelerate.

The evolution of intelligent micro-grids, the plummeting price of photovoltaic solar systems, and the introduction of sophisticated storage systems will result in consumers becoming producers.

⁴ Klaiman, K. Total electricity sales fell in 2015 for 5th time in past 8 years. Today in Energy - U.S. Energy Information Administration (EIA) (2016). Available at: http://www.eia.gov/todayinenergy/detail.cfm?id=25352. (Accessed: 18th July 2016). ⁵ DeVol, P. Commercial and Industrial Sales Forecast. (2016).

Demand management will integrate those systems into the local grid. That will dramatically change the demand curve:

"... it's not a trend that's going to change. The level of rate of load growth is going to continue to decrease. It will get to zero at some point in time, but it will start going negative when you've got enough distributed generation put in."

It also threatens the utility business model, cutting into profits⁷ and bringing into question the long-term financial viability of a project with financing dependent on a 30-year bond issue:

"... there's no question that it will transform [utility] models. They will be forced to transform them into these distribution platforms that are primarily receiving revenues through a fixed fee, much like the cable companies that provide cable services to homes and businesses. So I think the entire model will be transformed."

Conservation measures undertaken by Idaho Power customers have already undercut growth estimates significantly, consistently outperforming the company's estimates over the last 13 years, including by 160% in 2016.

Power engineers are aware of the likelihood that future demand will be reduced:

"Distributed generation is located in distribution networks close to consumers or even on the consumers' side of the meter. Therefore, the net demand to be supplied through transmission and distribution networks may decrease, allowing [utilities] to postpone reinforcement of existing networks." ¹⁰

The Idaho Power service area is also positioned to provide any additional power if it should be needed in the future. The cost of solar power is down by 75% since 2009, and the increase in solar "farms" has resulted in a higher per capita ratio of solar power in Idaho than any other state. ¹¹

⁶ Hering, G. Wellinghoff to utilities: Time to rethink your business model. GreenBiz (2014). Available at: http://www.greenbiz.com/blog/2014/05/27/wellinghoff-utilities-time-rethink-your-business-model. (Accessed: 15th July 2015).

⁷ Trabish, H. Report: US generators face \$2B in lost revenues from rooftop solar. Utility Dive Available at: http://www.utilitydive.com/news/report-us-generators-face-2b-in-lost-revenues-from-rooftop-solar/415799/. (Accessed: 1st April 2016).

⁸ Hering, G. Wellinghoff to utilities: Time to rethink your business model. GreenBiz (2014). Available at: http://www.greenbiz.com/blog/2014/05/27/wellinghoff-utilities-time-rethink-your-business-model. (Accessed: 15th July 2015).

⁹ Annual Report. (Idaho Power, 2015).

¹⁰ Mendez, V. H. *et al.* Impact of distributed generation on distribution investment deferral. *Int. J. Electr. Power Energy Syst.* **28**, 244–252 (2006).

¹¹ Solar power in Idaho - Wikipedia. Available at: http://www.wikiwand.com/en/Solar_power_in_Idaho. (Accessed: 23rd December 2016).

All of these trends lead to the conclusion that the Boardman to Hemingway power line is likely to be a stranded asset in the near future. All of this new recent information shows that demand for energy among industrial customers is decreasing, rather than increasing, that Idaho Power has not correctly reflected reductions in demand based on their energy efficiency initiatives in the calculations of demand for energy described in the FEIS, and trends in energy supply indicate the potential for serving whatever increased demand Idaho Power might *actually* experience can potentially be satisfied by distributed generation, including expansion of solar power, and improved storage solutions. Because of this significant new information not addressed in the FEIS, BLM needs to prepare a supplemental EIS that includes *current*, accurate data regarding Idaho Power's need for the B2H project, and evaluate whether that need actually exists. Otherwise any decision by BLM to grant a right-of-way to build the B2H Project will be in violation of NEPA and the Administrative Procedure Act.

7. Title V of the Federal Land Policy and Management Act

As noted, in a NEPA document, "the statutory objectives underlying the agency's action work significantly to define its analytic obligations." *Or. Natural Desert Ass'n*, 625 F.2d at 1109. In evaluating whether to approve a right-of-way for the B2H Project, and what conditions it should impose on that right-of-way if granted, BLM must strictly comply with its obligations under Title V of the Federal Land Policy and Management Act of 1976 ("FLPMA"), 43 U.S.C. §§ 1701–87. Although BLM must comply with Title V, it appears that nowhere in the FEIS is there a discussion of these obligations or any explanation of *how* BLM intends to comply with Title V. Such compliance is important to protect both sage-grouse and the visual and historic resources that are likely to be harmed by a transmission line of this magnitude. The failure to analyze and evaluate compliance with Title V in the FEIS violates NEPA.

Under FLPMA § 504, BLM can grant a right-of-way for a transmission line "limited to the ground which [BLM] determines . . . (4) will do no unnecessary damage to the environment." 43 U.S.C. § 1764(a). Rights of way "shall be granted, issued or renewed . . . consistent with . . . any other applicable laws." *Id.* § 1764(c). A right-of-way that "may have significant impact on the environment" requires submission of a plan of construction, operation, and rehabilitation of the right-of-way. *Id.* § 1764(d).

A Title V transmission right-of-way "shall contain terms and conditions which will . . . (ii) minimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment." *Id.* § 1765(a). In addition, the right-of-way "shall contain such terms and conditions as [BLM] deems necessary to:

(i) protect Federal property and economic interests; (ii) manage efficiently the lands which are subject to the right-of-way or adjacent thereto and protect the other lawful users of the lands adjacent to or traversed by such right-of-way; (iii) protect lives and property; (iv) protect the interests of individuals living in the general area traversed by the right-of-way who rely on the fish, wildlife, and other biotic resources of the area for subsistence purposes; (v) require location of the right-of-way along a route that will cause least damage to the environment, taking

into consideration feasibility and other relevant factors; and (vi) otherwise protect the public interest in the lands traversed by the right-of-way or adjacent thereto.

Id. § 1765(b).

Three important potential substantive requirements flow from the FLPMA right-of-way provisions. First, BLM has a mandatory duty under § 505(a) to impose conditions that "will minimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment." *Id.* (emphasis added). The terms of this section do not limit this specifically to "damage" on the land within the corridor. Rather, the repeated use of the expansive term "the environment" indicate that the overall effects of the transmission right-of-way on scenic and esthetic values must be evaluated. Particularly for scenic values, no other reading makes sense.

In addition, the obligation to impose terms and conditions that "protect Federal property and economic interests" in § 505(b) requires BLM to impose conditions that protect not only the federal land *crossed* by the right-of-way, but *all* federal land affected by the grant—including federal land *outside* the narrow right-of-way. The mandatory requirement in § 505(a) that BLM's right-of-way grant "minimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment" extends to minimizing damage the Project would cause to sage-grouse and scenic and historical resources beyond the narrow right-of-way.

Both §§ 505(a) and 505(b) impose an obligation on BLM, in the context of this Project, to insure that damage to the irreplaceable historic resources of the Oregon National Historic Trail is minimized or avoided and to ensure that the Project does not unrecognizably alter the unique setting through which the Oregon Trail passes east of the Blue Mountains—especially given that the Flagstaff Hill Interpretive Center overlooks both the most-visited and salient portion of the Trail and the potential route of the Project. And, of course, BLM's NEPA documents and FLPMA right-of-way should reflect and evaluate how the alternatives discussed (and any action alternative ultimately adopted) ensure compliance with FLPMA § 505 and other applicable laws, and particularly the National Historic Preservation Act (with respect to effects on the Oregon Trail and other cultural and historic resources along the Project route).

Second, the discretionary requirements in § 505(b) require a BLM determination as to what conditions are "necessary" to protect federal property and economic interests, as well as "otherwise protect[ing] the public interest in the lands traversed by the right-of-way *or adjacent thereto*" (emphasis added). BLM therefore will have to make a determination of necessary conditions that protect not only lands within the right-of-way but also the adjacent federal lands if it decides to approve the Project.

Third, the requirement that the right-of-way grant "do no unnecessary damage to the environment" and be "consistent with . . . any other applicable laws," *id.* §§ 1764(a)-(c), imposes an independent obligation on BLM to minimize the Project's impacts to sage-grouse and scenic and historic resources along the Project route, even if these impacts manifest outside of the right-of-way corridor.

However, the FEIS addresses none of these provisions, and no alternatives for complying with these provisions are proposed or analyzed. By failing to disclose how it intends to comply with its obligations under FLPMA Title V, BLM in the FEIS fails to take a "hard look" at this issue. This failure renders any decision to approve the B2H project arbitrary and capricious.

8. Vegetation

The FEIS's discussion of effects on vegetation, particularly in Section 3.3.3.3, Vegetation and Segment 2 through Union County, is inadequate to support a reasoned decision whether to approve this project. BLM has failed to provide accurate, high-quality, current information regarding potential threats to vegetation along the project route by not updating vegetation surveys for sensitive plants and noxious weeds since 2008 and by using outdated plant lists in its discussion of vegetation. Reliance on or inaccurate stale data does not constitute a "hard look" under NEPA. See, e.g., Or. Natural Desert Ass'n v. Jewell, 840 F.3d 562, 568–71 (9th Cir. 2016) (BLM's decision was arbitrary and capricious because it was based on winter sage-grouse surveys at a different site than where the project was proposed); N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1085–87 (9th Cir. 2011) (aerial surveys and site visits three and four years before agency's decision, and other aerial surveys from 10 to 22 years old, were stale and required updating with additional studies and surveys); Lands Council v. Powell, 395 F.3d 1019, 1031 (9th Cir. 2005) (six year-old wildlife data, without updated habitat surveys, was too stale and "too outdated to carry the weight assigned to it").

Among the main concerns with the FEIS's discussion of vegetation—which have remained unaddressed despite several comments in the DEIS concerning these—are:

- a. Inherently unknowable detrimental effects of Reasonably Foreseeable Future Actions on native vegetation communities on private lands.
- b. Moderate Residual Impact estimate and doubts about some assumptions made in the FEIS about Cumulative Impacts to sensitive plant species and native vegetation communities along the proposed route.
- c. A lack of attention to insect species and populations along the proposed route.
- d. Reliance on overly optimistic expectations of mitigation in order to protect species and communities put at risk by the B2H project.
- e. Violation of Oregon Statewide Planning Goals, including Goal 4, Forest Lands.

a) Public vs. Private Lands:

Approximately two-thirds of the planned B2H route transverses private lands. These lands occur primarily at lower elevations throughout eastern Oregon's Blue Mountains ecoregion. Higher elevations are more likely to be under federal management, such as USFS.

Land Use Practices on federally managed lands include consideration for protection of native vegetation communities and the co-dependent species that they support, such as tall sagebrush and Greater sage-grouse, riparian communities and anadromous fish, and native grasslands together with pollinators such as Monarch butterflies and native bees. Species that are federally-or state-listed as sensitive, threatened, or endangered may receive protection through the management planning process. However, sensitive species and native plant communities do not enjoy these same protections or management considerations on most private lands. Private landowners are not obligated to conserve native vegetation communities and their co-dependent species, so the assumption (FEIS at 3-2163) that steps will be taken to avoid, minimize and mitigate impacts to vegetation on these lands is unfounded.

b) Moderate Residual Impact

In Section 3.3.3.3 Vegetation, the FEIS states that for listed plant species, sensitive plant species, spread of noxious weeds, and traditional and ethnobotanical resources, "[d]isturbance is anticipated to result in moderate residual impact." FEIS at 3-2160.

This estimate, which is based primarily on public lands management, grossly underestimates potential detrimental effects of Future Actions on private lands. Private landowners are not obligated to conserve native vegetation communities and their co-dependent species.

The estimate of Moderate Residual Impact to vegetation along the proposed route relies on an assumption that private lands will continue to provide refugia for species impacted by the power line and associated infrastructure. Co-dependent species often rely on connectivity of increasingly fragmented ecosystems for survival. Each species has a limit beyond which it simply cannot breed, disperse or continue to inhabit areas that are not sufficiently connected. Habitat fragmentation is most severe on lower elevation, private lands, which will be predominantly impacted by the planned B2H route.

c) 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 triflorm* (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 private lands. The proposed B2H line would put at risk many species that we have yet to document or develop understanding of their habitat requirements.

d) Reliance on Mitigation

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. 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.

e) Violation of Oregon Statewide Planning Goals

Union County has zoned the lands of Glass Hill as Zone A4, Timber-Grazing Zone. This zone is created under Statewide Planning Goal 4, Forest Lands, which has as its purpose the conservation of forest lands (OAR 6600-015-00(4) and 660-006-0025).

Yet, the FEIS describes that the greatest disturbance on Glass Hill will be to "Mixed Conifer Forest vegetation communities." FEIS at 3-2177.

In summary, with regard to listed plant species, sensitive plant species, spread of noxious weeds, and traditional and ethnobotanical resources, the FEIS relies on stale data and several unsubstantiated, underlying assumptions regarding future actions on private lands and underestimates the eventual residual impacts of the project. It also reveals a lack of attention to understudied groups, and an assumption of reliance on overly optimistic mitigation expectations.

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.

CONCLUSION

The management decisions and analysis of impacts in the Proposed Land Use Plan Amendments and FEIS are in error for the reasons stated in this protest and comment. Unless corrected, these failures and shortcomings will result in a decision that fails to comply with and follow NEPA, WSRA, FLPMA, NFMA, Executive Orders, regulations, agency guidance, and best available scientific information, and would be based on analyses and actions that violate the legal and policy requirements identified in this protest and comment. Because of these significant flaws, the protested portions of the Proposed Land Use Plan Amendments and FEIS are contrary to applicable law, as well as agency policy and guidance, and cannot be adopted.

To correct these problems, we request that BLM supplement the FEIS and revise the Proposed Land Use Plan Amendments as described above.

Sincerely,

Dan Morse, Conservation Director Oregon Natural Desert Association

50 SW Bond St., Ste. 4 Bend, Oregon 97702 dmorse@onda.org

Dal Dhe

On behalf of—

Brian Kelly, Restoration Director Hells Canyon Preservation Council PO Box 2768 La Grande, Oregon 97850 brian@hellscanyon.org (541) 963.3950

Gail Carbiener

fair Carlien

19506 Pond Meadow Ave.

Bend, OR 97702

mcgccarb@bendbroadband.com

Doug Heiken

Doug Heiken, Conservation and Restoration Coordinator Oregon Wild PO Box 11648, Eugene OR 97440 dh@oregonwild.org

541.344.0675

Jim C. Kreider Stop B2H Coalition 60366 Marvin Road La Grande, Oregon 97850 jkreider@campblackdog.org Fuji Kreider Stop B2H Coalition 60366 Marvin Road La Grande, Oregon 97850 fkreider@campblackdog.org

cc: Theresa Hanley, Acting State Director, BLM Oregon/Washington

Don Gonzalez, Vale District Manager, BLM

Tom Montoya, Forest Supervisor, Wallowa-Whitman National Forest

Tamara Gertsch, BLM National Project Manager

Peter M. Lacy, Senior Attorney, Oregon Natural Desert Association

REFERENCES CITED

BLM. 2015. Wilderness Characteristics Inventory Review. A Review of Vale and Lakeview District Conformance with Established Procedures for Maintaining the Inventory of Lands with Wilderness Characteristics. Final Report - December 18, 2015

BLM. 2011. Wilderness Inventory Unit Index of Documents Deer Butte OR-036-053 https://www.blm.gov/or/districts/vale/plans/files/DeerButte_OR-036-053_ALL.pdf. (last visited Dec. 21, 2016).

Braun, Clait E., John W. Connelly & Michael A. Schroeder, "Seasonal Habitat Requirements for Sage-Grouse: Spring, Summer, Fall, and Winter," *in USDA Forest Service Proceedings*, at 38-40 (N.L. Shaw, S.B. Monsen & M. Pellant, eds., 2005).

Haak, A.L., Williams, J.E., Isaak, D., Todd, A., Muhlfeld, C., Kershner, J.L., Gresswell, R., Hostetler, S., and Neville, H.M., 2010, The potential influence of changing climate on the persistence of salmonids of the inland west: U.S. Geological Survey Open-File Report 2010–1236, 74 p.

Intergovernmental Panel on Climate Change, 2007, Climate change 2007—The physical science basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change: New York and Cambridge, U.K., Cambridge University Press

Kiesecker, J.M., H. Copeland, A. Pocewica, and B. McKenney. 2009. Development by design: blending landscape-level planning with the mitigation hierarchy. Frontiers in Ecology and the Environment 8(5):261-265.

Knick, Steven T. & Steven E. Hanser. Connecting Pattern and Process in Greater Sage-Grouse Populations and Sagebrush Landscapes," *in Greater Sage-Grouse: Ecology and Conservation of a landscape and its Habitats* (Steven T. Knick & John W. Connelly, eds.). 2011.

Oregon Department of Fish & Wildlife. Greater Sage-Grouse Conservation Assessment and Strategy for Oregon. 2011.

Saunders, S., Montgomery, C., Easley, T., and Spencer, T., 2008, Hotter and drier—The West's changed climate: The Rocky Mountain Climate Organization, accessed June 24, 2009,

Settlement Agreement between Oregon Natural Desert Association, Committee for the High Desert, Western Watersheds Project, and BLM. United States District Court, District of Oregon. June 7, 2010.

- U.S. Department of the Interior, Bureau of Land Management. Draft Environmental Impact Statement and Land Use Amendments for the Boardman to Hemingway Transmission Line Project. December 2014.
- U.S. Department of the Interior, Bureau of Land Management. Southeast Oregon Resource Management Plan and Record of Decision. September 2002.
- U.S. Department of the Interior, U.S. Fish and Wildlife Service, 2010, Endangered and threatened wildlife and plants, 12-month findings for petitions to list the Greater Sage-Grouse (Centrocercus urophasianus) as threatened or endangered: Washington, D.C., FWS–R6–ES–2010–0018, Federal Register, v. 75, no. 55 (March 23, 2010).

Wigington, P. J., J. L. Ebersole, M. E. Colvin, S. G. Leibowitz, B. Miller, B. Hansen, H. R. LaVigne, D.

White, J. P. Baker, M. R. Church, J. R. Brooks, M. A. Cairns, and J. E. Compton. 2006. Coho salmon dependence on intermittent streams. Frontiers in Ecology and the Environment 4:513-518.

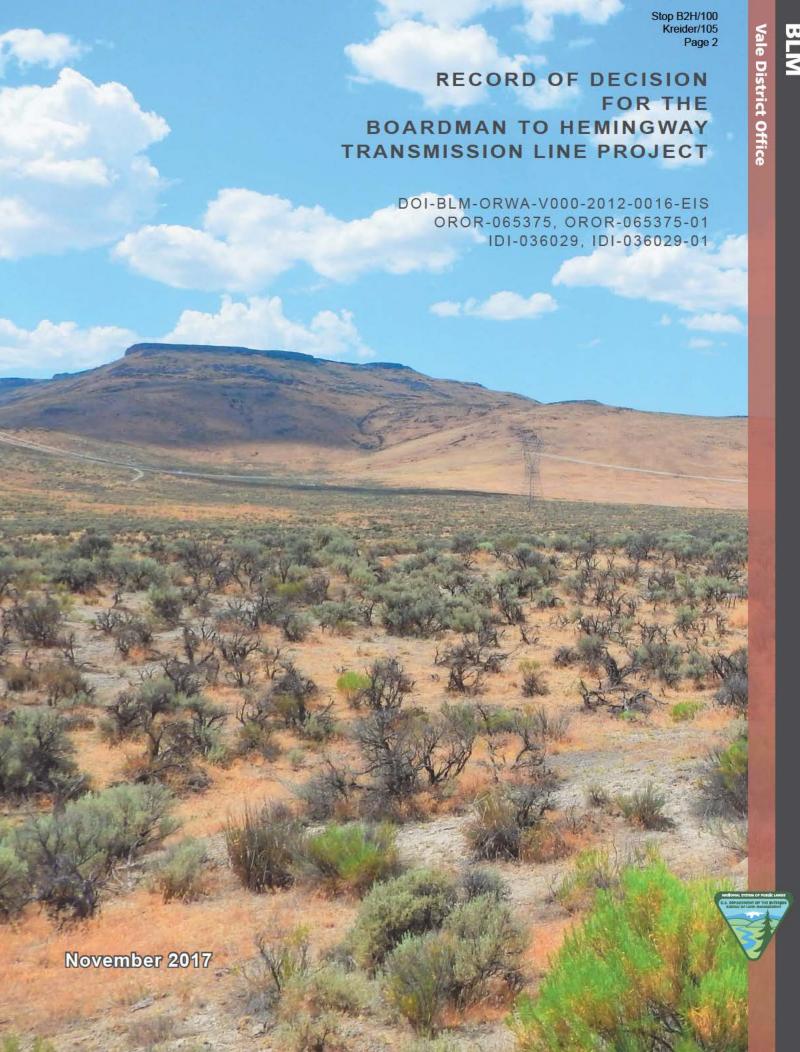
Williams, J.E., C.A. Wood, and M.P. Dombeck (editors). 1997. Watershed restoration: principles and practices. American Fisheries Society, Bethesda, Maryland.

Williams, J.E., Haak, A.L., Neville, H.M., and Colyer, W.T., 2009, Potential consequences of climate change to persistence of cutthroat trout populations: North American Journal of Fisheries Management, v. 29, p, 533–548.

EXHIBIT 5

Excerpt - BLM's Record of Decision, B2H Project

Nov 2017



In accordance with 43 C.F.R. § 1610.0-5(b), actions that occur on Federal lands administered by the BLM, including a decision to grant a ROW under Title V of FLPMA, are guided by decisions specified in the approved BLM RMPs. The applicable RMPs for BLM-administered lands crossed by the proposed transmission line and associated facilities on the selected route are listed in this ROD. The BLM evaluated the proposed route for the B2H Project and alternative routes to determine if they conform to the approved RMPs governing the public lands where the B2H Project would be sited. The BLM has determined that, for the selected route, the Proposed Action would not conform to certain aspects of its approved land use plans in Oregon, identified later in this document. That is, in some cases, the proposed transmission line and associated facilities require the BLM to amend certain approved land use plans.

Therefore, through this decision, the BLM is approving issuance of a ROW for the B2H Project and amending the Baker RMP and the Southeastern Oregon RMP at site specific locations. The amendments are designed to allow for a ROW for the proposed transmission line and associated facilities. The land use plan amendments are described in Chapter 3 of the Final EIS, which also includes a description of the planning process and the environmental analysis relating to the proposed land use plan amendments.

Use of any public land authorized under the ROW grant for the B2H Project would be contingent on the BLM receiving and approving final engineering and design construction plans as part of the final POD for construction. Until the BLM issues NTP (refer to Appendix B for explanation of the process), no surface-disturbing activities associated with construction can occur. Prior to the completion of the POD for construction and issuance of the overall NTP for the B2H Project, the Applicant may request NTP for geotechnical investigation and other site surveys prior to the completion of the POD for construction. Such a NTP will be conditioned on the completion of all necessary site survey work associated with the geotechnical investigation or surveys, and review and approval of those surveys by the relevant agencies.

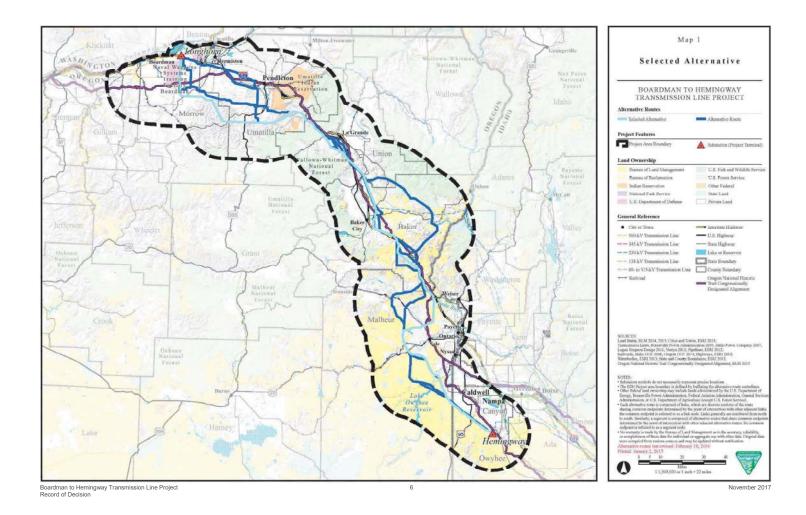
Specific items that will require a NTP before the ROW holder may use the granted areas are identified in Appendix B of this ROD. In addition, the Applicant may not begin construction until compliance with all applicable Federal, State, and local and other laws and regulations is documented as satisfactorily complete, as appropriate.

Decision

Right-of-Way Authorization and Selected Alternative

After reviewing the Final EIS and other documentation relating to the proposed ROW and plan amendments, the BLM has decided to authorize issuance of a ROW to Idaho Power Company for a 250-foot-wide ROW on 85.6 miles of BLM-administered lands for the construction, operation, and maintenance of a 500-kV transmission line following the Agency Preferred Alternative identified in the Final EIS, hereinafter referred to as the Selected Alternative (refer to Map 1 of this ROD).

The ROW authorization decision applies only to BLM-administered lands in the B2H Project area. In making its decision, however, BLM considered effects on other public lands managed by the BLM, as well effects on private lands and lands managed by agencies other than the BLM. This decision would achieve the B2H Project's purpose while also avoiding, minimizing, or requiring compensation for impacts on sensitive resources along the route.



Legal descriptions for the ROW granted on BLM-administered lands in the BLM Baker, Malheur, and Owyhee Field Offices are included in Appendix C of this ROD.

The decision includes approval of the draft POD that was submitted by the Applicant for purposes of the BLM's NEPA analysis. That POD, which is attached as Appendix D, has been reviewed and approved by the cooperating agencies and the BLM and Idaho Power. It is based on information and data carried forward from the Final EIS. As noted above, the requirements for completing an acceptable final POD for construction (prior to any surface disturbing activities other than geotechnical) are included in Appendix B. The final POD must include all the information and measures included in the draft POD or updated from the draft POD.

The draft POD covers the entire B2H Project and includes the following measures:

- West-wide Energy Corridor (WWEC) interagency operating procedures, which must be adhered to wherever the Selected Alternative is located within a designated WWEC;
- Design features of the B2H Project for environmental protection, as described in Chapter 2 of the Final EIS (refer to Table 2-7) and contained in the draft POD (Appendix D of this ROD);
- The BLM RMP land-use stipulations, best management practices, and standard operating procedures applicable to transmission line ROW for project construction, operation, and maintenance as described in the Final EIS; and
- Additional mitigation and monitoring measures to avoid, minimize, or rectify (over time) impacts. The agency-required mitigation measures are described in Chapter 3 of the Final EIS (Table 2-13) and in Appendix C of the Final EIS (Mitigation Framework). The agency-required mitigation measures have been refined and incorporated into the draft POD (Appendix D of this ROD); the final POD will be required to include application of the mitigation measures based on final design and engineering of the Selected Alternative.

Following the completion of various resource surveys (e.g., for biological, cultural, and paleontological resources) and the review and acceptance by the agency (or agencies) responsible for overseeing the surveys, the agency-required measures in the draft POD will be refined based on those surveys to prepare the final POD for construction. The agencies will be asked to review the final POD. The final POD must be consistent with the Selected Alternative. as analyzed in the Final EIS. If refinements to the final POD cause a substantial change to the approved project or the impacts as analyzed in the Final EIS, those refinements may be subject to additional NEPA analysis. Preparation and approval of the final POD is a required condition of BLM's ROW grant(s). Furthermore, the Applicant agrees to be bound by all terms and conditions, stipulations, and mitigation prescribed in such documents. As noted above, completion of the final POD is a precondition of NTP issuance (except for geotechnical work). The Applicant may add requirements to the approved final POD after issuance but the additions may require updated resource surveys or additional NEPA reviews, which will be based on whether the BLM determines the change(s) are substantial. Approval of changes may involve issuance of a variance or amendment to the POD, and potentially amend the ROW grant. These procedures are spelled out in Appendix A5 of the draft POD.

The final POD also will incorporate the additional measures identified in the following documents:

The Programmatic Agreement (refer to Appendix E of this ROD) developed by the BLM,
 State Historic Preservation Officers (SHPO) for Oregon and Idaho and the Confederated

Tribes of the Umatilla Indian Reservation (CTUIR), National Park Service, USFS, Reclamation and USACE, was signed on February 7, 2017, and is incorporated into this ROD:

- The Biological Opinion (BO) issued by the National Oceanic and Atmospheric Administration (NOAA) Fisheries (dated February 28, 2017) and the letter of concurrence issued by the U.S. Fish and Wildlife Service (USFWS) (dated January 18, 2017) have been incorporated into the ROD. All conservation measures for federally listed species as identified in the Final Biological Assessment (BA) including addendum (dated December 15, 2016 and the NOAA Fisheries BO are incorporated into this ROD; and
- All standard, terms, conditions, and stipulations of the BLM ROW Regulations at (43 C.F.R. Part 2800).

As noted above, mitigation measures, terms, and conditions have been developed based on the analysis in the Final EIS. Site-specific implementation details will be adopted prior to issuance of a NTP and will include the requirements identified in Appendix B of this ROD and the following:

- The Applicant's completion of the final POD, which is subject to review and approval by the BLM and other agencies with regulatory authority over affected resources. This final POD will include provisions for site-specific mitigation and monitoring during construction, operation, and maintenance of the B2H Project.
- The Applicant must incorporate the species-specific conservation measures developed through the Section 7 of the ESA consultation process by the BLM, USFWS, and NOAA Fisheries to eliminate or minimize impacts on federally listed species as identified in the NOAA Fisheries and USFWS BAs (dated November 16, 2016, and December 15, 2016, respectively) and the NOAA Fisheries BO (dated February 28, 2017) into the Biological Resources Conservation Plan to be contained in the final POD. Measures include specific requirements related to transmission line structure types (i.e., power line poles) to minimize B2H Project impacts on sensitive species. Species-specific conservation measures apply to ESA-listed species where they occur regardless of jurisdiction.
- The Applicant must incorporate the species-specific conservation measures developed through the NEPA process into the Greater Sage-grouse Mitigation Plan to be contained in the final POD. No construction can begin until the BLM, in coordination with state agencies, has determined that the Greater Sage-grouse Mitigation Plan complies with Federal and state policies for avoiding or minimizing adverse effects on the species and its habitat and the approved plan is consistent with USFWS and state agencies recommendations. Species-specific conservation measures identified in the Final EIS apply to Greater sage-grouse priority habitat management areas, general habitat management areas, and important habitat management areas (IHMA).
- Satisfaction of the requirements set forth in the PA developed in compliance with Section 106 of the NHPA, including posting a financial security (i.e., cultural bond, such as a surety bond, irrevocable letter of credit, etc.) with the BLM in an amount sufficient to cover all post-fieldwork costs associated with implementing the Historic Properties Management Plans (HPMP), or other mitigation activities, and to be required by the Applicant in its contracts for services in support of the PA and for reclamation requirements and activities.

Although the BLM does not have authority over state or private land, the Applicant has agreed that provisions of the draft and final Construction PODs will be applied consistently to state and private land as well as Federal land, unless otherwise indicated by the state and/or by private landowners. The BLM does have an obligation to enforce the requirements of the NHPA and the

ESA to protect historic properties and threatened and endangered species, respectively, regardless of land jurisdiction or ownership.

This decision to issue the ROW grant(s) does not authorize the Applicant to commence construction of any B2H Project facilities or proceed with other ground-disturbing activities connected with the B2H Project on BLM-administered public lands. The Applicant may not commence construction of B2H Project facilities or proceed with any ground-disturbing activities related to the B2H Project on BLM-administered public lands until the Applicant, in accordance with 43 C.F.R. § 2807.10, receives from the BLM a written final NTP, which could consist of multiple NTPs governing various portions of the projects. These NTPs may require the submission of additional information that must first be reviewed and approved by the BLM's Authorized Officer

To obtain a NTP (as summarized above and detailed in Appendix B), the Applicant must:

- Demonstrate complete fulfillment of all the required surveys and their review and approval, and mitigation requirements described in this ROD (including Appendix B);
- Obtain all necessary State, local and Tribal approvals and permitting requirements, including an Energy Facility Site Certificate from the State of Oregon EFSC; and
- Submit a performance bond for construction and initial reclamation for the ROW grant(s) (and USFS special-use authorization) to ensure compliance with all the terms and conditions identified in this ROD, the final POD, and applicable regulations. Acceptable bond instruments include cash, irrevocable letter of credit, cashier's or certified check, certificate or book entry deposits, negotiable U.S. Treasury bonds equal in value to the bond amount, or surety bonds from the approved list of sureties (U.S. Treasury Circular 570 available on-line), made payable to BLM.

The ROW grant and all associated long-term B2H Project facilities will be issued for a term of 30 years with a right of renewal. The BLM will issue a temporary (i.e., short-term) ROW grant for areas to be used only during construction for a period of 10 years. Activities associated with completion of the NTP requirements for construction of the B2H Project must commence within 5 years after the effective date of the ROW grant. The BLM has the discretion to renew a ROW grant if doing so is in the public interest. A renewal request will be subject to NEPA review.

The BLM also may issue a NTP for geotechnical investigation (analyzed in the Final EIS) prior to issuing a NTP to construct, operate, and maintain the B2H Project, provided that all necessary survey work associated with the geotechnical investigation is completed, and the reports are reviewed and approved by the BLM. The holder may, on approval from BLM, assign the ROW grant to another party in conformance with 43 C.F.R. Part 2800.

A decommissioning bond will be required 2 years prior to the expiration of the ROW grant, unless a timely request to renew those authorizations has been submitted. The decommissioning bond amount is to be determined with a Reclamation Cost Estimate Report submitted by the Applicant, and the final amount approved by the BLM. All costs of preparing and submitting this report shall be borne by the bond holder. If the ROW grant is renewed by the BLM, the bond will be terminated. If the grant is not renewed, the BLM will hold the bond until reclamation acceptable to the BLM Authorized Officer is completed.

Exhibit X Noise

Boardman to Hemingway Transmission Line Project



Mark Stokes, Project Leader (208) 388-2483 mstokes@IdahoPower.com Zach Funkhouser, Permitting (208) 388-5375 zfunkhouser@ldahoPower.com

Application for Site Certificate

September 2018

Exhibit X Noise

1.0 INTRODUCTION

Exhibit X provides analysis of potential noise impacts from the Boardman to Hemingway Transmission Line Project (Project). Exhibit X identifies all noise sensitive receptors (NSRs) within one-half mile of the Site Boundary from noise-generating Project features such as the transmission line, and demonstrates that the relevant Project noise sources will not exceed the Oregon Department of Environmental Quality's (ODEQ) maximum permissible sound level of 50 A-weighted decibels (dBA). Exhibit X also shows, for the majority of NSRs within the analysis area, that the Project will not exceed ODEQ's ambient antidegradation standard, which prohibits new industrial noise sources located on previously unused sites from increasing ambient noise levels by more than 10 dBA. However, Idaho Power Company (IPC) estimates that, at 36 NSRs, the Project may exceed the ambient antidegradation standard during foul weather conditions that occur on average around 2 percent of the calendar year. To address these limited circumstances where an exceedance may occur, IPC requests that the Oregon Energy Facility Siting Council (EFSC or Council) authorize an exception to the Project's compliance with the ambient antidegradation standard on the basis that such exceedances will be infrequent events and that, in all instances where the Project may exceed the ambient antidegradation standard, the noise generated by the Project is below the maximum permissible nighttime sound level (50 dBA). Alternatively, IPC 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.

2.0 APPLICABLE RULES AND SECOND AMENDED PROJECT ORDER PROVISIONS

2.1 Site Certificate Application Requirements

Oregon Administrative Rule (OAR) 345-021-0010(1)(x) states Exhibit X must include the following information about noise generated by construction and operation of the Project, providing evidence to support a finding by the Council that the Project complies with the ODEQ's Noise Control Regulations at OAR 340-035-0035:

- (A) Predicted noise levels resulting from construction and operation of the proposed facility.
- (B) An analysis of the proposed facility's compliance with the applicable noise regulations in OAR 340-035-0035, including a discussion and justification of the methods and assumptions used in the analysis.
- (C) Any measures the applicant proposes to reduce noise levels or noise impacts or to address public complaints about noise from the facility.
- (D) Any measures the applicant proposes to monitor noise generated by operation of the facility.
- (E) A list of the names and addresses of all owners of noise sensitive property, as defined in OAR 340-035-0015, within one mile of the proposed site boundary.

Table X-8 shows the total number of days, the maximum number of consecutive days, and the maximum number of consecutive hours that foul weather occurred at each station. Table X-7 also shows the average number of consecutive days and hours that foul weather occurred at each station.

Table X-8. Daily and Hourly Frequency of Foul Weather

	,,	Foul Weather					
		Rainfall 0.8 mm/sec - 5 mm/sec					
		Percent	Percent Maximum				
		of	Consec.	Average		Average	
		Days with	Days with	Number of	Maximum	Number of	
		1 hour or	1 hour or	Consec.	Consec.	Consec.	
	Years of	more of	more of	Days with	Hours of	Hours of	
MET	Meteorological	1	Foul	Foul	Foul	Foul	
Station	Data Studied	Weather	Weather	Weather	Weather	Weather	
Flagstaff Hill	4	10%	5	1	5	2	
La Grande	4	22%	6	2	11	3	
Umatilla NWR	4	6%	3	1	16	2	
Owyhee Ridge	4	11%	5	1	8	2	
Average of All MET Stations	4	13%	5	1	10	2	

mm/sec = millimeters per second

As Table X-8 indicates, maximum consecutive days and hours of foul weather were somewhat variable depending on meteorological station; however, average consecutive days and hours of foul weather were similar for nearly all meteorological stations. Considering all four meteorological stations combined, the average number of consecutive days and hours of foul weather were relatively infrequent in the Project area, with on average foul weather lasting for only 1 day and for 2 consecutive hours. When looking at the average of all of the meteorological stations, foul weather occurred for at least 1 hour during 13 percent of the days over the 4-year period analyzed. The maximum number of consecutive days occurred one time during October 2009 at the La Grande meteorological station where six consecutive days had at least 1 hour of foul weather or more on each of the days. The maximum consecutive hours of foul weather was 16 and occurred in the Umatilla area in December 2010 over the course of 2 days. The maximum consecutive days and hours shown in Table X-8 are uncommon, with the average numbers presented indicative of typical daily and hourly frequency.

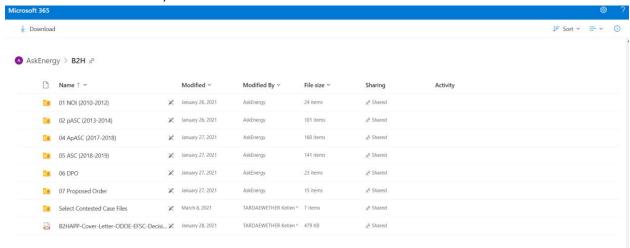
The La Grande WRCC meteorological station data reported the highest incidence of foul weather days, having 22 percent of days with 1 hour or more of foul weather. While predominantly (i.e., 78 percent of the days) fair weather persists at the La Grande station, a sensitivity analysis was conducted on the WRCC data to ascertain the frequency with which foul weather occurs during the late-night time period from 12:00 a.m. to 5:00 a.m., which represents the time of the night when the ambient noise is the quietest and accordingly the most likely time period for a potential exceedance. Table X-9 summarizes the results of the sensitivity analysis for the late night time period and demonstrates that consecutive late nights of foul weather occur infrequently in the Project area. On average, late night foul weather only occurs for one night at a time throughout the Project area. Meteorological data from the WRCC confirm that foul weather events occurred during a very small percentage of time. This is true regardless of the season or time of day.

EXHIBIT 7

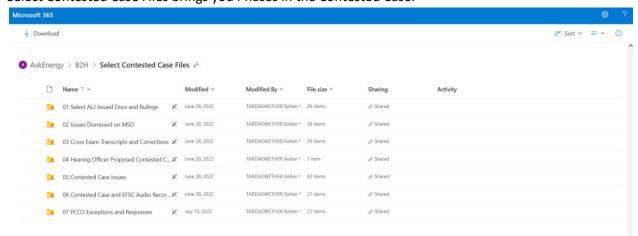
Screen Shots of Selected File Folders to Orient to the B2H Record at ODOE/EFSC

Link: **B2H Record and Selected Contested Case Files** (One Drive)

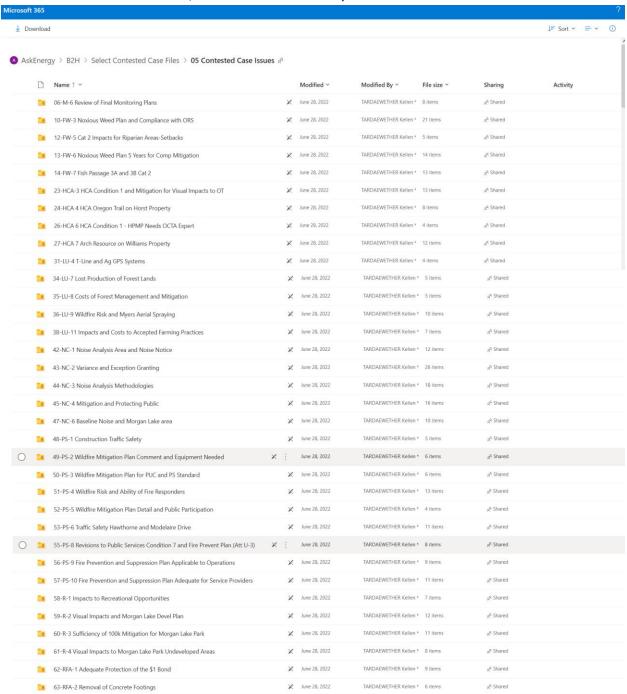
This is the top level. Folders are organized by Phase of the EFSC Process (from NOI-2010 to the Contested Case 2019-2022).



Select Contested Case Files brings you Phases in the Contested Case.



Under 05 Contested Case Issues, the records are sorted by Issue Statement and Code.



	66-SR-2 SR and PA Standards at NHOTIC and Undergrounding	×	June 28, 2022	TARDAEWETHER Kellen * 9 ite	ems gA Shared	
	67-SR-3 Visual Impacts at NHOTIC Less than Sig	×	June 28, 2022	TARDAEWETHER Kellen * 10 it	iems g ^R Shared	
	71-SR-7 Methods and KOPs for Visual Impact Assessment at OT and other PAs	×	June 28, 2022	TARDAEWETHER Kellen * 12 it	ems g ^A Shared	
	72-SP-1 Soil Protect Standard and Gen Stand Soil Compaction, Stored Carbon, etc	×	June 28, 2022	TARDAEWETHER Kellen * 16 it	ems g ^R Shared	
	32 74-SS-1 Design Feature 32 Blasting Plan and Springs	×	June 28, 2022	TARDAEWETHER Kellen * 4 ite	ms g ^A Shared	
0	75-SS-2 Flood Risk from Blasting, Eval of Hydrology La Grande	×	June 28, 2022	TARDAEWETHER Kellen * 5 ite	ems e ^R Shared	
	76-SS-3 Testing Well Water	×	June 28, 2022	TARDAEWETHER Kellen * 8 ite	rms g ^R Shared	
	78-SS-5 Blasting and Geotech in Union County	×	June 28, 2022	TARDAEWETHER Kellen * 5 ite	ms g ^A Shared	

Navigation is fairly easy however there are some files that don't download. All documents can be requested @ ODOE.

EXHIBIT 8

EFSC Contested Case

OAH Case No. 2019-ABC-02833

Stop B2H Coalition Written Direct Testimony, Exhibit #5 - Standlee Report (9/15/2021) (15 pages)

And

Stop B2H Coalition Surrebuttal, Exhibit A, - Standlee Report (12/3/2021) (26 pages)

September 15, 2021



15399 SW Burgundy Street Tigard, OR 97224

Stop B2H Coalition 60366 Marvin Road La Grande, OR 97850

Attn: Fuji Kreider, Secretary/Treasurer

From: DSA Acoustical Engineers, Inc.

Kerrie G. Standlee, P.E.

Principal



Re:

ODOE B2H Proposed Order Review

Kerie & Standell

Project #: 103211

Introduction

At the request of the Stop B2H Coalition, DSA Acoustical Engineers, Inc. reviewed the Oregon Department of Energy (ODOE) Proposed Order of Idaho Power's site certificate application for the Boardman to Hemingway (B2H) transmission line. Specifically, DSA reviewed the sections of the document that addressed noise and its impacts on noise sensitive receivers located along the proposed transmission line.

This report presents the findings that came from the review. The information is broken down into two areas of discussion, *Representative Ambient Noise Levels* and *Request for an Exception to the Ambient Noise Degradation Rule*.

Representative Ambient Noise Levels

Justification for Selection of Ambient Noise Levels Proposed in the ASC

A large portion of section IV.Q.1 of the proposed order (the section that discusses how the proposed transmission line will or will not comply with the DEQ Noise Control Regulations for Industry and Commerce) discusses the selection of representative ambient noise levels for noise sensitive receptors (NSRs) located along the proposed transmission line. At three locations within the section, reference was made to ODOE conclusions being supported by information in documents that I generated while working as a consultant to two general consultants who worked for ODOE, Golder & Associates and Cardno.

Page 1 of 15





In the top paragraph of page 628, the document says:

Therefore, the applicant's noise consultant developed its own methodology to specify other ambient measurement points and other measurement procedures, summarized below (and outlined in Step 4 below), which was repeatedly vetted with the Department and two noise consultants' acoustical engineers, Standlee and Associates and Golder Associates. In preparation of the ASC, based on recommendations obtained from Standlee and Associates, the Department reviewed and concurred with the applicant's noise analysis methodology, as presented in ASC Exhibit X, Attachments X-1 through X-3, and X-6, as summarized below.

In the bottom of the second paragraph on page 628, the document states:

Therefore, based on the Departments' review, supported by two consultants (Standlee and Associates and Golder Associates, Inc.), the applicant selected 17 monitoring positions (MPs) with acoustic environments representative of the acoustic environment of NSRs identified within the analysis area (totaling 132 NSR locations) (note: Attachments X-2 and X-3 identify 30 total MPs; however, due to changes in the alignment of the proposed facility and alternative segments the final acoustic noise analysis relies solely on 17 MPs, as identified in Attachment X-6 and presented in Table 3 below).

Finally, in the last paragraph of page 629, the document says:

The Department's technical noise consultant, Standlee and Associates, recommended that approval or concurrence with the applicant's approach for use of measured ambient noise levels at designated MPs to represent ambient noise levels at one or many NSRs be based on the representativeness of the MP acoustic environments, specifically proximate noise sources, topography and land cover, compared to that of the NSRs and NSR groups.670 As presented in Table NC-3: Department Evaluation of Acoustic Noise Environments of Ambient Noise Monitoring Positions and NSR Groups, based on ASC Exhibit X, the Department evaluated the representativeness of the MP and NSR group acoustic environments.

I am the Standlee of *Standlee and Associates* referred to in the above sections of the document, and I strongly disapprove the way in which it is implied that I approved and agreed with the ambient noise data presented in the final ASC. While I was involved in the review of measurement procedures and the selection of ambient noise measurement locations associated with the original alignment of the proposed transmission line, my involvement was significantly limited in the selection of ambient noise data that represented the ambient noise levels at receivers along the Morgan Lake alternative route. In fact, the 2016-03-06 memo referred to by footnote 666 (it should be noted that the memo was actually written on 2016-04-06 but mistakenly shown as the 2016-03-06 date referred to in the footnote) basically said that selecting data coming from a measurement location in proximity of new locations is not a sufficient enough explanation to convince me that the



data is representative of the ambient noise at the new residential locations. I basically told Mr. Max Wood of ODOE that I would need more information explaining why the ambient noise level data measured in 2012 would be representative of the ambient noise levels at new residences associated with the revised site plan. That information was never submitted for my review so I cannot say, without reservation, that the ambient noise data shown in the final Exhibit X of the ASC is representative of the ambient noise at all NSRs along the transmission line, and especially along the Morgan Lake alternative route.

Ambient Noise Levels at Residences along the Morgan Lake Alternative Route

The final ASC documentation material shows ambient noise level data measured at MP11 was used to represent the ambient noise at residences located along the Morgan Lake alternative route. While MP11, generally speaking, is in the proximity of the residences located along the Morgan Lake Alternative Route, the acoustic conditions at MP11 are in no way similar to that found at many of the residences located west of MP11. For one thing, MP11 is located within 50 feet of a paved highway (old US Highway 30 – see attached Figure 1) where vehicle speeds are limited to 55 mph while all residences located along the Morgan Lake alternative route (especially in the vicinity of Morgan Lake) are located along gravel roads where safe vehicle speeds are limited to at most, 20 to 25 mph.

In addition to the highway conditions at MP11, the ambient measurement site is located within 200 feet of the main Union Pacific railroad line that runs between Portland and Boise, Idaho. According to the railroad company, there can be 10 to 12 up to one-mile-long trains traveling by the site at all hours of the day and night (see attached Figure 2 of photo showing one such train passing by the location during a brief stop by the site on September 12, 2021). The nearest railroad tracks to residences in the vicinity of the Morgan Lake alternative line are at a minimum of 2.25 from some residences and up to over 3 miles away from others, north in La Grande.

Because the acoustic conditions at MP11 seemed to be so different from those observed at residences located in the vicinity of Morgan Lake, a measurement of ambient noise levels was made on the morning of September 12, 2021. Attended noise measurements were made with a Larson Davis Model LxT precision integrating sound level meter placed at 59655 Morgan Lake Road residence owned by Mr. Greg Larkin (see Figure 3 for location – note: the residence is referred to as NSR 125 in the ASC document). Calibration of the meter was field checked with a Larson Davis CAL 200 calibrator prior to and after the measurements.

The ANSI compliant Type 1 Larson Davis meter was programmed to continually monitor the sound at the measurement location using a fast meter response and determine and store the hourly L_{10} and L_{50} sound levels between 12:25 a.m. and 4:00 a.m., as required under the DEQ ambient noise degradation rule. Notes were made during the measurements of the sources of sound heard that influenced the measurement results.

The noise level measurement results along with weather conditions present during the measurements are presented in Table 1.



Table 1
Ambient Noise Levels Measured at Greg Larkin Residence on 9/12/2021

Time	L ₅₀ (dBA)	L ₁₀ (dBA)	Temp	RH	Wind
12:25 a.m. – 1:00 a.m.	29	30	50°F	73%	calm
1:00 a.m. to 2:00 a.m.	23	27	50°F	73%	calm
2:00 a.m. to 3:00 a.m.	21	23	49°F	73%	calm
3:00 a.m. to 4:00 a.m.	20	23	48°F	72%	calm

During the 12:25 to 1:00 a.m. measurement period, the noise at the residence was mainly controlled by crickets in the area. In the 1:00 a.m. to 2:00 a.m. period the cricket noise began to subside, but it was still influenced by fewer crickets located further from the measurement location. During the 2:00 a.m. to 3:00 a.m. hour, when the ambient noise had dropped down to its lowest levels, a train horn could be faintly heard coming from the northwest in the direction of MP11. The sound did not have any influence on the measured noise levels.

Comparison of Measured Ambient Noise Levels with MP11 Noise Level

The B2H ASC document shows an ambient noise level of 32 dBA was taken from MP11 data to represent the ambient noise levels at essentially all residences located in the vicinity of Morgan Lake, including the Larkin residence. As the data in Table 1 above shows, the ambient noise level at the Larkin residence, and likely at many others in the area are far below the 32 dBA level used in the impact analysis to determine impact from the Morgan Lake alternative.

Based on the noise levels shown in Table 1, it appears the ambient noise at residences in the vicinity of Morgan Lake is likely 10 to 12 dB lower than the level used in the B2H noise analysis. This finding shows the ambient noise level measured at MP11 is not representative of the ambient noise levels at residences in the vicinity of Morgan Lake. Consequently, a complete analysis of impacts has not been made for those residences.

Given the significant level difference between what may be the actual ambient noise level and what was assumed in the noise analysis, future corona noise levels with the transmission line in place could at times be four times or more louder than current conditions at some residences (the predicted level at the Larkin residence could be as much as 23 dBA louder which is greater than a quadrupling of noise). That level of increase would be completely unacceptable under the DEQ noise control regulations.

And, based on what I have been told by Mr. John Hector, the original manager of the Oregon DEQ Noise Control Program when the regulations were written, it is doubtful that the DEQ, if still involved in enforcing the noise control regulations, would have approved an exception for such an increase, no matter how often it did or did not occur (see attached



copies of correspondence between myself and Mr. Hector)¹. In addition, with revised ambient noise level data included in the analysis, there could be a significant increase in the number of residences in the vicinity of the Morgan Lake alternative route (and possibly some of those located between the Morgan Lake alternative route and the preferred route) that will experience more than a 10 dBA increase in the noise levels. Without an accurate assessment of the potential impacts, the Energy Facility Siting Council cannot make an informed decision.

Recommended Action Regarding Use of MP11 Data to Represent Conditions at Other Receivers

Given the new findings concerning the assessment of impacts on residences located in the vicinity of the Morgan Lake alternative route, I suggest you request that the Energy Facility Siting Council not approve the site certificate to include the use of the Morgan Lake route, and any other route in which a noise impact analysis was made using data taken from MP11 without verifying that the data is truly representative of the conditions present at the receivers of concern.

Request for an Exception to the Ambient Noise Degradation Rule

On pages 642 through 645, the Proposed Order provides a discussion as to why the ODOE supports the Energy Facility Siting Council granting an exception to the B2H project relative to meeting the ambient noise degradation rule within the DEQ noise control regulations for industry and commerce. The ODOE basically says the exception should be granted due to the "unusual" and "infrequent" occurrence of the "foul weather" events along the transmission line.

The arguments presented in the Proposed Order for granting the variance seem at first to be supported and reasonable. However, now that there is data showing that the ambient noise levels at residences in the vicinity of the Morgan Lake alternative route is significantly lower than what was assumed in the noise analysis, using the "foul weather" analysis to determine the number of times corona noise levels will exceed the ambient noise degradation 10 dBA increase limit is not an accurate picture of the number times corona noise will exceed the limit.

The "foul weather" corona noise analysis tends to indicate corona noise occurs only when it is raining, and only when it rains at a certain rate. Based on what I have witnessed nearby where I live and based on what I have read in articles about corona noise, high voltage line corona noise can occur when the relative humidity is high enough for the noise to be generated. I have observed corona noise radiating from high voltage lines in my area when the sky is clear, the temperature is cool, and the relative humidity is in the range of 86%. And, based on what I saw in the relative humidity data used by Idaho Power's consultants to determine "foul weather" conditions, the relative humidity rises to 86% or above during many late-night hours in eastern Oregon, without rain.

¹ The report and analysis of Hector Engineering is the type of research and analysis that I and most experts typically rely upon, and I incorporate and adopt that analysis in this report.



While the level of corona noise radiating from high voltage lines without rain may not be as high as when rain is present, given the low background noise levels present in the Morgan Lake area, even a lower level of corona noise could cause an exceedance of the ambient noise degradation rule. Consequently, without a prediction of the corona noise at those residences during all times when it could occur, it is premature to conclude that the ambient noise degradation rule will be exceeded only 48 days per year as stated in the Proposed Order. It is possible that, during certain times of the year, corona noise could occur on many days in a row without the presence of rain, especially during those months where the humidity increases above 85% during the early morning hours as the temperature approaches the dew point. Condensation caused when the temperature approaches the dew point can be significant enough to cause water droplets to form on the transmission line and result in corona noise like that experienced in "foul weather".

In addition to the analysis presented above against granting an exception to the ambient noise degradation rule, John Hector, in his response to my inquiry about his experience as a past manager of the DEQ Noise Control Program, said 48 days per year of exceedances would not have met their definition of "unusual or infrequent". Thus, he concluded, the basis for the exception request was flawed (see letter from John Hector). I agree with and adopt those conclusions.

Conclusions

The noise analysis produced to address the Morgan Lake alternative route was flawed because ambient noise data measured at MP11 was used to represent ambient noise levels at all residences along the alternative line route without being adequately vetted as truly representative. In addition, because the same data was used to represent ambient noise at some receivers located along the preferred route, the results of the analysis for some of those receivers may also be flawed.

Measured noise levels at one residence in the vicinity of Morgan Lake show the ambient noise during late-night hours is 10 to 12 dBA lower than the ambient noise level assumed for the residences located in the vicinity of Morgan Lake. When the lower noise levels are included in an analysis of corona noise impacts, corona noise will be seen to exceed the DEQ noise control regulations ambient noise degradation rule at more residences than was reported in the B2H ASC documents. Corona noise will also be seen to cause an increase in the ambient noise level at residences that can be two times or more higher than that allowed by the DEQ regulations. Finally, high humidity conditions and "foul weather" conditions both could cause corona noise levels that exceed the DEQ ambient noise degradation rule at residences due to the low ambient noise conditions. Consequently, the number of times corona-generated noise could exceed the DEQ limits is higher than predicted by the B2H analysis.

The requested exception status for the B2H facility based on "unusual and infrequent" events will not be supported by the data once the lower ambient noise levels are taken into account. The Energy Facility Siting Council should be asked to either delay the approval of



Kerie & Standlee

the request until the results of further study still show the predicted conditions support the "unusual and infrequent" occurrences stated in the Proposed Order.



DSA Acoustical Engineers, Inc.

Old US Highway 30 at MP11 ambient noise

Phone: 503-516-4298
Email: stanhartk@comcast.net

DESIGNED BY:

kgs

DRAWN BY:

kgs

DRAWN BY:

DRAWN BY:

DATE:

09/15/21

PROJECT NO.

103211

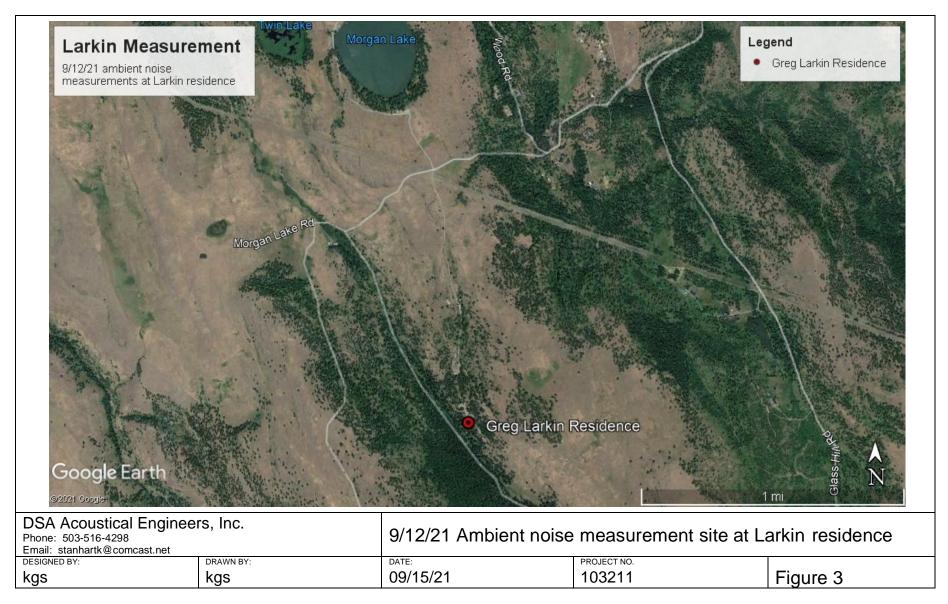
Figure 1



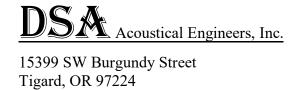


DSA Acoustical Engineers, Inc. Phone: 503-516-4298 Email: stanhartk@comcast.net		Long UP train passing by MP11 ambient noise measurement site				
DESIGNED BY:	DRAWN BY:	DATE:	PROJECT NO.			
kgs	kgs	09/15/21	103211	Figure 2		









Date: September 9, 2021

To: Mr. John Hector

31870 SW Country View Lane

Wilsonville, OR 97070

From: Kerrie Standlee, P.E.

Re: Review of ODOE Proposed Order for B2H Site Certificate Request

DSA File #: 103211

CC:

Message:

John,

I am sending you a copy of the Oregon Department of Energy (ODOE) proposed order for the B2H site certification request from Idaho Power. I would like you to review it focusing your attention on the part where the ODOE is suggesting that an Exception or Variance to meeting the ambient noise degradation rule of the DEQ Noise Regulations for Industry and Commerce (OAR 340-035-0035) is warranted.

I am asking for your opinion regarding ODOE's recommendation because you were involved in writing and administering the regulation for many years at the DEQ as a past Manager of the Noise Section.

I would appreciate it if you could send me your thoughts as soon as possible since ODOE's proposed order is being contested and there is a short timeframe for information to be submitted into the record.

Let me know if you have any questions.

Kerie & Standell



HECTOR ENGINEERING

Acoustical and Environmental

John Hector, P.E. (Retired Status) 31870 SW Country View Ln Wilsonville, OR 97070 503-542-7818

September 10, 2021

Mr. Kerrie Standlee, P.E. DSA Acoustical Engineers, Inc. 15399 SW Burgundy Street Tigard, OR 97224

Dear Mr. Standlee,

I am responding to your September 9, 2021 memo requesting my response to ODOE's proposed order for the B2H site certification request from Idaho Power. In addition to the proposed order, you also provided a copy of document a called *ODOE Response to Gilbert Kreider Discovery Request*. Specifically, you have asked that I respond to the ODOE proposal that an Exception and/or Variance be granted to Idaho Power as the proposed facility is shown to exceed the ambient degradation rule of the DEQ Noise Regulations for Industry and Commerce (OAR 340-035-0035).

As an introduction to my experience, I spent eleven years as the manager of the DEQ's noise control program, thus I am familiar with the original intent, and practical application of the rules. During my time at DEQ, the applicable noise rules were developed, adopted and enforced. However, to aid in my review of the reports, I refreshed my memory of the regulations by reviewing the applicable regulations contained in Division 35, Chapter 340 of the Oregon Administrative Rules. I have attached a copy of my professional resume for details on my qualifications.

Oregon Noise Control rules were authorized under Oregon Revised Statutes Chapter 467. Section 467.060 pertains to the issuance of variances to strict compliance with the noise rules. This authorization was codified in the DEQ noise rules under Oregon Administrate Rules (ORS) 340-035-0010 Exceptions that could be approved by the Department. Variances, which must be considered by the Environmental Quality Commission, were specified in the rules under ORS 340-035-0100. Exceptions to strict compliance from the rules for industry and commerce are contained in ORS 340-035-0034(6).

From my review of the ODOE proposed order I see that the projected noise levels would exceed the ambient degradation standard (10 dBA increase) at some locations by as much as 8 dBA (in other words, the predicted noise levels were 18 dBA higher than the existing noise levels). The degradation standard was established to limit an increase from the preexisting sound of no more than 10 dBA. A 10 dBA increase is perceived by humans as a doubling of sound or as being twice as loud. While an increase of 10 decibels may not be considered totally protective of the public, the standard was approved as a balance to allow industrial development and minimal protection of public health and welfare.



The ODOE proposed exception would at times allow the industrial sound to be almost four (4) times louder than as the preexisting level of sound at some receivers. That would be two times louder than what the DEQ regulations allow, so the protection of human health and welfare would be even more impacted than allowed by the regulation. This would be considered a major impact.

ODOE recommends an exception to the ambient degradation rule be allowed because the exceedance events would be "unusual or infrequent". However, the proposed order indicates exceedances could occur 48 days per year. This does not meet the criteria of unusual or infrequent. Thus, the basis of the request appears to be flawed. In addition, the proposed order suggests that all known, unknown and future exceedance should be granted a variance as the facility is described as a "linear" source. I see no basis in the rules to grant such a variance.

My experience in the application of DEQ's noise rules to requests from strict compliance were always based on the protection of public health and welfare to the extent practicable. Mitigation conditions were added to minimize adverse impacts. Such conditions included limits on the time of day and the number of days exceedances were allowed. In addition, requirements were included to require the facility to continue toward strict compliance over time rather than an open-ended variance as new or innovative mitigation techniques may be applied when found to be successful. Thus, it was expected that the source achieves strict compliance, perhaps over a period of time.

If you have any further questions regarding this issue, feel free to contact me.

Sincerely

John Hector

Attachment (1)



PROFESSIONAL RESUME

JOHN M. HECTOR

Education Master of Science, University of Southern California, Los Angeles, CA -

Mechanical Engineering, 1969

Bachelor of Science, University of Portland, Portland, OR

General Engineering, 1962

<u>Professional</u> Registered Professional Engineer, State of Oregon Acoustical and

Environmental Engineering – 1982

Retired P.E. Status (not currently providing engineering service) - 2005

Experience Eleven years (1962-1973) acoustical and structural dynamics experience in the aerospace and defense industry.

Thirteen years engineering and management experience at the Oregon Department of Environmental Quality (1973-1986) as the manager of the State of Oregon's Noise Control Program. This experience includes the following:

- Development of five major noise control regulations and their successful adoption by the Oregon Environmental Quality Commission.
- Development of programs and procedures to implement the adopted regulations throughout the state.
- Development of the noise control laboratory to provide data reduction/analysis and instrumentation calibration traceable to national standards.
- Development of programs to provide assistance to city and county noise control programs

Twelve years (1986-1998) of engineering and management experience at the Oregon Department of Environmental Quality in a regional office managing all environmental programs in the central and eastern portions of the state. These programs included air quality, noise control, solid waste, water quality, hazardous waste and underground storage tanks.

KERRIE G. STANDLEE, P.E.

PRINCIPAL ENGINEER

Mr. Standlee is the Principal engineer responsible for management, technical direction and acoustical work on projects undertaken by the firm. His experience includes work in architectural acoustics design, architectural noise control, industrial noise control, environmental noise assessment and control, and transportation noise control.



PROFESSIONAL EXPERIENCE

Mr. Standlee has worked in the field of acoustic design and noise control since 1975. He has participated in many architectural acoustic design projects throughout his career where he was responsible for the selection and review of acoustical designs and acoustical products. He has provided services on projects related to the design of performing arts facilities, high school auditoriums, college lecture halls, music practice rooms, band halls, K12 school classrooms, gymnasiums, libraries, churches, swimming pool facilities and other architectural structures to ensure the acoustic environments meet the desired conditions.

Mr. Standlee has been responsible for the design of partitions to control sound in architecturally related projects. He has learned the importance of construction details in the control of sound as well as careful inspection of on-site construction to assure that design goals are met. He has worked on many architectural projects where special designs were recommended to reduce the transmission of noise and assure the desired acoustical environment is achieved in acoustically critical spaces.

Mr. Standlee has provided noise control consultation to industrial clients including natural gas transmission, pulp and paper, timber, food processing, metal fabrication, chemical and rock extraction and crushing companies. He has been responsible for evaluating worker noise exposure and selecting measures to reduce that exposure to meet federal and state regulations. He has been responsible for the measurement, evaluation and control of industrial noise radiating to the outdoor environment to meet governmental regulations.

Mr. Standlee has directed noise studies involving transportation sources such as automobile, truck, train, boats and aircraft. He has been responsible for the measurement and prediction of noise associated with racing at facilities in the Northwest including motocross race tracks, oval race tracks and sprint boat race tracks.

EDUCATION

B.S. in Architectural Engineering, University of Texas at Austin M.S. in Engineering - Acoustics and Vibrations, University of Texas at Austin

PROFESSIONAL CERTIFICATION, AFFILIATIONS AND ACTIVITIES

Registered Professional Acoustical Engineer in the State of Oregon National Council of Acoustical Consultants Acoustical Society of America (Full Member) Institute of Noise Control Engineering (Board-Certified Member) – Board of Directors December 3, 2021

DSA Acoustical Engineers, Inc.

15399 SW Burgundy Street Tigard, OR 97224

Stop B2H Coalition 60366 Marvin Road La Grande, OR 97850

Attn: Fuji Kreider, Secretary/Treasurer

From: DSA Acoustical Engineers, Inc.

Kerrie G. Standlee, P.E.

Principal

ALTER PROFESSION AND ALTER STANDING STA

Re:

B2H Noise Rebuttal Testimony Review

Kerie & Standell

Project #: 103211

Introduction

At the request of the Stop B2H Coalition, DSA Acoustical Engineers, Inc. reviewed the rebuttal testimony submitted by Mr. Mark Bastasch, P.E. and Mr. Ken Kosky, P.E. in response to information submitted in the Stop B2H Coalition's Direct Testimony of September 17, 2021, which included my report, ODOE B2H Proposed Order Review. Mr. Bastasch's testimony was submitted on behalf of Idaho Power and Mr. Kosky's testimony was submitted on behalf of the Oregon Department of Energy.

This document presents surrebuttal comments concerning new data and new statements presented in the testimonies from the two witnesses. The comments are presented relative to three areas of discussion; 1) the ability of train traffic on the Union Pacific railroad to influence the hourly L_{50} noise levels at ambient measurement location MP11, 2) the additional ambient noise data measured by Mr. Bastasch and 3) the rebuttal testimony provided by Mr. Kosky.

Union Pacific Railroad Influence on MP11 Hourly L₅₀ Noise Levels

On page 61 of Mr. Bastasch's testimony, he states that he was surprised by comments in my September 15 report to Stop B2H Coalition saying train traffic on the Union Pacific railroad could have had an influence on the hourly L_{50} noise levels measured by Tetra Tech



at the MP11 location. Mr. Bastasch went on to state that intermittent "pass-by" sounds that do not occur for more than 30 minutes of an hour cannot influence the hourly L_{50} noise level at a measurement location because the hourly L_{50} noise level is defined as the noise level exceeded 50% of an hour (in other words, 30 minutes of an hour).

This statement is not completely accurate. In fact, the addition of train noise into the mix of other naturally occurring noises could result in an hourly L_{50} noise level that is above the hourly L_{50} noise level that would be found without the train noise. However, I agree that if the background sound without the presence of train sound never exceeds the sound of the train, then Mr. Bastasch's statement would be accurate.

As an example, if the ambient sound during an hour without the presence of train sound exceeded 32 dBA for a total time of 10 minutes, and sound from a train exceeded 32 dBA for 20+ minutes of time during a portion of the hour not affected by the natural occurring sound, then the hourly L₅₀ sound level found at the measurement location could be 32 dBA, even though the train sound was not present for more than 30 minutes of time. In that sense, the presence of the train would be considered to have had an influence on the measured hourly L₅₀ noise level even though it was not present for more than 30 minutes of the hour.

Regardless of that fact, Mr. Bastasch went on to say,

the fact that MP 11 is close to the railroad tracks and a road with a higher speed limit would not impact the L_{50} measurement, unless either the train or automobile traffic sounds were consistently present more than fifty present of the time, which does not appear to be the case. (bold print added for emphasis)

The last portion of Mr. Bastasch's statement quoted above is a crux of the problem with using data measured at MP 11 to represent the ambient sound levels at residences located along the Morgan Lake alternative route.

After I presented the discussion in my September 15 report, I expected Mr. Bastasch would conduct more than a 15-minute site visit to MP 11. I expected he would do so in order to become familiar with noise sources that influence the background sound at the location.

In addition, I expected some amount of time would be spent at the measurement location during the late-night hours when the background noise tends to drop to some of its lowest levels. Had Mr. Bastasch (or one of his colleagues) visited the measurement location late at night at a time when a train traveled past the MP 11 location, he would have observed how long sound from the train is present above the background sound at the measurement location. Had he done so, he would likely have found that it is in fact present for a much longer period of time than he thought was the case.



In the early 1990's I was retained by legal counsel for the Union Pacific railroad to conduct sound level measurements onboard trains traveling along the railroad that passes by MP 11. The sound measurements were being made to allow legal counsel to respond to hearing loss claims being made by railroad employees.

It was during those trips that I noted the trains traveling west out of La Grande had to make a significant uphill climb to reach the pass located just west of MP 11. During the climb, train engines had to be set at maximum power to climb the hill at a very slow speed due the curves in the railroad, the length of the trains and the weight being pulled up the hill by the engines. With trains made up having engines at the front to pull the train and engines at the rear to push the train (and sometimes one or two engines in the center of the train to push and pull cars), engine sound alone can be audible above the background sound in a quiet area for a significant length of time.

When trains leaving Pendelton travel east toward La Grande, the same steep climb occurs going to the pass while moving west to east. Once the train reaches the pass, the engineers have to use the engine retarders to keep the train speed slow enough so the train can be stopped in La Grande without causing major concern with overspeed issues traveling down the canyon to La Grande.

Because Mr. Bastasch apparently did not visit the MP 11 measurement location for enough time to become familiar with how train sound affects the ambient noise at the site, I asked volunteers from the Stop B2H Coalition to conduct observations at MP 11 and gather information on how long train sound was audible above the background sound at the location. On the morning of November 17, 2021, beginning around 1:00 a.m., one volunteer conducted observations at MP 11. During an approximate 60-minute period of time, the volunteer stated that she heard train sound for approximately 32 to 33 minutes radiating above the background sound. See attached Declaration provided by volunteer Irene Gilbert.

The 32 to 33 minutes of train sound was the result of two trains leaving La Grande and traveling in a close time frame, and in so doing they influenced the background sound for more than 30 minutes. Although she was not able to capture additional data on the length of time train sound was present (due to dealing with vehicle battery problem), the volunteer stated that while she was still at the measurement location, two more trains passed by MP 11. *Id.* Thus, on the morning of November 17 a total of four trains passed through the area between 1:00 a.m. and 4:30 a.m.

On November 21, 2021, another volunteer conducted observations at MP 11 beginning at around 4:10 p.m. This volunteer stated that during an approximate 60-minute period at the location he witnessed train sound above the background sound at MP11 (which included the sound of distant freeway traffic noise when trains were not present) for approximately 46 minutes. See attached copy of Peter Barry Declaration. Similar to the other volunteer,



Mr. Barry observed that the total 46 minutes of train sound was the result of two trains passing in a close timeframe to one another within the hour of time.

From the observations made by two different people, on two different days, during two different times of the day, train sound at MP 11 was audible above the background sound more than 30 minutes of a 60-minute period. These observations show that train sound reaching MP 11 could have influenced the hourly L_{50} noise levels measured by Tetra Tech, especially during the late-night hours of the 2012 ambient noise study.

As I pointed out in my September 15 report, train sounds did not affect the ambient sound levels at the Larkin residence during the late-night hours when a train was heard briefly off in the distance even while the hourly L₅₀ noise level was found to be in the 20 to 22 dBA range; levels that are much lower than the average 32 dBA reported for MP 11.

If Mr. Bastasch were to access the one-second sound level data measured by Tetra Tech in 2012 at MP 11, he could plot the data and likely see when trains passed by the measurement location. From those plots, he could determine if train sound influenced any of the hourly L_{50} noise levels reported by Tetra Tech. If that data was made available to me, I could do that same.

From such a review, it could be determined if data measured at MP 11 is – or is not - representative of the ambient noise at residences located along the Morgan Lake alternative route. The statements by Mr. Bastasch in his rebuttal testimony are, without more information, not sufficient to support such a conclusion.

Additional Ambient Noise Measurements Made by Mr. Bastasch

Representativeness of the Additional Noise Measurement Results

Pages 65 through 70 of Mr. Bastasch's rebuttal testimony provides a discussion about some additional noise measurements conducted at four locations in the vicinity of La Grande. One of the locations, MP 100, appears to have been selected to provide sound level data that might be representative of ambient sound levels at residences located along the Morgan Lake alternative route. The other three locations, MP 101, MP 102 and MP 103 appear to have been selected to provide data regarding ambient sound levels at residences located along the preferred alternative route.

Within the ambient noise measurements discussion, Mr. Bastasch talks about how sound level meters were placed at the four locations and left to continually monitor the sound level over an approximately 21-day period. He mentions that at some locations, the sound level meter shut down due to low battery power and would not turn back on until the solar panel connected to the meter's external battery recharged the battery enough to operate the meter again. No discussion was provided regarding the effect of lost data at the various locations on the results of the noise measurements.



In addition to describing how the sound level meters were set up to operate, Mr. Bastasch described how the data captured by the meters was downloaded (likely through a modem connection although it was not specifically stated) and analyzed to determine what was presented in his testimony as the average ambient hourly L_{50} noise level at the four locations.

Mr. Bastasch said his measurement results showed the average hourly L₅₀ noise level at MP 100, MP 101 and MP 102 was 37 dBA during the late-night hours of midnight to 5 a.m. when average wind speeds were below 10 mph at the measurement locations. He also said the same results were found when data measured with wind gusts at or above 10 mph were also excluded from the calculations.

To try to confirm the conclusions presented in Mr. Bastasch's rebuttal testimony, I did a calculation of the hourly L_{50} noise levels at MP 100 (one of the measurement locations appearing to represent residences located along the Morgan Lake alternative route) using the data presented in the "Late Night Data" section of Exhibit J to the Bastasch rebuttal testimony. When all the data presented in the table for that location was used in the calculation, the average hourly L_{50} noise level was indeed approximately 37 dBA, as stated by Mr. Bastasch.

However, when the data measured with average wind speeds of 10 mph or above were excluded from the calculation, the hourly L_{50} noise level was found to be 35 dBA instead of the 37 dBA reported by Mr. Bastasch. And, more importantly, when the data measured with wind gusts at 10 mph or above were eliminated from the calculation, the average hourly L_{50} noise level at MP 100 was found to be only 31 dBA - rather than the 37 dBA reported by Mr. Bastasch.

I am not sure why there is the difference in the calculated hourly L_{50} noise levels shown in Mr. Bastasch's testimony and what DSA found using the data shown in Exhibit J. This leads me to be concerned about the recent ambient noise measurements that Mr. Bastasch has provided in his rebuttal testimony.

There was an extensive amount of discussion by Mr. Bastasch about the number of hours of data that was collected during the approximately 3-weeks of monitoring. During the review of all that discussion, apart from the discussion about the measurements at the location close to the freeway (MP 103), I was not able to find any discussion about the source(s) of the sound measured at the various locations. That appears to me to be a major problem.

A part of any ambient noise study needs to include an explanation of the source of the sound causing the measured noise levels, especially when the location is far removed from typical man-made noise sources such as roads and railroads, and when the measured noise levels have such a drastic swing during late-night hours. One such example was observed to have occurred at MP 100 when the hourly L_{50} noise level went from 26.6 dBA on



October 17 in the 11:00 p.m. hour to 52.1 dBA in the 1:00 a.m. hour on October 18 (an approximate 26 dB difference). Without such a discussion, the measured noise data from an ambient noise study is basically just that, measured noise data. It in no way has been qualified to be representative of the ambient noise levels that should be used to assess impacts caused by a potential future noise source.

In 2012 prior to Tetra Tech beginning their ambient noise study, during a meeting I attended as an acoustical engineering consultant for ODOE, the firm was told to conduct field observations at various times during the noise measurements to help establish the source(s) of sound influencing the measurement results so they could ensure the results were not being influenced by unusual events or conditions. Based on what has been presented in Mr. Bastasch's rebuttal testimony, it appears field observations were not made during the measurements he conducted.

From a review of the hourly L_{50} noise level patterns and a review of one-second history data associated with various hourly measurements, it appears to me that much of the wild swings in the hourly sound level data may have been the result of the unusual weather patterns that have swept across Oregon this fall. For instance, it was noted in the data measured at MP 100 on several occasions that the nighttime hourly L_{50} noise levels began to drop down into the upper 20 dBA range similar to what was observed at the Larkin residence during the September 12, 2021, noise measurements. Then suddenly, the hourly L_{50} sound levels begin to rise as the wind data began to show gusty winds in the area as high sometimes as above 20 mph, when noise measurements should no longer have been made.

When I asked STOP volunteer Fuji Kreider about the weather patterns this fall compared to past years, she stated the patterns this fall have been significantly different, with much more wind than usual. Given Mrs. Kreider's observations and given the high level of variation in the measured sound level data seen in the additional measurement results, it is questionable if the new data can be used to determine a representative hourly L_{50} value - that could then be used to assess the impact of corona noise on residences located along the Morgan Lake alternative route.

Finally, it is my understanding that one of the reasons the additional noise measurements were being made was to help determine if the noise level data measured at MP 11 was representative of the noise levels that would be found at residences located along the Morgan Lake alternative route. Given that as the reason for the measurements, Mr. Bastasch should have discussed how the measurement conditions occurring at the measurement locations during the measurement period were similar or different from those at MP 11 during the 2012 noise measurements.

And, given that the question has been, "is there a difference in the ambient noise levels found at MP 11 and at residences located along the Morgan Lake alternative route", that question would have been more accurately answered if sound measurements had been



made at MP 11 along with the measurements being made at any other locations of interest. That way, there would not have been a question as to whether the conditions present at the additional noise measurement locations were similar to those found at MP 11 during the 2012 measurements; especially as stated by Mr. Bastasch on page 62 of his testimony that, "the ambient sound level will vary even at the same location due to a myriad of factors." Having simultaneous measurements at MP 11 and any other locations allows some reduction in the number of the myriad of factors that could leave the representativeness of the data in question. Yet that does not appear to have been done here.

Validity of the DSA Ambient Noise Measurements Made at the Larkin Residence

At one point in Mr. Bastasch's rebuttal testimony, he was asked to provide his thoughts on the results of the ambient noise measurements made at the Larkin residence on September 12, 2021. Mr. Bastasch stated that he believed the measurements were likely made on a very quiet night at the residence and that those results alone could not be used to draw any legitimate conclusions about the average sound level at the Larkin residence.

First, it should be stated that the measurements at the Larkin residence were never intended to establish a representative ambient noise level for the residence. The measurements were made to simply help determine if longer term measurements would be warranted to help determine a representative ambient noise level for the area. Thus, I agree with Mr. Bastasch that the results from one night of measurements at the residence should not be used to determine representative ambient noise levels for the residence.

However, the data found from one night of measurements can and should be used to compare with the long-term measurement results found at MP 100 by Mr. Bastasch, and the Larkin data should provide an indication as to the likelihood that ambient noise at the residence could be lower than what was found at MP 100. According to the data found at MP 100, there were occasions when the hourly L_{50} noise levels were down in the mid 20 dBA range. While this level is still not as low as what was found at the Larkin residence during the September 12 measurements, it does indicate that the noise levels at the Larkin residence were not automatically questionable.

The MP 100 measurement location is out on more of an unprotected area of the ridge where wind can have an influence on the ambient noise levels. The Larkin residence is in a more wind-protected area of the hill which may have had an influence on the lower ambient noise levels found on September 12. Consequently, in my professional opinion the results found at the Larkin residence on September 12 still support a conclusion that an ambient noise level for the residence would likely be lower than what would be found at MP 100, and likely MP 11.



Rebuttal Testimony Provided by Mr. Ken Kosky, P.E.

The testimony provided by Mr. Kosky was basically a series of responses to questions either written by him to himself, or submitted to him by legal counsel for ODOE. Mr. Kosky said that he had reviewed rebuttal materials submitted into the record by the Stop B2H Coalition and that he was prepared to provide opinions regarding statements and data submitted in the material.

Answer 14

In his response to question fourteen (Q14) of his testimony, Mr. Kosky said,

Moreover, an ambient noise measurement of 32 dBA is consistent with a "Typical Rural Area at Night" which is between 30 and 40 dBA and quieter than whispered speech at 2 meters which is 35 dBA.

This response by Mr. Kosky tells me that he is not at all familiar with the acoustic environment in many areas of "rural" eastern Oregon and other western states of the United States. He is completely factually wrong in this statement.

I am currently involved in a project in northeastern Nevada where there is concern by some in the Nevada Department of Wildlife that a baseline ambient hourly L_{50} noise level of 18 dBA may not be low enough to adequately protect sage grouse habitat during the lekking period. There have been times when hourly L_{50} noise levels are as low as 12 to 14 dBA. That is an order of magnitude or more below the figures Mr. Kosky is referencing.

Another fact, Mr. Kosky seems to be overlooking or not aware of, is that even Tetra Tech found during their long-term noise study that some areas along the proposed B2H route had average nighttime hourly L_{50} noise levels at around 26 dBA rather than the 32 dBA he apparently considers to be consistent with a "Typical Rural Area". For the "average" hourly L_{50} noise level to be 26 dBA, it means there were hours when it was even lower, which would be entirely consistent with those I found at Mr. Larkin's residence.

Thus, in my opinion, Mr. Kosky's response provides no credible evidence that supports the use of 32 dBA as the baseline noise level for residences located along the Morgan Lake alternative route. He could have said the 26 dBA level proposed for other rural eastern Oregon residences was reasonable for the Morgan Lake route residences and have had as much credibility, but he apparently chose not to take that route.

Answer 23

Question twenty-three (Q23) of Mr. Kosky's testimony basically asked him to address my concerns with using data collected at MP11 to represent the noise levels at residences along the Morgan Lake alternative route. In his response, Mr. Kosky claimed that I provided no facts, evidence or measurement data to support the allegations that ambient noise data



collected at MP11 are not representative of the ambient noise at the Morgan Lake residences. As a final statement to his answer, Mr. Kosky says,

Moreover and importantly, the applicant collected hourly data at MP11 over a 31-day period for over 700 hours. There would certainly be many hours where a train did not pass.

As to his claim that no facts or data were provided to support the concern that data collected at MP11 may not be representative of the acoustical environment along the Morgan Lake alternative route, see my prior testimony. In fact, sound level data measured at the Larkin residence and presented in the rebuttal period of the contested case is data that provides a reason to question if the MP11 data should be used to represent the ambient noise at Morgan Lake alternative route residences.

While the Larkin residence measurement data by itself is not enough to draw a final conclusion concerning the hourly L₅₀ noise level that should be used as representative of the baseline noise levels at residences along the alternative route, it is normally the responsibility of the applicant to provide data that demonstrates a concern has been adequately addressed. The data collected during additional measurements by Mr. Bastasch at a different time of the year with different weather conditions than those present at MP11 in 2012 are not sufficient to demonstrate that the 32 dBA hourly L₅₀ noise level found at MP11 is representative of the noise level along the Morgan Lake alternate route.

As to the statement by Mr. Kosky about how there would certainly be many hours where a train did not pass by MP11 during the 700 hours of measurements at the location, that has no bearing on how train noise at MP11 could affect the average hourly L₅₀ noise level derived for MP11. The representative baseline noise level at MP11 is based on an average value of several individual values collected over a period of time. If any of the individual values collected at MP11 included the influence of train noise, that influence is included in the averaging process.

In the case of residences along the Morgan Lake alternative route, it has already been established through measurements and observations made on September 12 that trains traveling on Union Pacific's mainline between Portland and Boise do not influence the hourly L_{50} noise level at some, if not all, of the residences during any hour of the late night. The same cannot be said about the data collected at MP11 so there is still the need for the applicant to demonstrate that train traffic on the UP line did not have an influence on the average hourly L_{50} level coming out of that data.

The additional noise level measurements made by Mr. Bastasch do not provide a response to that issue. They only further demonstrate that one cannot take measurements at different locations on different days of the year during different weather conditions and not come up with different noise levels. We still need to know if the 32 dBA noise level value established from data collected at MP11 in 2012 would have been found if those



measurements had been made in the vicinity of the Morgan Lake alternative route instead of at MP11.

Answer 24

In response to question 24, Mr. Kosky stated that he wanted to see the raw data measured at the Larkin residence and the calibration information for the equipment used to make the measurements. The raw data, previously provided to Idaho Power at the request of their counsel, is attached at the end of this surrebuttal document. The data comes from the Larson Davis meter after it has been converted to Excel spreadsheet.

The Larson Davis LxT meter calibration information is also attached at the end of this document. It should be pointed out that the LxT meter used in the measurements was purchased at the beginning of 2017. However, the meter was never activated and used until the middle of 2018. During the time from when the meter was purchased and when it was first used, I under a noncompete agreement with the company who had bought my former business.

After the completion of the noncompete agreement, I basically moved into a semi-retired mode. I took on work of interest, most of which did not require sound measurements. Consequently, from the time I again began to accept project work until the time the measurements were made at the Larkin residence, the LxT meter was used approximately twenty-nine times. Those uses ranged in time from a use of from less than a minute, to several hours at a time. I believe that the meter had been used a total of approximately 10 to 12 hours of accumulated time, in the approximately three years since its use began.

The Larson Davis LxT sound level meter provides a calibration parameter selection option ranging from one year to four years. This option allows for setting when the meter is due back to the lab for recertification.

Recertification requirements can be based on how often the meter is in use, how long it is in use and the conditions in which it is stored between uses. Based on the meter use experienced with the DSA meter, the 3-year period since its beginning use is considered acceptable. The LxT meter in question is going to be sent back to Larson Davis for recertification shortly. It should be returned within a one-month period. The calibration report will include the condition of the meter upon receipt by Larson Davis and any changes required to update its calibration. If anyone would like to see that report, I will make it available as soon as I receive it.

Answer 27

In the answer to Q27, Mr. Kosky appears to say that no data or factual evidence has been provided to show corona noise can be caused by high humidity. That is not correct. Mr. Bastasch reported in his rebuttal materials that the BPA includes high humidity conditions in their review of corona noise and estimates that noise is 10 dBA lower than foul weather



noise. I also know of a transmission line noise fact sheet produced by Aspen Environmental Group that states that high voltage line corona noise can occur when humidity exceeds 80% relative humidity (sheet attached).

Answer 28

In question Q28, Mr. Kosky is asked about the concern that I raised relative to the possibility that high humidity or dew-point condensation conditions could cause an exceedance of the ambient noise degradation rule when the ambient noise was likely at some of its quietest levels. Mr. Kosky in response to that question said there was no technical information presented to support a claim that lower levels of corona noise could result in an exceedance of the ambient noise degradation rule outside of "foul weather" events.

Actually, there is such information. On page 82 of the Bastasch testimony document, Mr. Bastasch admits that corona noise associated with high humid conditions (and presumably at times when the dewpoint is reached which causes moisture to condense on the wires) would be 10 dBA less than those occurring during foul or wet conditions. Mr. Bastasch went on to state that, with the maximum increase predicted at any B2H NSR of 18 dBA under rain or foul weather conditions, the increase in ambient noise would only be 8 dBA after the lower corona noise effects are taken into account.

While Mr. Bastasch's arguments are correct as stated, it should be pointed out that the ambient noise used to draw that conclusion is based on an average of all ambient noise levels measured at a given location. If the ambient noise levels are considered that might actually be present under calm wind, high humidity or dewpoint conditions (such as the hourly noise levels found at the Larkin residence on September 12 – which are expected to still be present with higher humidity during the early morning hours when temperatures tend to approach dewpoint), it is very likely that non-foul weather condition corona noise would still increase the ambient noise levels by more than 10 dBA. So still, the applicant has not addressed those conditions.

Conclusions

Information presented in rebuttal testimony by Mr. Bastasch and Mr. Kosky has not totally responded to the concerns presented in Stop B2H Coalition's September 17 contested case submittal. Additional noise measurement data collected by Mr. Bastasch at locations in the vicinity of the Morgan Lake alternative route are questionable due to the lack of information about the effect of the weather conditions present during the measurement period. Also unaddressed is how those conditions were or were not similar to those present at MP11 during the 2012 measurements, and the lack of measurements at MP11 made simultaneously with those made at the additional measurement sites. That makes it difficult if not impossible to know if the noise levels at Morgan Lake alternative residences would have been the same as those found at MP11 in 2012 or if they would have been lower, like



the lower levels found at other remote locations east of the Morgan Lake alternative route area.

The material submitted in the rebuttal testimony has not definitively eliminated the possibility that corona noise produced by high humidity and dewpoint conditions would exceed the DEQ ambient noise degradation rule at residences when low ambient noise conditions, not the average ambient noise level, exist. Consequently, corona-generated noise could exceed the DEQ limits more often than is predicted by the B2H analysis.

Finally, the proposed mitigation plan included in the B2H application materials states that mitigation efforts would be instigated when the measured corona generated noise levels were found to be higher than predicted only at the residences where it was predicted to exceed the average ambient noise levels during foul weather conditions by more than $10 \, dBA$. Since it is possible that there could be times during non-foul weather conditions when the corona noise could be more than $10 \, dBA$ above the actual ambient noise levels at a residence during those non-foul weather conditions (early morning hours when the winds are calm and the dewpoint is reached for instance), and because the B2H applicant has asked for a variance from the ambient noise degradation rule, I suggest that - if the Energy Facility Siting Council elects to grant the variance - it would be more protective of all residences along the line if mitigation efforts were triggered at those residences where the non-foul weather corona noise levels were predicted to be more than $10 \, dBA$ above the lowest ambient hourly L_{50} noise level found at the MP site representing the NSR. That, in my opinion, would make more sense than using only the $10 \, dBA$ increase over the average hourly L_{50} noise level trigger.



ATTACHMENTS



Observation Summary 11-17-2021

FOLLOWING IS A STATEMENT OF EVENTS OCCURRING ON THE MORNING OF NOVEMBER 17, 2021. THE TIMEFRAMES WERE TAKEN FROM THE VIDEO RECORDINGS MADE BY MY PHONE DURING MY VISIT TO MP-11 AND THIS DOCUMENT WAS DEVELOPED ON THURSDAY, NOVEMBER 18, 2021.

On Tuesday, November 16, 2021 I was asked to drive to Monitoring Station 11 and identify timing for the following:

- 1. In the event a train was passing after 12:00 midnight, use a stop watch or other device to determine the following:
 - a. When was I able to first hear the train coming?
 - b. When did the train engine pass in front of me?
 - c. When did the final train car pass in front of me?
 - d. When was I last able to hear the train as it moved away from my location?
- 2. I was also asked to note information such as the weather and what direction the train was going, eastbound or westbound.

I started my observations approximately 1:00 a.m. on Wednesday Morning, November 17, 2021. I decided that the best way to document the material was to use my phone to record the events since it gives times as well as video. My phone is an Android, and while it is not a noise monitoring device, it did pick up noise as the trains passed, even from inside my vehicle and the recordings show location and times. My car was parked in the parking area at the east side of Monitoring Position 11.

There were scattered clouds, very little wind, and the temperature when I checked it was very cold (19 degrees).

I did not get started in time to catch the beginning of the first train, and the video recording does not start until 1:06 a.m., so the times listed start when the engine passed in front of my vehicle:

TRAIN ONE

Train came from the east headed west.

Minute 2:26 on tape train engine was directly in front of my car.

Four Minutes and 14 seconds later the last car passed in front of my car at 6:40 on the tape. Five minutes and 30 seconds later at 11:30 on the tape, the train moved out of my earshot.

TRAIN TWO

I started getting ready to go home, but noted that I could hear another train coming from east to west, so I resumed recording at 1:44 a.m.



Nine minutes and 39 seconds later at 9:39 on tape, the engine passed in front of my car. Four minutes and 21 seconds later the last car passed in front of my vehicle at minute 14 on the tape.

Six minutes and 58 seconds later was when I last heard the train at 20:58 on the video tape. The battery on my car went dead during the recording of the second train and I started trying to get someone to come to Meachum and jump my engine. Given the time of night, I felt it best not to wake the sleeping residents of the house to get up and jump my car, and I have towing insurance. During the time I was dealing with the insurance company a third train went by, but I was not able to record the information regarding this train that was moving west to east.

TRAIN THREE

Did not get the timeframes due to conflict with me dealing with the insurance company, but I did turn on my phone at 2:21 a.m. for a few seconds when the train was moving past.

While I was at the location for some time after this dealing with my battery, I did not do any further formal monitoring. A fourth train passed when I was having my battery jumped, however, I did not record information regarding it.

Total of four trains past me from 1:00a.m. to approx.. 4:30 a.m.

The last train passed approximately 4:30 a.m. I am basing this time on the fact that I called my better half and asked him to come at 3:43 a.m. and cancelled my tow truck request at 3:55. It takes approximately 30 minutes to drive to Meachum from La Grande.

The above information is accurate and the timeframes for three different trains can be documented by use of the video recordings I made. My phone contacts with the insurer and Les Henderson document approximate times for the last train.

I hereby declare that the above statements are true to the best of my knowledge and belief, and that I understand they are made for use as evidence in administrative and court proceedings and are subject to penalty for perjury.

Dated this 22nd day of November, 2021.

Irene Gilbert	
/s/ Irene Gilbert	
Pro-Se Petitioner	



Train Observation Summary 11-21-2021 MP11

Arrive designated location next to railroad tracks at Kamela, Oregon. 410PM Sunday 11-21-2021

0-2 mph intermittent breeze. Sound of distant freeway continuous, and only sound noticeable.

First Train observed. 11-21-2021

426pm first light/distant sound of train coming from East, up grade, Westbound freight train.

438pm lead engines at/passing observation location. Blows loud horn once /long blast (at before nearby crossing). Long freight train follows -- some groups of cars make much louder noise than others.

446pm Pusher Engines -- end of train. Noise subsides quickly at observation location. (Train crests mountain pass here and engines idle back). Hear freeway traffic noise again.

Second Train observed:

457pm 11-21-2011 (Same Day--Sunday) First sound of train coming up grade from East--Westbound freight train.

514pm First engines at observation station. Blows two long train-horns, before nearby crossing. Long freight train follows, one engine mid-train. One vehicle passed by on nearby 2 lane highway.

520pm Pusher engines/End of train, pass observation location.

523 trains sounds subside to nothing. (hear freeway traffic noise again.)

Have some video clips of sound and actual trains. Humans would have to yell to be heard at close range when sound is loudest.

I hereby declare that the above statements are true to the best of my knowledge and belief, and that I understand they are made for use as evidence in administrative and court proceedings and are subject to penalty for perjury.

Dated this 22nd day of November, 2021.



Peter Barry	
/s/ Peter Barry	

Peter Barry PO Box 566 La Grande, Oregon 97850

Calibration Certificate

Certificate Number 2017000055

Customer:

DSA Acoustical Engineers Inc. 15399 SW Burgundy Street Tigard, OR 97224, United States

Model Number

LxT1

Serial Number Test Results

0004982 **Pass**

Initial Condition As Manufactured

Description

SoundTrack LxT Class 1 Class 1 Sound Level Meter

Firmware Revision: 2.301

Procedure Number

D0001.8378 Ron Harris Technician 4 Jan 2017

Calibration Date Calibration Due

Temperature

Static Pressure

23.32 °C 50.9 %RH ± 2.0 %RH

± 0.25 °C

85.48 kPa ± 0.13 kPa

Evaluation Method

Tested electrically using Larson Davis PRMLxT1 S/N 042559 and a 12.0 pF capacitor to simulate microphone capacitance. Data reported in dB re 20 µPa assuming a microphone sensitivity of 50.0

Humidity

mV/Pa

Compliance Standards

Compliant to Manufacturer Specifications and the following standards when combined with

Calibration Certificate from procedure D0001.8384:

IEC 60651:2001 Type 1

IEC 60804:2000 Type 1

IEC 61252:2002 IEC 61260:2001 Class 1

IEC 61672:2013 Class 1

ANSI S1.4-2014 Class 1

ANSI S1.4 (R2006) Type 1

ANSI S1.11 (R2009) Class 1

ANSI S1.25 (R2007)

ANSI S1.43 (R2007) Type 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005. Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

Correction data from Larson Davis LxT Manual for SoundTrack LxT & SoundExpert Lxt, I770.01 Rev J Supporting Firmware Version 2.301, 2015-04-30

Calibration Check Frequency: 1000 Hz; Reference Sound Pressure Level: 114 dB re 20 µPa





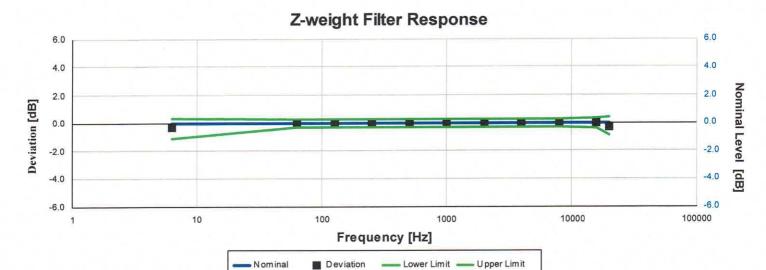


	Standards Used		TO MENT AND THE PROPERTY OF THE PARTY OF THE
Description	Cal Date	Cal Due	Cal Standard
Hart Scientific 2626-S Humidity/Temperature Sensor	2016-06-17	2017-06-17	006946
SRS DS360 Ultra Low Distortion Generator	2016-10-14	2017-10-14	007167









Electrical signal test of frequency weighting performed according to IEC 61672-3:2013 13 and ANSI S1.4-2014 Part 3: 13 for compliance to IEC 61672-1:2013 5.5; IEC 60651:2001 6.1 and 9.2.2; IEC 60804:2000 5; ANSI S1.4:1983 (R2006) 5.1 and 8.2.1; ANSI S1.4-2014 Part 1: 5.5

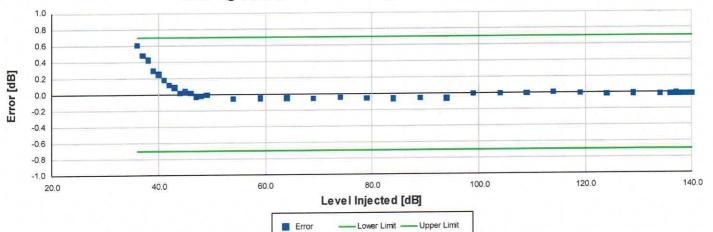
Frequency [Hz]	Test Result [dB]	Deviation [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
6.31	-0.29	-0.29	-1.11	0.33	0.10	Pass
63.10	-0.02	-0.02	-0.30	0.30	0.09	Pass
125.89	-0.01	-0.01	-0.30	0.30	0.09	Pass
251.19	0.00	0.00	-0.30	0.30	0.09	Pass
501.19	0.00	0.00	-0.30	0.30	0.09	Pass
1,000.00	0.00	0.00	-0.30	0.30	0.09	Pass
1,995.26	0.01	0.01	-0.30	0.30	0.09	Pass
3,981.07	0.02	0.02	-0.30	0.30	0.09	Pass
7,943.28	0.05	0.05	-0.30	0.30	0.09	Pass
15,848.93	-0.06	-0.06	-0.42	0.32	0.09	Pass
19,952.62	-0.31	-0.31	-0.91	0.41	0.09	Pass
		En	d of measurement res	ults		

2017-1-4T15:28:39





A-weighted Broadband Log Linearity: 8,000.00 Hz



Broadband level linearity performed according to IEC 61672-3:2013 16 and ANSI S1.4-2014 Part 3: 16 for compliance to IEC 61672-1:2013 5.6. IEC 60804:2000 6.2, IEC 61252:2002 8, ANSI S1.4 (R2006) 6.9, ANSI S1.4-2014 Part 1: 5.6, ANSI S1.43 (R2007) 6.2

Level [dB]	2002 8, ANSI S1.4 (R2006) 6.9 Error [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
36.00	0.60	-0.70	0.70	0.09	Pass
37.00	0.48	-0.70	0.70	0.09	Pass
38.00	0.42	-0.70	0.70	0.09	Pass
39.00	0.29	-0.70	0.70	0.09	Pass
40.00	0.25	-0.70	0.70	0.09	Pass
41.00	0.18	-0.70	0.70	0.09	Pass
42.00	0.12	-0.70	0.70	0.09	Pass
43.00	0.09	-0.70	0.70	0.10	Pass
44.00	0.02	-0.70	0.70	0.11	Pass
45.00	0.03	-0.70	0.70	0.10	Pass
46.00	0.01	-0.70	0.70	0.10	Pass
47.00	-0.03	-0.70	0.70	0.09	Pass
48.00	-0.02	-0.70	0.70	0.09	Pass
49.00	-0.01	-0.70	0.70	0.09	Pass
54.00	-0.06	-0.70	0.70	0.09	Pass
59.00	-0.05	-0.70	0.70	0.09	Pass
64.00	-0.05	-0.70	0.70	0.09	Pass
69.00	-0.06	-0.70	0.70	0.09	Pass
74.00	-0.05	-0.70	0.70	0.09	Pass
79.00	-0.06	-0.70	0.70	0.09	Pass
84.00	-0.06	-0.70	0.70	0.09	Pass
89.00	-0.06	-0.70	0.70	0.09	Pass
94.00	-0.06	-0.70	0.70	0.09	Pass
99.00	0.00	-0.70	0.70	0.09	Pass
104.00	-0.01	-0.70	0.70	0.09	Pass
109.00	-0.01	-0.70	0.70	0.09	Pass
114.00	0.00	-0.70	0.70	0.09	Pass
119.00	-0.01	-0.70	0.70	0.09	Pass
124.00	-0.02	-0.70	0.70	0.09	Pass
129.00	-0.01	-0.70	0.70	0.09	Pass
134.00	-0.02	-0.70	0.70	0.09	Pass
136.00	-0.02	-0.70	0.70	0.09	Pass
137.00	-0.02	-0.70	0.70	0.09	Pass
138.00	-0.02	-0.70	0.70	0.09	Pass
139.00	-0.02	-0.70	0.70	0.09	Pass
140.00	-0.02	-0.70	0.70	0.09	Pass

Larson Davis, a division of PCB Piezotronics, Inc 1681 West 820 North Provo, UT 84601, United States 716-684-0001







-- End of measurement results--

Peak Rise Time

Peak rise time performed according to IEC 60651:2001 9.4.4 and ANSI S1.4:1983 (R2006) 8.4.4

Duration [μs]		Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
40	Negative Pulse	136.49	135.01	137.01	0.09	Pass
	Positive Pulse	136.48	135.00	137.00	0.09	Pass
30	Negative Pulse	135.54	135.01	137.01	0.09	Pass
	Positive Pulse	135.54	135.00	137.00	0.09	Pass
	40	40 Negative Pulse Positive Pulse 30 Negative Pulse	40 Negative Pulse 136.49 Positive Pulse 136.48 30 Negative Pulse 135.54	40 Negative Pulse 136.49 135.01 Positive Pulse 136.48 135.00 30 Negative Pulse 135.54 135.01	40 Negative Pulse 136.49 135.01 137.01 Positive Pulse 136.48 135.00 137.00 30 Negative Pulse 135.54 135.01 137.01	Test Result [dB] Lower limit [dB] Upper limit [dB] Uncertainty [dB]

Positive Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Amplitude [dB]	Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
136.85	3	OVLD	± 0.50	0.09	Pass
	.5	OVLD	± 1.00	0.09	Pass
	10	OVLD	± 1.50	0.09	Pass
126.85	3	-0.14	± 0.50	0.09	Pass
	5	-0.14	± 1.00	0.11	Pass
	10	OVLD	± 1.50	0.09	Pass
116.85	3	-0.13	± 0.50	0.09	Pass
	5	-0.14	± 1.00	0.09	Pass
	10	-0.01	± 1.50	0.09	Pass
106.85	3	-0.13	± 0.50	0.09	Pass
	5	-0.13	± 1.00	0.09	Pass
	10	-0.09	± 1.50	0.09	Pass
		End of n	neasurement results		





Negative Pulse Crest Factor

200 µs pulse tests at 2.0, 12.0, 22.0, 32.0 dB below Overload Limit

Crest Factor measured according to IEC 60651:2001 9.4.2 and ANSI S1.4:1983 (R2006) 8.4.2

Crest Factor	Test Result [dB]	Limits [dB]	Expanded Uncertainty [dB]	Result
3	OVLD	± 0.50	0.09	Pass
			0.09	Pass
	1		0.09	Pass
			0.09	Pass
			0.09	Pass
			0.09	Pass
10	-0.09	± 1.50	0.09	Pass
	3 5 10 3 5 10 3 5 10 3 5	3 OVLD 5 OVLD 10 OVLD 3 -0.12 5 -0.11 10 OVLD 3 -0.13 5 -0.12 10 0.00 3 -0.12 5 -0.12 5 -0.12	3 OVLD ± 0.50 5 OVLD ± 1.00 10 OVLD ± 1.50 3 -0.12 ± 0.50 5 -0.11 ± 1.00 10 OVLD ± 1.50 3 -0.13 ± 0.50 5 -0.12 ± 1.00 10 0.00 ± 1.50 3 -0.12 ± 0.50 5 -0.12 ± 0.50 5 -0.12 ± 0.50 5 -0.12 ± 0.50 5 -0.12 ± 0.50	3 OVLD ±0.50 0.09 5 OVLD ±1.00 0.09 10 OVLD ±1.50 0.09 3 -0.12 ±0.50 0.09 5 -0.11 ±1.00 0.09 10 OVLD ±1.50 0.09 3 -0.13 ±0.50 0.09 5 -0.12 ±1.00 0.09 10 0.00 ±1.50 0.09 10 0.00 ±1.50 0.09 5 -0.12 ±0.50 0.09 5 -0.12 ±0.50 0.09 5 -0.12 ±0.50 0.09

Gain

Gain measured according to IEC 61672-3:2013 17.3 and 17.4 and ANSI S1.4-2014 Part 3: 17.3 and 17.4

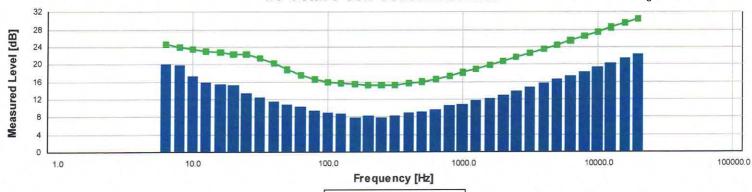
Measurement	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
0 dB Gain	93.97	93.91	94.11	0.09	Pass
0 dB Gain, Linearity	41.17	40.31	41.71	0.09	Pass
OBA Low Range	94.01	93.91	94.11	0.09	Pass
OBA Normal Range	94.01	93.20	94.80	0.09	Pass
	Enc	d of measurement res	ults		



Certificate Number 2017000055

Stop B2H/100 Kreider/108 Page 40





Measured — Upper Limit

The SLM is set to low range.

Frequency [Hz]	Test Result [dB]	Upper limit [dB]	Resul
6.30	20.00	24.60	Pass
8.00	19.80	24.00	Pass
10.00	17.30	23.50	Pass
12.50	15.79	23.00	Pas
16.00	15.37	22.90	Pas
20.00	15.18	22.40	Pass
25.00	13.40	22.30	Pass
31.50	12.50	21.50	Pass
40.00	11.61	20.20	Pass
50.00	10.94	18.80	Pass
63.00	10.43	17.60	Pass
80.00	9.50	16.60	Pass
100.00	9.06	15.90	Pass
125.00	8.81	15.70	Pass
160.00	7.91	15.50	Pass
200.00	8.21	15.20	Pas
250.00	7.92	15.20	Pas
315.00	8.29	15.20	Pass
400.00	8.96	15.70	Pas
500.00	9.20	16.00	Pass
630.00	9.65	16.60	Pas
800.00	10.52	17.30	Pas
1,000.00	10.93	18.10	Pas
1,250.00	11.69	18.90	Pass
1,600.00	12.29	19.80	Pass
2,000.00	12.93	20.80	Pass
2,500.00	13.75	21.70	Pas
3,150.00	14.64	22.60	Pass
4,000.00	15.56	23.50	Pas
5,000.00	16.54	24.50	Pass
6,300.00	17.33	25.50	Pas
8,000.00	18.23	26.50	Pass
10,000.00	19.34	27.40	Pas
12,500.00	20.35	28.50	Pas
16,000.00	21.35	29.50	Pass
20,000.00	22.33	30.40	Pass

Larson Davis, a division of PCB Piezotronics, Inc 1681 West 820 North Provo, UT 84601, United States 716-684-0001







Certificate Number 2017000055

Stop B2H/100 . Kreider/108 Page 41

Broadband Noise Floor

Self-generated noise measured according to IEC 61672-3:2013 11.2 and ANSI S1.4-2014 Part 3: 11.2

Measurement	Test Result [dB]	Upper limit [dB]	Result
A-weight Noise Floor	27.07	36.00	Pass
C-weight Noise Floor	26.88	35.00	Pass
Z-weight Noise Floor	32.60	39.00	Pass

-- End of measurement results--

Total Harmonic Distortion

Measured using 1/3-Octave filters

Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
135.46	135.05	136.65	0.09	Pass
-64.88		-58.00	0.01	Pass
-61.49		-58.00	0.01	Pass
	135.46 -64.88	135.46 135.05 -64.88	135.46 135.05 136.65 -64.88 -58.00	135.46 135.05 136.65 0.09 -64.88 -58.00 0.01

-- End of Report--

Signatory: Ron Harris

Larson Davis, a division of PCB Piezotronics, Inc 1681 West 820 North Provo, UT 84601, United States 716-684-0001







Transmission Line Noise Fact Sheet

Three types of noise are often associated with transmission lines once operational, including noise from the transmission lines and towers, noise from activities for routine inspection and maintenance of the new facilities, and noise from new substation facilities. The noise generated by routine maintenance is generally negligible, while the noise generated by a substation may affect the area immediately adjacent to the substation. Transmission line noise, which includes *corona, insulator, and Aeolian noise*, can be generated throughout the transmission line route and is therefore more likely to affect sensitive receptors than the other two noise types.

Types of Transmission Line Noise

Corona noise is the most common noise associated with transmission lines and is heard as a crackling or hissing sound. Corona is the breakdown of air into charged particles caused by the electrical field at the surface of conductors. This type of noise varies with both weather and voltage of the line, and most often occurs in conditions of heavy rain and high humidity (typically >80%). An electric field surrounds power lines and causes implosion of ionized water droplets in the air, which produces the sound.

During relatively dry conditions, corona noise typically results in continuous noise levels of 40 to 50 dBA in close proximity to the transmission line, such as at the edge of the right-of-way. In many locations, this noise level is similar to ambient noise conditions in the environment. During wet or high humidity conditions, corona noise levels typically increase. Depending on conditions, wet weather corona noise levels could increase to 50 to 60 dBA and could even increase to over 60 dBA under some conditions. Corona noise levels are not consistent from location to location because conductor surface defects, damage, dust, and other inconsistencies can influence the corona effect.

For comparison purposes, noise levels for other common sounds are presented in the table to the right.



1	
	Insulator
	Conductor

Top of lattice steel tower illustrating insulator and conductor.

Common Sounds and Their Associated Noise Levels				
Source	Level			
Normal breathing	10 dBA			
Rustling leaves	20 dBA			
Whisper	20-30 dBA			
Ambient noise in an average home	50 dBA			
Normal conversation at 3 feet	60-65 dBA			
Vacuum cleaner	60-82 dBA			
Freeway traffic at 165 feet	70 dBA			
Garbage disposal at 3 feet	80 dBA			
Rock concert	90-115 dBA			
Jet flyover at 1,000 feet	110 dBA			
Apollo liftoff	188 dBA			

Insulator noise is similar to corona noise but it is not dependent on weather. It is caused by dirty, nicked, or cracked insulators, and is mainly a problem with older ceramic or glass insulators. New polymer insulators minimize this type of noise.

Aeolian noise is caused by wind blowing through the conductors and/or structures. This type of noise is usually infrequent and depends on wind velocity and direction. Wind must blow steadily and perpendicular to the lines to set up an Aeolian vibration, which can produce resonance if the frequency of the vibration matches the natural frequency of the line. Dampeners can be attached to the lines to minimize Aeolian noise.



EXHIBIT 9

EFSC Contested Case

OAH Case No. 2019-ABC-02833

Stop B2H Coalition Written Direct Testimony, Exhibit #3 (9/17/2021)

Memo IPC's Colburn to BLM regarding location and Noise Sensitive Properties



Mitch Colburn
Engineering Leader
1221 W. Idaho Street
Boise, Idaho 83702
MColburn@idahopower.com

July 10, 2015

VIA ELECTRONIC MAIL

Tamara Gertsch, National Project Manager Don Gonzalez, District Manager Bureau of Land Management, Vale District Office 100 Oregon Street Vale, Oregon 97918 TGertsch@blm.gov DGonzale@blm.gov

Re: Preliminary Feasibility Analysis of Possible Interstate 84 and Co-Located 230-kV

Routes in Umatilla County

Boardman to Hemingway Transmission Line Project

Dear Tamara and Don,

In Umatilla County's comments on the Draft Environmental Impact Statement (EIS) for the Boardman to Hemingway Transmission Line Project (Project), the County requested that the Bureau of Land Management (BLM) consider a new alternative or route variation running adjacent to Interstate 84 (I-84) or the existing 230-kV transmission line through Umatilla County. We are writing to provide information regarding the feasibility and impacts of a possible I-84 corridor route. Specifically, we explain that the I-84/230 kV co-located route was specifically considered during scoping and that neither an I-84 or 230 kV co-located route were carried forward as a proposed or alternate route from the 2009-2010 community advisory site selection process. Based on the community advisory site selection process, the route was not carried forward due to increased impacts to agriculture and developed areas. The same constraints still apply, and therefore, the I-84 corridor does not present a reasonable alternative that BLM need consider in detail.

I. The I-84 Corridor Was Not Carried Forward During the Community Advisory Process

On December 19, 2007, Idaho Power submitted a right-of-way application to the BLM and the USFS. On September 12, 2008, the BLM published an NOI in the Federal Register, announcing the preparation of an EIS for the B2H Project. The NOI initiated a NEPA scoping

period from September 12 through November 14, 2008. The transmission line route proposed in 2007 and presented to the public during the 2008 scoping period is shown below in Figure 1.

Idaho Power began the process of identifying a route for the Project when it submitted its right-of-way applications to the BLM and U.S. Forest Service on December 19, 2007. On September 12, 2008, BLM published in the Federal Register its notice of intent to prepare an EIS for the Project. The notice of intent initiated a National Environmental Policy Act (NEPA) scoping period from September 12 through November 14, 2008. The transmission line route proposed in 2007 and presented to the public during the 2008 scoping period is shown below in Figure 1. *See* Revised Scoping Report, p. 7 (April 2011).

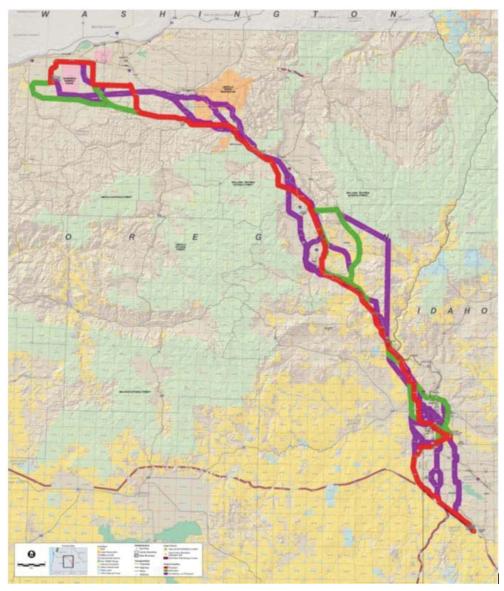


Figure 1: Boardman to Hemingway 2008 Proposed Route

Based on public feedback received during the scoping process, Idaho Power initiated in March 2009 the Community Advisory Process (CAP) to engage the affected communities to develop a revised proposed route. See CAP Final Report (Feb. 2011). Idaho Power established a broad study area between the two proposed termination points for the Project and established five Project Advisory Teams (PATs) representing five geographic areas within the study area. The PATs were comprised of residents, property owners, business leaders, local officials, and others from each county in the project area. For over a year, approximately 450 Project Advisory Team members worked to develop community criteria for each region that were used to evaluate possible routes. The community criteria were integrated with regulatory requirements to give a more holistic, community centered evaluation methodology for the line route. Once team members had a thorough understanding of the routing criteria and how these criteria would be applied, they worked with technical experts to recommend a proposed route and alternate routes for the transmission line. Routes not meeting the regulatory and community criteria were removed from consideration. Idaho Power presented the outcomes from the Project Advisory Team meetings to the public for review and comment. Comments submitted at the public meetings showed that the concerns of the general public were closely aligned with those of the Project Advisory Team members. Using the routes identified in the CAP mapping sessions, Idaho Power identified the proposed route considered in the Draft EIS.

Umatilla County was included in the study area considered by the North Project Advisory Team. Umatilla County officials were members of the North team. The team developed community siting criteria, seeking, among other things, opportunities to site the line in or near existing transportation and energy corridors and to avoid irrigated farmland, private residences, and urban areas. *See* CAP Final Report, App'x C, pp. 2, 3. Applying its siting criteria, the North team identified several proposed routes through Umatilla County. The routes considered by the Project Advisory Teams are shown below in Figure 2. *See* CAP Final Report, p. 23 (February 2011).

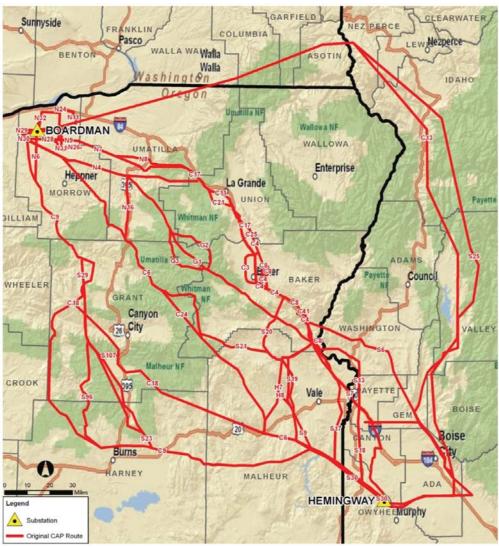


Figure 2: Routes Developed by Community Advisory Process Project Advisory Teams

None of the North Project Advisory Team's proposed routes followed I-84 or the 230-kV line through Umatilla County. There was a section identified in Morrow County that followed I-84, however it wasn't carried forward in the NEPA process. That's not to say the North team didn't consider other routes adjacent to the interstate or 230-kV line. Indeed, the North team evaluated routes throughout its study area, which included the I-84 corridor through Umatilla County as well as Morrow County. *See id.*, p. 6. Further, Idaho Power presented routes paralleling the existing 230 kV line corridor in Umatilla County during the 2008 scoping process—routes that the North team found unacceptable. *See* Figure 1, Revised Scoping Report, p. 7 (April 2011).

Idaho Power's objective for the CAP process was to develop a range of possible routes that addressed community issues and concerns. With respect to Umatilla County, the North

Project Advisory Team defined community siting criteria relevant to the County's interests, considered siting opportunities along the I-84 and 230-kV corridors, and concluded that those routes did not satisfy the community's siting criteria. Because an I-84 or 230-kV route would be inconsistent with the North team's objectives for the siting of the Project in Umatilla County and Idaho Power's objectives for respecting the CAP routes where possible, the I-84 and 230-kV routes are not reasonable alternatives that BLM must consider in detail. *See Alaska Survival v. Surface Transp. Bd.*, 705 F.3d 1073, 1085 (9th Cir. 2013) ("An agency must look hard at the factors relevant to definition of purpose, which can include private goals, especially when the agency is determining whether to issue a permit or license."); *Envtl. Law & Policy Ctr. v. U.S. Nuclear Regulatory Comm'n*, 470 F.3d 676, 684 (7th Cir. 2006) (in considering alternatives, the federal agency "'may accord substantial weight to the preferences of the applicant and/or sponsor in the siting and design of the project.' ") (quoting *City of Grapevine v. Dep't of Transp.*, 17 F.3d 1502, 1506 (D.C. Cir. 1994)).

II. Each of The I-84 And 230-kV Routes Would Result In Greater Impacts To Irrigated Agriculture And Noise Sensitive Receptors

Generally, lands adjacent to interstate highways are more developed than areas farther from major transportation corridors. For example, interstates typically connect and go through urban areas. Outside of urban areas, residences, irrigated agriculture, industrial areas, and service facilities (e.g., gas stations) tend to be developed near interstate access points in order to take advantage of transportation opportunities. Accordingly, in general, a transmission line route along an interstate corridor greatly increases the number of people and number of developed farms and businesses that would be disturbed by the project.

Irrigated Agriculture

Umatilla County's primary justification for requesting BLM to consider an alternative route is to minimize or avoid impacts to agriculture. *See* Umatilla County Comment Letter, p. 5 (Mar. 8, 2015). However, a route adjacent to I-84 or the 230-kV power line would result in more impacts to agriculture. Specifically, the alternative routes would run near two or three concentrated feeding operations (CAFOs), whereas the preferred route would not be located near any CAFOs. Additionally, the I-84 or the 230-kV routes would impact 22 to 42 additional miles of irrigated agricultural lands when compared to the preferred route:

Comparison of Agricultural Impacts Between Idaho Power's Preferred Route and the Possible I-84 and 230-kV Routes

Feature	Preferred Route	Variation 1	Variation 2	Variation 3	Variation 4
Agriculture, CAFOs (# w/in 1,200 feet)	0	2	3	2	3
Agriculture, Pivot Irrigation (# w/in 1,200 feet)	47	87	69	89	71

Noise Sensitive Receptors

Umatilla County's comment also points to impacts to residences and other noise sensitive receptors (NSRs) in support of its proposed alternative routes. *See* Umatilla County Comment Letter, p. 6 (Mar. 8, 2015) (discussing impacts to a home and horse corral near McKay Creek). Nonetheless, the number of NSRs that possibly would be affected by the hypothetical alternative routes would increase substantially over the impacts of Idaho Power's preferred route. There are three NSRs located within 1,200 feet of the current preferred route. In striking contrast, there are between 72 and 105 NSRs located within 1,200 feet of the four I-84/230-kV routes:

Comparison of NSR Impacts Between Idaho Power's Preferred Route and the Possible I-84 and 230-kV Routes

Feature	Preferred Route	Variation 1	Variation 2	Variation 3	Variation 4
Residences/NSRs (# w/in 1,200 feet)	3	105	101	76	72

Umatilla County's current concerns regarding agriculture and NSR impacts were considered during the CAP process. Based on those considerations, among others, the North Project Advisory Team proposed multiple routes that did not follow I-84 or the 230-kV power line. The current analysis of irrigated agriculture and NSR impacts reiterates and confirms the findings of the CAP—an I-84 or 230-kV power line route through Umatilla County would result in substantially greater impacts than Idaho Power's preferred route. Accordingly, because the proposed routes would not be effective in meeting Umatilla County's objectives, the routes are not reasonable alternatives that BLM must consider in detail. *See Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1180-81 (9th Cir.1990) ("Nor must an agency consider alternatives which are infeasible, ineffective, or inconsistent with the basic policy objectives for the management of the area.").

III. The Impacts To Noise Sensitive Receptors Possibly Would Make The I-84 And 230-kV Routes Unpermittable

In Exhibit X of an Oregon Energy Facility Siting Council's application for site certificate, an applicant must present substantial evidence that the proposed facility will comply with the Oregon Department of Environmental Quality's (ODEQ) noise control standards in Oregon Administrative Rule (OAR) 340-035-0035 (ODEQ Noise Rules). *See* OAR 345-021-0010(1)(x). For new commercial or industrial noise sources on a previously unused site, the ODEQ Noise Rules contain both a maximum permissible sound level (50 A-weighted decibels [dBA]) and an ambient antidegradation standard. The antidegradation standard prohibits a new industrial or commercial noise source located on a previously unused site from increasing "ambient" L50 statistical noise levels by more than 10 dBA at the appropriate measuring point of a "noise sensitive receptor" (NSR) as that term is defined in OAR 340-035-0015(38). The term "ambient noise" means all noise associated with a given environment; ambient noise is usually made up of composite of sounds from many sources near and far as described in OAR 345-035-0015(5). In order to demonstrate that the Project will comply with the ODEQ Noise Rules, and the antidegradation standard in particular, Idaho Power is required to identify all NSRs within the analysis area required by the Project Order, which is within one-half mile from the edge of the

site boundary (a 500 foot corridor for the transmission line component). For every location at which the Project cannot demonstrate compliance with ODEQ's noise antidegradation rule, IPC must request that the Council grant a variance pursuant to OAR 340-035-0100 on the basis that requiring the Project to strictly comply with the ODEQ Noise Rules is unreasonable and likely to make the Project unpermittable.

The noise studies Idaho Power has conducted to date indicate that NSRs closer than 1,200 feet from the Project centerline will likely exceed the 10 dBA criteria. The possible I-84 and 230-kV power line routes present a significant risk of noncompliance with ODEQ's Noise Rules. As discussed in Section II above, preliminary analysis indicates that locating the Project in any of the possible I-84/230-kV routes would result in a significant increase in the number of NSRs in close proximity to the transmission line. While it is not possible for Idaho Power to predict with certainty whether noise from the Project would increase noise levels at these NSRs by more than 10 dBA without both sound monitoring and modeling, there is a strong likelihood that any one of the possible I-84 or 230-kV power line routes would result in an unmanageable, if not unpermittable, number of exceedances.

From a public policy perspective, Idaho Power believes that it is untenable to propose locating a 500-kV transmission line within 1,200 feet of so many residences when a viable alternative (the preferred route) exists that would avoid those impacts. Moreover, EFSC possibly would not grant a variance from the ODEQ Noise Rules for these exceedances, both because of the sheer number of likely exceedances and because an alternative location with many fewer exceedances exists. See OAR 345-035-0100(1) (standard for a granting a variance). It is highly unlikely that Idaho Power could obtain a site certificate from the State of Oregon for the I-84 and 230-kV routes, and therefore, the routes are not reasonable alternatives. *See Headwaters, Inc.*, 914 F.2d at 1180-81.

IV. The Routes Crossing The Reservation Would Require A Short-Term Right-Of-Way That Would Be Inconsistent With Idaho Power's Project Objectives

Due to the high demand for transmission services, the high cost of building new transmission lines, and the intrinsic value of transmission rights-of-way, Idaho Power designs, constructs, and operates its transmission lines and substations with the objective that the facilities will be in service indefinitely. Idaho Power has never retired a bulk electric system transmission line. Indeed, industry wide, transmission line retirements are extremely rare, occurring only when a line is re-routed. Accordingly, when obtaining right-of-way authorizations for its transmission lines, Idaho Power seeks to obtain indefinite or long-term access rights.

On June 18, 2015, Idaho Power met with representatives from the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). The CTUIR representatives indicated that their policy is to issue right-of-way grants for a term of 20 years. A 20-year term does not meet Idaho Power's objectives because of the financial uncertainty associated with a potential renewal after the 20 year period and the possibility that CTUIR could deny a renewal of the right-of-way and force Idaho Power to take the affected portion of the line out of service, threatening Idaho

Power's intention that the Project remain in-service long-term if not indefinitely. Therefore, due to the inherent uncertainty associated with a 20 year right-of-way grant for a billion dollar investment, the possible I-84 and 230-kV co-located power line routes crossing the CTUIR should be eliminated from further consideration. *See Alaska Survival*, 705 F.3d at 1085; *Envtl. Law & Policy Ctr.*, 470 F.3d at 684.

V. Conclusion

Idaho Power's objective is to construct the Project as an indefinite resource and to site the Project in a manner that minimizes, where possible, impacts to agriculture and residences. BLM should not consider, in detail, alternatives that, if adopted, would not be feasible or reasonable or would not fulfill the project objectives as defined by Idaho Power. Further, BLM should accord substantial weight to the preferences of Idaho Power, as the project proponent, in the siting and design of the proposed project. The I-84 and co-located 230-kV routes through Umatilla are not technically feasible or economically reasonable and do not meet Idaho Power's project objectives, and thus, BLM should not consider these routes in more detail.

Sincerely,

Mitch Colburn

Mith blom

EXHIBIT 10

EFSC Contested Case

OAH Case No. 2019-ABC-02833

STOP Written Direct Testimony, NC-2 Kreider (9 pages, refer to: pp. 3-9), including **Exhibit #4 Declaration J Kreider** (3 pages);

STOP Closing Argument Opening Brief (31 pages, refer to: pp. 5-9);

STOP Closing Argument Response Brief (40 pages, refer to: pp 5-22).

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS STATE OF OREGON for the OREGON DEPARTMENT OF ENERGY

IN THE MATTER OF:) STOP B2H COALITION: DIRECT
BOARDMAN TO HEMINGWAY) TESTIMONY OF FUJI KREIDER ON) ISSUES NC-2.
TRANSMISSION LINE)
) OAH Case No. 2019-ABC-02833

NC-2: Whether the Department erred in recommending that Council grant a variance/exception from the Oregon DEQ's Noise Rules, OAR 340-035-0035, and whether the variance/exception is inconsistent with ORS 467.010.

Q: What brought the issue of Noise Control and a high voltage transmission line to the attention of the Stop B2H Coalition?

A: In Idaho Power's Application for Site Certificate, they plainly state that compliance with the ODEQ Noise Standards would make the project "unpermittable." Therefore, we investigated this issue further. STOP ultimately concluded that **we agree** the project is unpermittable.

Q: Why did STOP become concerned?

A: Instead of adherence to the state DEQ standards, the ODOE recommends in the Proposed Order that the Council grant a full variance to all of Oregon's noise standards; plus an exception, increasing by 10 dBA the maximum allowable noise. That would bring the total noise levels to 20 dBA over ambient background noise in certain conditions. This is an industrial scale intrusion. STOP was stunned with this recommendation, and the disregard for the people of Oregon's public health, safety and welfare that it authorized.

Numerous pages of attempted justification for this variance and exception were submitted. In STOP's view those do not bring the project into compliance. We see the Proposed Order is as inconsistent with the law (ORS Chapter 467), which is designed to protect the public health, safety and welfare of the citizens of Oregon from unreasonable noise pollution.

¹ ODOE - B2HAPPDoc3-41 ASC 24_Exhibit X_Noise_ASC 2018-09-28. Page 5 of 371

Q: What part of the action does STOP think is inconsistent with the law?

A: The state policy established by the legislature regarding the purpose and intent of the noise rules per ORS 467.010 states:

"467.010 Legislative findings and policy. The Legislative Assembly finds that the increasing incidence of noise emissions in this state at unreasonable levels is as much a threat to the environmental quality of life in this state and the health, safety and welfare of the people of this state as is pollution of the air and waters of this state. To provide protection of the health, safety and welfare of Oregon citizens from the hazards and deterioration of the quality of life imposed by excessive noise emissions, it is hereby declared that the State of Oregon has an interest in the control of such pollution, and that a program of protection should be initiated. To carry out this purpose, it is desirable to centralize in the Environmental Quality Commission the authority to adopt reasonable statewide standards for noise emissions permitted within this state and to implement and enforce compliance with such standards." [1971 c.452 §1]

However, in this particular case, the Environmental Quality Commission (EQC) was not consulted.

Q: Why does failure to consult the EQC matter?

A: Because only the EQC can grant a Variance, and then only under very specific circumstances. ORS 467.060 on Variances provides for: issuance, revocation or modification of a variance.² There are 5 sub-sections in the Variance provisions. The first three are very clear

² ORS 467.060 on Variances: issuance, revocation or modification; grounds; rules.

⁽¹⁾ The Environmental Quality Commission by order may grant specific variances from the particular requirements of any rule or standard to such specific persons or class of persons or such specific noise emission source, upon such conditions as it may consider necessary to protect the public health, safety and welfare. The specific variance may be limited in duration. The commission shall grant a specific variance only if it finds that strict compliance with the rule or standard is inappropriate because:

⁽a) Conditions exist that are beyond the control of the persons applying for the variance;

⁽b) Special circumstances render strict compliance unreasonable, unduly burdensome or impractical due to special physical conditions or cause;

⁽c) Strict compliance would result in substantial curtailment or closing down of a business, plant or operation; or

⁽d) No other alternative facility or method of operating is yet available.

and specifically address the *issuance* of a variance. The fourth and fifth sub-sections address the revocation of a variance. Perhaps most important to STOP, Subsection (1), allows the variance within a specified time only as a condition to *protect* the public health, safety and welfare of Oregonians, not as a means to diminish their health, safety and welfare. (emphasis added in footnote 2.)

Q: Were there any sub-sections that allow some discretion regarding the issuance of a variance?

A: Yes. Sub-section (1) (a) through (d) appear to authorize the EQC could grant a variance if they found that strict compliance was inappropriate. Let's take each one in turn:

"(1)(a) Conditions exist that are beyond the control of the persons applying for the variance"

The persons applying here is the developer, Idaho Power Company (IPC). This applicant has numerous conditions that are within their control. The most obvious is the routing.

As described in the letter from Mitch Colburn at IPC to the Bureau of Land Management during the EIS process, dated July 10, 2015, there are alternatives to the currently proposed route. In that letter on page 7, IPC describes that:

From a public policy perspective, Idaho Power believes that it is untenable to propose locating a 500-kV transmission line within 1,200 feet of so many residences when a viable

(2) The commission by rule may delegate to the Department of Environmental Quality, on such conditions as the commission may find appropriate, the power to grant variances and to make the finding required by subsection (1) of this section to justify any such variance.

(3) In determining whether or not a variance shall be granted, the commission or the department shall consider the equities involved and the advantages and disadvantages to residents and to the person conducting the activity for which the variance is sought.

(4) A variance may be revoked or modified by the commission. The commission may revoke or modify a variance if it finds:

- (a) Violation of one or more conditions of the variance;
- (b) Material misrepresentation of fact in the variance application or other representations of the variance holder;
- (c) Material change in any of the circumstances relied upon by the commission or department in granting the variance; or
- (d) A material change or absence of any of the circumstances set forth in subsection (1)(a) to (d) of this section.

(5) The procedure for denial, modification, or revocation of a variance shall be the procedure for a contested case as provided in ORS chapter 183. [1977 c.511 §2]

alternative (the preferred route) exists that would avoid those impacts. Moreover, EFSC possibly would not grant a variance from the ODEQ Noise Rules for these exceedances, both because of the sheer number of likely exceedances and because an alternative location with many fewer exceedances exists. See OAR 345-035-0100(1) (standard for a granting a variance). It is highly unlikely that Idaho Power could obtain a site certificate from the State of Oregon for the I-84 and 230-kV routes, and therefore, the routes are not reasonable alternatives. See Headwaters, Inc., 914 F.2d at 1180-81. ³

In the case of Union County, for example, there was a route that was approved by the Bureau of Land Management (BLM) and other federal agencies that would have avoided nearly all 63 NSRs, a tranquil park and protected areas⁴. However in the timeframe from 2015 to the final ASC this route was abandoned resulting in 36 NSRs (the Mill Creek preferred route) and 19 NSRs (the Morgan Lake Alternative.)⁵ And since the PO was issued there are more.⁶

IPC's choice of proposing routes for the B2H transmission line is not a condition "outside" their control. IPC's choice of proposed alignments, causing so many noise impacts to so many residents, is in fact a condition *entirely within* their control.

"(b) Special circumstances render strict compliance unreasonable, unduly burdensome or impractical due to special physical conditions or cause"

Similar to above, there are other routes that were studied and that were not considered unreasonable, unduly burdensome or impractical, since the federal agencies preferred and approved them.⁷ However, given that the Council cannot recommend one of the alternatives, it is incumbent upon them to make the binary choice of compliance or non-compliance. It is clear that IPC's request for a variance does not meet the compliance standard.

"(c) Strict compliance would result in substantial curtailment or closing down of a business, plant or operation"

Whether or not the B2H transmission line is built will not result in substantial curtailment or closing down of Idaho Power or their business. The guaranteed profit to shareholders of the private company is the only thing that could be curtailed. The statute has clearly nothing to do with protection of shareholders.

"(d) No other alternative facility or method of operating is yet available."

There are numerous alternative facilities and methods for meeting the perceived future needs of Idaho Power. And these are available today, some of which Idaho Power is in the process of procuring.⁸ These are well-documented by the multiple portfolios considered in the Oregon

³ Exhibit #3, Colburn Memo, page 7.

⁴ ODOE - B2HAPPDoc3-37 ASC 20_Exhibit T_Recreation_ASC 2018-09-28. Page 30 of 291 through ODOE - B2HAPPDoc3-37 ASC 20_Exhibit T_Recreation_ASC 2018-09-28. Page 35 of 291.

⁵ ODOE - B2HAPPDoc3-41 ASC 24_Exhibit X_Noise_ASC 2018-09-28. Page 264 of 371 through ODOE - B2HAPPDoc3-41 ASC 24_Exhibit X_Noise_ASC 2018-09-28. Page 268 of 371. And, ODOE - B2HAPPDoc3-41 ASC 24_Exhibit X_Noise_ASC 2018-09-28. Page 351 of 371 through ODOE - B2HAPPDoc3-41 ASC 24_Exhibit X_Noise_ASC 2018-09-28. Page 355 of 371.

⁶ ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02. Page 9803 to 9805 of 10016.

⁷ ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02. Page 19 of 10016

⁸ Exhibit # 4, Declaration, Fact Witness, Jim Kreider.

Public Utilities Commission (OPUC) processes. There are also alternative methods that the IPC is already in the process of pursuing. These alternatives do not include the B2H transmission line. Exhibit# 4 describes these alternative facilities and methods that are available.

Q: Can EQC delegate its authority to grant a Variance?

A: Yes. In (2) the law states:

"(2) The commission by rule may delegate to the Department of Environmental Quality, on such conditions as the commission may find appropriate, the power to grant variances and to make the finding required by subsection (1) of this section to justify any such variance."

The authority for determining to allow a variance is by statute the sole decision of the Environmental Quality Commission. However, as noted, the EQC may delegate certain conditions and powers to the Oregon Department of Environmental Quality (DEQ). This has been affirmed by John Hector, former DEQ Noise Control Manager in a memo incorporated in the report of noise expert and consultant, Kerrie Standlee. 11

Q: Why does that matter?

A: The DEQ has adopted implementing administrative rules and a standards manual.¹² Those Rules are also designed to *protect* the public health, safety and welfare of the citizens of Oregon, not allow exceptions to harm them.¹³

Q: Why isn't DEQ involved then here, where IPC has sought a Variance?

A: In 1991, the Oregon Legislature withdrew funding for the DEQ noise program but did not specifically delegate the authorities elsewhere.

Q: Who is applying the Variance criteria then?

A: To their credit, the Oregon Department of Energy and the Energy Facilities Siting Council, in their review of site certificate applications have been attempting to apply, ORS Chapter 467 and OAR Chapter 340 Division 35 to their decision making.

Q: Doesn't that solve the problem?

A: No. There is nowhere in "Suspension of the Commission and Department Responsibilities" ORS 340-035-0110, that specifically allows an agency other than DEQ (e.g.: ODOE/EFSC) to change, misinterpret, or modify, the statute, rules, or standards, in the application of the state's

⁹ ORS 467.040

¹⁰ ORS 467.060 (2)

¹¹ Exhibit #5, Report to the Stop B2H Coalition

¹² OAR 340-035-0005 through -0110

¹³ See Exhibit #5

noise protections. To change or modify the rules, there needs to be a formal rulemaking process; and to change a statute, it must go to the Legislative Assembly.

The Oregon Department of Energy in their analysis and review of the ASC and Proposed Order are taking extreme liberties in interpreting the statute and the rules. ODOE is also redesigning the rules and methodology that is embedded in DEQ's administrative rule and standards manual. ODOE appears to STOP to be doing so on the basis of the developer's self-serving request and interests--and not the interests of the public health, safety and welfare of the people of Oregon per ORS 467.

Q: Doesn't the Council have the ability to authorize ODOE to apply the statute and the DEQ Rules?

A: No. "The Council cannot waive any applicable state statute." ¹⁴

The Oregon Environmental Quality Commission continues to be responsible absent legislative action to modify rules. The DEQ/EQC continues, on an on-going basis, to update their rules OAR 340-035-0035 and NPCS-1 Sound Measurement Procedures Manual¹⁵. This, in and of itself, shows they continue to act on their responsibility regarding these rules.

Nonetheless, the ODOE has not consulted with the EQC on this matter in this site certificate review. Instead, ODOE, which generally insists on their "standards-based approach," disregarded the DEQ procedures and acquiesced to a methodology for determining ambient background noise, created and designed by the developer's consultants based on the request of the developer and not in the interest of the people.¹⁶

Q: Did anyone bring this problem to ODOE/EFSC's attention?

A: Yes.

STOP commented extensively in the DPO comment period about noise¹⁷ and specifically about the recommendations of noise consultant, Golder.¹⁸ The review of Standlee, another consultant, was also introduced into the Record in the PO.¹⁹ Another one of Standlee's letters states clearly that they needed more information to render advice about Monitoring Positions.²⁰ He reiterates that in his report, Exhibit #5. Thereafter, IPC and ODOE no longer utilized these consultant's

¹⁴ OAR 345-022-0000(b).

¹⁵ DEQ 23-2018, 24-2017, 14-2017.

¹⁶ ODOE - B2HAPPDoc3-41 ASC 24_Exhibit X_Noise_ASC 2018-09-28. Page 309-310 of 371.

¹⁷ ODOE - B2HAPPDoc5-1 All DPO Comments Combined-Rec'd 2019-05-22 to 08-22. Page 5585 to 5599 of 6396, including attachment 4.1 and 4.2.

¹⁸ ODOE - B2HAPPDoc5-1 All DPO Comments Combined-Rec'd 2019-05-22 to 08-22. Page 5594 to 5597 of 6396. ODOE - B2HAPPDoc9 ApASC Golder Noise Memo 1788390_B2H_Exhibit X 2017-12-19. Page 1 to 3 of 3.

¹⁹ ODOE - B2HAPPDoc89 B2H pASC memo addressing the ambient noise level data 2014-05-14 B2H-0332. Page 1 of 3.

²⁰ ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02. Page 8396 to 8397 of 10016

services.²¹ While it is the developer and ODOE prerogative to consult with whomever they chose, not including the EQC is counter legislative and administrative intent.

Q: What did STOP do to try to address this problem?

A: STOP hired consultant Standlee to do more analysis and monitoring. His report is attached as Exhibit #5.

Q: Is there another section of the Variance law that may in theory apply here?

A: Yes. In subsection (3), it states:

"(3) In determining whether or not a variance shall be granted, the commission or the department shall consider the equities involved and the advantages and disadvantages to residents and to the person conducting the activity for which the variance is sought."

General statements regarding supposed benefits to the public at large are not considerations that are listed in the statute. It is hard to understand what alleged benefits to local residents might exist here.

In reality there are no advantages for residents and this apparent from the number of DPO commenters²² opposed to the project as well as contested case petitioners under the "noise control" standard. At the very least, an evaluation of the advantages and disadvantages to the public health, safety and welfare must be conducted before a variance, exemption or site certificate is granted.

Numerous studies and professional literature, in particular about public health,²³ bring into question the necessity of this analysis. Analysis on public safety and public welfare, such as electrocution risk for farmers²⁴ and firefighters (de-energizing lines) needs further analysis.

In addition as Exhibit #5 describes and the evidence brought under issue NC-3, there clearly is not enough verified information about corona noise impacts from which a decision can be made due to the number of impacted residents.

Q: What about the OARs that are part of this case issue NC-2?

A: Within the governing rules of the Noise Control Standard, OAR 340-035-0035, Sections (5) exemptions and (6) exceptions, apply. More specifically, as used by the developer and the Department, sub-section (6) (a) "Unusual and/or infrequent events" as well as Rule 340-035-

²¹ Exhibit #6, Email exchange.

²² ODOE - B2HAPPDoc5 DPO Comment Index Spreadsheet 2019-11-12. Page 1-7 of 7.

²³ ODOE - B2HAPPDoc5-1 All DPO Comments Combined-Rec'd 2019-05-22 to 08-22. Page 3282 through 3293 of 6396. Exhibit #7, Exhibit #8, and Exhibit #9.

²⁴ ODOE - B2HAPPDoc5-1 All DPO Comments Combined-Rec'd 2019-05-22 to 08-22. Page 1381 to 1384: Testimony, Jim Foss.

0010 "Exceptions," are addressed by expert witness Kerrie Standlee in his report to the Stop B2H Coalition.²⁵

STOP commented in the DPO about "unusual and infrequent events" and as Golder described there are more reasons for increased corona noise than climate and weather-related events.²⁶ The ASC does 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 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." ²⁷

The report also states that these would not be conditions outside the developer's control. 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."

In Standlee's report to STOP, he also addresses "unusual and infrequent events" as a criteria that is not applicable in this instance. He addresses relative humidity, fog, and early morning dew causing higher corona noise. In a letter from former DEQ noise control manager incorporated in the Standlee report, John Hector states that 48 days per year of exceedances (as predicted in the PO) would not have met their (the DEQ noise control divison) definition of "unusual or infrequent." Thus, he concluded, the basis for the exception request was flawed.

Weather-related events must not be disregarded as "infrequent." Even the Proposed Order in other locations include statements that are cognizant of climate change and the increase of weather-related events: "Extreme precipitation events are also expected to increase, resulting in an increased risk of flooding, runoff, soil erosion, landslides, and mass wasting events" Climate change will not reduce these extreme precipitation events. It will only increase them. Since the B2H is planned into perpetuity, the noise exceedances will only increase.

Given increasing climate change and weather-related events and 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."

Q: Does this conclude your testimony on NC2?

A: It concludes my factual statements about the statutes, rules and my gleaning of the ASC, DPO and PO; however, I'd like to add another point that simply defies common logic. That is, the

²⁵ EXHIBIT #5.

ODOE - B2HAPPDoc5-1 All DPO Comments Combined-Rec'd 2019-05-22 to 08-22. Page 5594 to 5597 of 6396.
 ODOE - B2HAPPDoc9 ApASC Golder Noise Memo 1788390_B2H_Exhibit X 2017-12-19. Page 1 to 3 of 3.
 Ibid. EXHIBIT #5.

²⁸ ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02. Page 98 of 10016.

sheer volume of missing information due to monitoring irregularities.

The number of NSRs not evaluated should cause a pause in any determination of variance or exception. This will become more apparent in my testimony on NC-3, methodology, and upon review of the Standlee Report in Exhibit #5. In particular, the monitoring point 11 (MP 11) needs to be re-evaluated. This MP contains 63 NSRs. There are 132 total NSRs identified within a half mile. So, nearly half of the NSRs have suspect baseline measurements.

As mentioned in STOP's DPO comments under Noise Notification²⁹ (and in testimony under NC-1), only NSRs within a ½ mi from the line corridor (with the exception of 6 NSRs that are 1 mi from the line) were monitored; and only 17 (13%) were actually monitored per the rules and the NPCS-1 Manual. As stated in the second amended project order (see Section II.B. *Project Order*), the applicant must assess potential impacts beyond the analysis area if non-compliant noise impacts from facility operation are predicted.³⁰

In the DPO, 36 noise receptor exceedances were predicted and the ODOE recommended an exception. In the PO there are now 41 noise exceedances predicted³¹ and STOP believes there are still more, especially given the problems with the MPs, described in my testimony under NC-3, methodology.

Rather than contend with the volume of these noise exceedances, and making determinations about which ones could be granted an exception, ODOE is recommending a complete variance as well as an exception to raise the maximum exceedance level 10 dBA higher! In other words, the developer cannot comply!

The project is demonstrably non-compliant with statutes, rules and the public interest; nor does it *protect* the public health, safety and welfare of the people of eastern Oregon, per ORS 467. The variance and exemption/exception must be denied.

I hereby declare that the above statements are true to the best of my knowledge and belief, and that I understand they are made for use as evidence in administrative and court proceedings and are subject to penalty for perjury.

Dated this 17th day of September, 2021.

/s/ Fuji Kreider
Fuji Kreider

²⁹ ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02. Page 7677 of 10016.

³⁰ ODOE - B2HAPPDoc2-1 Proposed Order on ASC w Hyperlink Attachments 2019-07-02. Page 627 of 699

³¹ ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02. Page 9803-9805 of 10016.

EXHIBIT #4

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS STATE OF OREGON for the OREGON DEPARTMENT OF ENERGY

IN THE MATTER OF:	Declaration of JimFact Witness on N	<i>'</i>
BOARDMAN TO HEMINGWAY)	
TRANSMISSION LINE) OAH Case No. 201	9-ABC-02833
)	

My name is Jim Kreider, Co-Chair of the STOP B2H Coalition. I was the lead intervener for the Stop B2H Coalition (STOP) at the Oregon and Idaho Public Utility Commissions for the Idaho Power Company (IPC) Integrated Resource Planning (IRP) dockets since 2015 and have continued to be for the 2021 IRP. I was also STOP's lead intervener in PacifiCorp's (PAC) IRP dockets before the Oregon PUC since 2017 and will be for 2021.

Having participated in these dockets qualifies me as a fact witness to comment on NC-2 regarding the ODOE's recommendation granting a variance/exception from the ODEQ's Noise Rules. Specially, I have been asked to comment on the inconsistency with ORS 467.060 1(d): "No other alternative facility or method of operating is yet available."

Idaho Power's need for additional resources, referred to as "need" in the Integrated Resource Plan (IRP) was in a large part created by Idaho Power's early exit of Jim Bridger coal units 1 and 2 in Rock Springs, Wyoming. According to Idaho Power this created a need to fill 354 MW of energy. There are alternative facilities and methods of operating available to Idaho Power other than building a 300 mile 500 kV transmission line through eastern Oregon to fill this need.

1. Convert Jim Bridger Units 1-2 from coal to natural gas peakers (713 MW PAC 2/3 share [PAC IRP pdf p 323] and 354MW IPC 1/3 share)

Until very recently PacifiCorp the majority owner (2/3) and Idaho Power minority owner (1/3) of Jim Bridger units 1-4 were in negotiations to early retire units 1 and 2. Idaho Power had planned to exit their 1/3 share in Jim Bridger Units 1 and 2 on a schedule that was different from PacifiCorp's.

In PacifiCorp's 2021 IRP, announced on September 1, 2021, PAC said that it was going to begin the process of a coal-to-gas peaker conversion of Jim Bridger Units 1 and 2 in Rock Springs, Wyoming. [pdf p 20 2021 PAC IRP] Idaho Power's 2021 IRP is under development and they may choose to follow PacifiCorp's lead and maintain their 1/3 ownership share. IPC said they need B2H to replace the loss of the coal generated energy.

IPC is planning to build a 300 MW gas plant in 2031[Page 148 Second Amended 2019 IRP] within their 100% clean energy by 2045 plan. Therefore it could be assumed they will no longer exit these units early, the energy deficit will not materialize as anticipated, thus establishing a clear alternative to B2H.

2. Additional cost effective renewable energy can be added to Idaho Power's resource mix at a rate greater than is planned to reduce the energy deficiency they assert they will have in 2026 thus justifying the need for B2H.

The Idaho Public Utility Commission in reviewing Idaho Power's <u>Application for the Power Purchase Sales Agreement with Jackpot Holdings, LLC, case number IPC-E-19-14</u>, determined that a 20 year Power Purchase Agreement (PPA) for 120 MW of solar energy was less expensive than purchasing energy from the Mid-C trading Hub. The Mid-C trading Hub is the market the B2H would buy energy from. Therefore, purchasing renewable energy in Idaho, closer to load, is more economical for the rate payer than purchasing it from the Mid-C trading hub. A review of renewable energy projects being developed in Idaho, at the <u>Renewable Northwest web site</u>, shows 1,263.1 MW in queue. More than enough to meet Idaho Power's energy needs into the future.

3. Reconductor and upgrade the three 230 KV transmission lines on PATH 14 to larger, 345 kV lines, creating an additional 345 MW of capacity, in the same right of way.

There are three 230 kV lines that can be reconductored to 345 kV lines thereby creating 345 MW of additional capacity.

4. Upgrade/Build new sub stations as they can create new capacity

In an 2020 application to build new transmission infrastructure on Path 14 (Northwest to Idaho) in Oregon Idaho Power requested and received permission from the Wallowa County Planning Commission to build a new substation stating that it will add 80 MW of capacity to PATH 14. Idaho Power also upgraded another substation on the Mid-Point to Valmy path that increased capacity by 80 MW. Other substations could be upgraded to create additional capacity to alleviate the need for B2H.

5. Acquisition of new transmission resources to other energy market hubs

In a <u>Security and Exchange Commission FORM 10-Q</u> filing for the quarterly period ended June 30, 2021 Idaho Power disclosed it entered into two new long term transmission purchase agreement outside of the IRP process. These resource acquisitions were not included in the most recently acknowledged IRP by the Idaho or Oregon PUC's so are not credited towards reducing the asserted energy need. The additional capacity acquisition amount has therefore not been disclosed publically, nor in the IRP process to date.

I hereby declare that the above statements are true to the best of my knowledge and belief, and that I understand they are made for use as evidence in administrative and court proceedings and are subject to penalty for perjury.

Dated this 17th day of September, 2021.

/s/ Jim Kreider
Jim Kreider

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS STATE OF OREGON for the OREGON DEPARTMENT OF ENERGY

IN THE MATTER OF:

STOP B2H COALITION CLOSING ARGUMENT

BOARDMAN TO HEMINGWAY TRANSMISSION LINE

OAH Case No. 2019-ABC-02833

I. INTRODUCTION

Idaho Power Company's Application for Site Certificate in the proposed Boardman to Hemingway project suffers from numerous defects. With regard to issues around noise control; scenic resource analysis methodology; and, soil protection, Idaho Power has failed to meet its burden of proof for each of the reasons set forth herein.

The issues addressed in this Closing Argument on behalf of STOP are NC-1, NC-2, NC-3, NC-4, and SR-7. In an effort to avoid duplicative effort and briefing, STOP will adopt the closing arguments of co-petitioner Dr. Suzanne Fouty on the Soil Protection issue for which STOP also has standing (SP-1).

II. Standard of Review and Burden of Proof

Oregon's Administrative Procedures Act directs that an Order in a Contested Case be issued "only as supported by, and in accordance with, reliable, probative and substantive evidence." ORS 183.450(5). Agency decisions must "be rational, principled, and fair, rather than ad hoc and arbitrary." Gordon v. Bd. of Parole & Post Prison Supervision, 343 Or 618, 633 (2007) (describing that notion as one "embodied in the APA"). The Oregon Court of Appeals

interpreted ORS 183.450(5) as prescribing the preponderance of evidence standard of proof in contested cases. *See*, *e.g.*, *Gallant v. Bd. Of Medical Examiners*, 159 Or App 175, 180 (1999).

In issuing a Decision, ODOE must follow its rules, and the rules of other Agencies. *Smith v. Veterinary Medical Examining Board*, 175 Or. App. 319, 327, *rev. den.* 332 Or 632 (2001) ("An agency must comply with the statutes that govern it **and follow its own rules**")(emphasis added). *See also, Peek v. Thompson*, 160 Or App 260, 264-265, *rev. dismissed* 329 Or 553 (1999)("It is, of course, axiomatic that an agency must follow its own rules." and *Pena v. Traveleers Ins. Co. (In Re Pena)*, 294 Or App 740, 745 (2018), *rev. den.* 364 Or 723 (2019) ("[W]here an agency has enacted a specific and mandatory rule governing what evidence is considered, it must follow that rule.")

The relevant statutes do not clearly allocate burden. While ORS 183.450(2) provides that "[t]he burden of presenting evidence to support a fact or position in a contested case rests on the proponent of the fact or position," ALJ Greene-Webster recognized that this is not entirely helpful in this particular context, and provided an analysis on this issue in her Ruling and Order on Idaho Power Company's Motion to Dismiss Issues FW-5, HCA-6, LU-4, LU-7, LU-8, PS-1, PS-5, SS-1, and SS-2 dated November 2, 2021. Judge Webster noted, in part, that "Idaho Power maintains the burden to show, by a preponderance of the evidence, that the proposed facility complies with the Council's siting standards and other pertinent rules, the limited parties with standing on a particular issue bear the burden of producing evidence to establish their respective claims with regard to the issue." *Id* at 3.

STOP has produced evidence sufficient to establish its claims with regard to each of its issues. Consequently, the burden is on Idaho Power Company (IPC) to persuasively rebut all of

that evidence and demonstrate that the proposed facility complies with the relevant standards and rules.

Said another way, to prevail, STOP does not have to prove the opposite of any of Oregon Department Of Energy's (ODOE's) findings or conclusions in its Final Order on the B2H project. *See Corcoran v. Board of Nursing*, 197 Or App 517, 533 n. 13 (2005) ("if the agency, which has the burden of proving misconduct, failed in that burden, why should we be concerned with whether a preponderance of the evidence in the record establish that, as a matter of historical fact, the licensee did not engage in such conduct.").

III. ARGUMENT

For each of the reasons set forth herein, the ALJ should reverse or, alternately, remand the Final Order to ODOE for further analysis and fact-finding following further submissions by Idaho Power to support its application for a site certificate.

- A. ODOE failed to comply with the statutes and rules relevant to issues NC-1, NC-2, NC-3, and NC-4 when it issued its final Order on IPC's Application for Site Certificate.
 - i. NC-1: The Department improperly modified/reduced the noise analysis area, and $OAR\ 345-021-0010(x)(E)$ requires notification to all owners of noise sensitive property within one mile of the site boundary

The second part of Issue NC-1, which asks whether the rule requires identification, is squarely answered by the rule. OAR 345-021-0010(x)(E) is unequivocal in requiring that the applicant include "[a] list of the names and addresses of all owners of noise sensitive property, as defined in OAR 340-035-0015, within one mile of the proposed site boundary." *Id.* (Emphasis added). The remaining questions are whether ODOE modified or reduced the area for identification or notification of noise-sensitive property owners; and if so, whether it was appropriate to do so.

ODOE did not provide testimony on this issue, instead pointing back to the Proposed Order, the Application for Site Certificate, and the Second Amended Project Order. ODOE did not provide any context or explanation for why those documents allegedly support its position.

Idaho Power did provide brief testimony on this issue. Mr. Bastasch agreed that the Second Amended Project Order did modify the identification area from one mile, to one-half mile of the proposed site boundary. Thus, there is no dispute as to whether the analysis area was reduced.

The remaining question is whether ODOE's decision to reduce that area was lawful and appropriate. It was not.

ODOE has not justified its Decision to reduce the area for identifying owners of noise-sensitive property. Instead, the best evidence in the Record for why this was allowed, appears to be because the project is very large or lengthy.² On its face, this is a self-serving modification that does little more than reduce the number of property owners who IPC identifies, that could be potentially affected by this project, and as a result potentially leaves those additional property owners without notice.

The Rule requirement is mandatory ("must identify"). On the face of the Rule, there is no discretionary language for modification for any purpose, let alone when a project happens to be very long. ODOE has provided no justification and no context for its Decision to arbitrarily and unlawfully reduce the area for identification of property owners under this Rule.

² "All paragraphs apply. However, because of the linear nature of the proposed facility, the requirements of

¹ See Bastasch Rebuttal Testimony at pp. 6-7.

ODOE's modification of this clear requirement is arbitrary, *ad hoc*, and contrary to the law. *Gordon, supra*. While legally ODOE *may* have had the authority to modify this requirement *if* it engaged in a full rulemaking process to potentially create an exception, ODOE conducted no such rulemaking.³ The Rule modification was on its face unlawful, and there is no evidence in the Record (much less sufficient evidence) to support a modification of this Rule as written.

ODOE has improperly modified the identification area boundary, and its action in doing so tainted the entire proceeding. It violates the due process rights created by the Rule, and it harms the interests of all members of the public – who are entitled to have the agency follow the law, not unlawfully change it. Validly promulgated rules have the force of law. *Haskins v. Employment Dept.*, 156 Or App 285, 288 (1998); *See also*, *Smith v. Veterinary Medical Examining Board*, *supra*; *Peek v. Thompson, supra*.

ii. NC-2: The Department erred in recommending that Council grant a variance/exception from the Oregon DEQ's Noise Rules, OAR 340-035-0035, and the variance/exception is inconsistent with ORS 467.010

Issue NC-2 consists of two sub-issues that are closely related. First, whether ODOE improperly recommended the variance/exception to the Department of Environmental Quality's (DEQ's) noise rules; and, second, whether that variance is inconsistent with ORS 467.010. Here, the second part disposes of the first. Since the variance is inconsistent with state law, ODOE violated the Oregon APA when it granted the variance.

On issue NC-2, witnesses for ODOE and IPC provided substantive testimony, as did Fuji Kreider and Kerrie Standlee on behalf of STOP B2H Coalition. For its part on the variance, IPC

³ See, e.g., Burke v. Pub. Welfare Div., 31 Or App 161, 165 (1977)("the interpretive amplification or refinement of an existing rule is a new exercise of agency discretion and must be promulgated as a rule under the APA to be valid") See also, Brown v. Parks and Rec. Dept., 296 Or App 886, 892 (2019) quoting Smith v. TRCI, 259 Or App 11, 25 (2013)("If a rule 'is susceptible to reasonable interpretations other than [that given by the agency]' in purporting to apply it, then it has been amplified and refined")(modifications in original).

noted (with regard to the Morgan Lake Alternative) simply that it "is unable to avoid potential noise exceedances at NSR⁴-119, -212, and -125." In reality, IPC is unable to avoid potential exceedances at 41 NSRs.⁶ In any case, that explanation is insufficient to justify a variance under ORS 467.060. The fact that an applicant cannot meet the requirements of a Rule is a basis for denying an application, not a basis for creating or granting an exception to the Rule.

The proposed variance grants IPC the right to maintain an unacceptable intrusion of noise emissions, which the legislature found to be "as much a threat to the environmental quality of life in this state... as is pollution of the air and waters of the state." ORS 467.010. These rules must be strictly followed. The only exception is when the expert agency on the matter, which has specific authority to do so finds (for the reasons outlined in ORS 467.060) that an exception or variance is appropriate. John Hector, former DEQ noise control program manager (and author of the manual at issue) characterized the noise exceedance of "four (4) times louder than as the preexisting level of sound." from the proposed B2H facility as "a major impact."

As a matter of law, ODOE cannot contravene the plain language of the statutes by which it is bound. As with NC-1, STOP does not argue that ODOE (or the Energy Facility Siting Council – EFSC) do not have authority to engage in rulemaking when either or both of them seeks to change *their own rules*., Here the issue concerns a DEQ regulation and a statute.

ODOE/EFSC has no authority to change either.

⁴ NSR is a frequently used abbreviation for Noise Sensitive Receptor.

⁵ IDAHO POWER – Rebuttal Testimony of Joseph Stippel at p. 14.

⁶ *Id* at 7 ODOE - B2HAPPDoc2-1 Proposed Order on ASC w Hyperlink Attachments 2019-07-02 p. 650. ("The applicant identified 132 NSR locations, or points, within the analysis area to evaluate proposed facility compliance with the standard; of the 132 NSR locations, 41 NSR locations resulted in a predicted exceedance.")(modification in original).

⁷ STOP B2H Exhibit 5 to direct testimony, p. 4.

ODOE argues that because "ORS 469.310 provides that the purpose of the energy facility siting statutes is to create 'a comprehensive system for the siting, monitoring, and regulating of the location, construction and operation of all energy facilities in the state," EFSC has "comprehensive authority" sufficient to grant a variance pursuant to another agency's rules. 8 The aspirational, introductory policy statement contained in ORS 469.310 can hardly be sufficiently specific to grant the extraordinary authority to ODOE to override the specific statutory authority granted to a completely different agency or entity (the Environmental Quality Commission -EQC) by ORS 467.060 regarding variances to DEQ rules and standards, and who may grant them (EQC). See ORS 467.060(1)-(2). ODOE/EFSC cannot usurp a power which belongs solely to the EQC, merely because of an aspirational, non-specific policy statement created by a different agency's enabling authority chapter. Don't Waste Oregon Com. v. Energy Facility Citing, 320 Or. 132, 142 (1994) (explaining that, where an agency has interpreted one of its own rules, courts will defer to that agency's interpretation as long as it is plausible); See also, Chevron v. NRDC, 467 U.S. 837, 844-45 (1984) (Holding in the federal context that an agency is entitled to deference when it interprets a statute that it administers); and New Jersey Air Nat'l Guard v. FLRA, 677 F.2d 276, 281-82 n. 6 (3rd Cir 1982), cert. den. 459 U.S. 988 (1982)(Holding, in the federal context, that an agency is **not** entitled to deference when interpreting a statute administered by another agency).

ODOE further argues that an exception to DEQ noise standards is warranted because exceedances would be unusual or infrequent.⁹ Foul weather is neither 'infrequent' nor 'unusual' in the region. John Hector, former DEQ noise control program manager noted that the 48 days-

⁸ ODOE Response to Direct Evidence and Testimony at p. 61.

⁹ ODOE – B2HAPP Doc2 Proposed Order on ASC and Attachments 2019-07-02 at p. 652.

per-year of exceedances predicted by ODOE "does not meet the criteria of unusual or infrequent." ODOE/EFSC are not within their discretion to make this kind of decision on behalf of DEQ/EQC under DEQ regulations, and ODOE has exceeded its authority by recommending the variance in this case.

Alternately, even *if* EFSC *could hypothetically* grant a variance in the same manner that EQC has statutory authority to do, IPC's methodology on noise analysis is fatally flawed (as explained at length below), thereby making the variance improper. IPC's Application for Site Certificate plainly acknowledges that requiring compliance with DEQ's noise standards would make the project "unpermittable," [sic]. However, for the reasons discussed in the sections that follow, that circumstance does not fit any of the four permissible reasons for a variance listed in ORS 467.060(1)(a)-(d). Thus, even if authority existed (which it does not) for EFSC to grant a variance (one that only the EQC can by statute grant) doing so would still be legally improper.

First, there is no evidence in the Record that strict compliance is inappropriate because "conditions exist that are *beyond the control* of the persons applying for the variance." ORS 467.060(1)(a)(emphasis added). STOP B2H Coalition provided comments on this issue during the DPO phase, and as ODOE's consultant described, there are more reasons for increased corona noise than climate and weather-related events.¹²

Next, there is no evidence that strict compliance is inappropriate because "special circumstances render strict compliance unreasonable, unduly burdensome, or impractical due to special physical conditions or cause." ORS 467.060(1)(b). The noise control statutes are meant to

¹¹ ODOE - B2HAPPDoc3-41 ASC 24 Exhibit X Noise ASC 2018-09-28 p. 5.

¹⁰ STOP Direct Exhibit #5 at p. 13.

¹² ODOE - B2HAPPDoc5-1 All DPO Comments Combined-Rec'd 2019-05-22 to 08-22 pp. 5594-5597.

preserve what little is left of quiet places. The only conditions beyond IPC's control, or special physical conditions, are those that are borne from the circumstances meant to be preserved by the statute, and those which are inevitable in siting powerline projects.

If the DEQ regulations are meant to have any meaningful authority, they cannot be circumvented simply because the power line, by the power company's own design choices, will exceed noise regulations. IPC cannot be allowed to circumvent noise regulations simply because it does not **want** to meet those regulations. ORS 467.060(1)(c) does not apply, and there is no evidence in the Record that strict compliance would result in any impact to any business, plant, or operation.

Finally, ORS 467.060(1)(d) is not satisfied either. Jim Kreider provided testimony to the effect that IPC's current needs are met, and future needs can be met through multiple avenues, some of which IPC is already in the process of procuring.¹³

Since none of the statutorily authorized criteria for a variance are met, no variance can or should be granted. For each of the above-stated reasons, ODOE must re-analyze this application without the proposed variance.

iii. NC-3: The methodologies used for the noise analysis were not appropriate, and, ODOE erred in approving the methodology used to evaluate compliance with OAR 340-035-0035.

Issue NC-3 gets to the heart of noise compliance issues facing the proposed B2H Project. This question involves application of OAR 345-035-0035, OAR 345-035-0015, and ORS 467.010-467.030. The question is fundamentally about whether the methodology was appropriate for determining impacts to public health, safety, or welfare.

2

¹³ See generally, STOP Exhibit 4, Testimony of Jim Kreider.

STOP commented extensively in the DPO phase about noise, and about the recommendations of IPC's noise consultant.¹⁴ Eventually, Kerrie Standlee independently (if briefly) monitored baseline noise recordings to see if an NSR in the Morgan Lake alternative area would yield similar results to IPC's baseline noise studies.¹⁵ Mr. Standlee also reviewed rebuttal testimony, provided sur-rebuttal testimony, and was questioned on cross examination.

For its part, IPC retained Mr. Mark Bastasch to discuss his noise monitoring and analysis methods. IPC developed its own method for analyzing noise impacts along the proposed B2H line, calling it "The B2H Baseline Sound Monitoring Protocol." This methodology prioritized averaging noise levels, and 'representative' sound monitoring positions, which would ideally set an accurate baseline for general use in determining sound impacts. While that sounds lofty, in reality this methodology resulted in a skewed baseline, allowing unacceptable impacts to noise sensitive properties.

STOP consistently questioned this methodology. It is clear that it would only be protective if the measurements were taken and applied conservatively. On the flip-side of that, was Monitoring Point 11, which represents nearly half of all NSRs along the project's proposed path. As an initial matter, ODOE never actually approved of any of the monitoring points (MPs) as appropriate for determining a baseline for background sound levels.¹⁹

¹⁴ ODOE - B2HAPPDoc5-1 All DPO Comments Combined-Rec'd 2019-05-22 to 08-22 pp. 5585-5599 (including attachments 4.1 and 4.2).

¹⁵ STOP Direct Exhibit #5, Standlee Report.

¹⁶ B2HAPPDoc3-41 ASC 24 Exhibit X Noise ASC 2018-09-28 p. 70.

¹⁷ ODOE - B2HAPPDoc3-41 ASC 24 Exhibit X Noise ASC 2018-09-28 p. 222.

¹⁸ STOP Surrebuttal Exhibit A at p. 8-9.

¹⁹ ODOE - B2HAPPDoc3-41 ASC 24 Exhibit X Noise ASC 2018-09-28. p. 309.

a. MP 11 is not representative of the relevant NSRs

MP 11's proximity to I-84, Highway 30, and frequent Union Pacific train service makes its use as a "representative" monitoring point dubious at best.²⁰ Further, examination of the tables provided by IPC demonstrating baseline noise levels by County shows that IPC's proposed Union County baseline is significantly 'louder' than those in Malheur, Baker, or Umatilla Counties - which are just as rural as the Morgan Lake NSRs which MP 11 purports to represent.²¹ A truly conservative approach would use the same lower baseline for this Morgan Lake area, as those applied to the other rural Counties.

STOP, seeking to evaluate the baseline studies and MP representativeness (or not) of NSRs along the proposed B2H route, particularly at MP 11, hired Mr. Standlee to conduct further monitoring in the limited time available before testimony was to be filed.²² Mr. Standlee's report—included as an exhibit to Ms. Kreider's direct testimony on this issue—presents the measurements from the evening of September 12, 2021 at a residence near Morgan Lake. *See Id* at p. 4, Table 1. The observations provided show noise levels, on average, **far** below the 32 dBA level included by IPC in its application, and up to 12 dBA lower at times. *Id*.

In part, this could be because MP 11's noise baseline has a strong influence from frequent train service and close proximity to the rail line. According to Union Pacific, 25-35 trains pass MP 11 on average each day.²³

²⁰ ODOE - B2HAPPDoc3-41 ASC 24_Exhibit X_Noise_ASC 2018-09-28 p. 160.

²¹ ODOE - B2HAPPDoc3-41 ASC 24 Exhibit X Noise ASC 2018-09-28 pp. 24-25.

²² STOP Direct Exhibit #5.

²³ Cross Examination Hearing Transcript, Day 1, p. 152.

IPC and ODOE rely on their witnesses' assertions that MP 11 was in fact representative of the area.²⁴ To IPC's credit, it found concerns around MP 11's legitimacy sufficiently valid to conduct additional measurements at places IPC called MP 100, MP 101, and MP 102, which it then presented on rebuttal.²⁵

Unfortunately, there were at least two problems with this later data collection. First, there was no concurrent data collected at MP 11, so that one can compare the MP 11 data to the data from MPs 100, 101, and 102 data to determine if they are representative of one another. That sort of comparison would be essential to determining whether MP 11 was, in fact, representative (or not). Second, the data collected by Mr. Bastasch was compromised, such that any hour for which fewer than 60 minutes were captured, that hour was eliminated from consideration.²⁶

Mr. Standlee reviewed that data, and noted that "[n]o discussion was provided regarding the effect of lost data at the various locations on the results of the noise measurements. That appears to me to be a major problem."²⁷ This kind of omission of data, without justification, explanation, or analysis illustrates the problems with IPC's noise analysis methodology. "Without such a discussion, the measured noise data from an ambient noise study is basically just that, measured noise data. It in no way has been qualified to be representative of the ambient noise levels that should be used to assess impacts caused by a potential future noise source."²⁸

20 - -

²⁴ IDAHO POWER – Rebuttal Testimony of Mark Bastasch p. 61; Written Rebuttal Testimony of Ken Kosky, and attachments 11/12/2021 pp. 10, 12.

²⁵ IDAHO POWER - Rebuttal Testimony of Mark Bastasch p. 64.

²⁶ *Id* at p. 69, n. 161: Exhibit J.

²⁷ STOP Surrebuttal, Standlee Report p. 5.

²⁸ *Id* at p. 6.

The end result is the failure on IPC's part to provide adequate proof that MP 11 is representative of the NSRs in the area. Mr. Standlee provided the following discussion in his surrebuttal report:

"Finally, it is my understanding that one of the reasons the additional noise measurements were being made was to help determine if the noise level data measured at MP 11 was representative of the noise levels that would be found at residences located along the Morgan Lake alternative route. Given that as the reason for the measurements, Mr. Bastasch should have discussed how the measurement conditions occurring at the measurement locations during the measurement period were similar or different from those at MP 11 during the 2012 noise measurements.

And, given that the question has been, "is there a difference in the ambient noise levels found at MP 11 and at residences located along the Morgan Lake alternative route", that question would have been more accurately answered if sound measurements had been made at MP 11 along with the measurements being made at any other locations of interest. That way, there would not have been a question as to whether the conditions present at the additional noise measurement locations were similar to those found at MP 11 during the 2012 measurements; especially as stated by Mr. Bastasch on page 62 of his testimony that, "the ambient sound level will vary even at the same location due to a myriad of factors." Having simultaneous measurements at MP 11 and any other locations allows some reduction in the number of the myriad of factors that could leave the representativeness of the data in question. Yet that does not appear to have been done here."²⁹

Mr. Standlee also set out to verify the averages, using the raw data provided by Mr. Bastasch, and he found some serious problems with Mr. Bastasch's calculations.³⁰ While Mr. Standlee's calculations of Mr. Bastasch's data resulted in similar outcomes, he found that Mr. Bastasch included noise data from times when average wind speeds exceeded 10mph, in violation of DEQ regulations - calling into question the validity of the methodology.³¹ The bottom line here, is that IPC's noise collection was imprecise and contrary to DEQ (and industry) standards. The complete data from the application was not provided, but when IPC set out to demonstrate the "validity" of that data by

²⁹ *Id* at pp. 6-7 (emphasis added).

³⁰ *Id* at p. 5.

³¹ OAR 340-035-0035 (DEQ Sound Measurement Procedures Manual at p. 7).

collecting new data, the complete data collected and provided to STOP was shown to be severely compromised. That makes IPC's methodology flawed, and inappropriate.

Much of the late-night data in Mr. Bastasch's supplemental monitoring project was eliminated due to equipment shut-offs, causing critical data from the quietest hours of the day to be removed from averaging. The lack of on-the-ground observations during monitoring leaves one evaluating the data after the fact and unable to make sense of spikes and valleys in noise levels.³² Finally, the large number of loud trains which pass MP 11 each day call into question the legitimacy of the noise levels in the face of the much lower noise readings from other, similarly-situated rural counties through which this project is proposed to pass.

b. Corona noise is caused by foul weather including (but not limited to) rain, humidity, fog, snow, and condensation at dew point.

Foul weather events are defined in the studies as a rain rate of 0.8 to 5.0 millimeters per hour.³³ Sometimes 90% humidity is also considered within this "foul weather" calculation.³⁴ However, it is undisputed that factors other than rain can create corona noise, namely: fog, snow, humidity, condensation at dew point.³⁵ Additionally, physical issues such as nicks, scrapes, construction or maintenance oil and dirt, and bird feces or other debris can lead to corona noise.³⁶

³² A critical piece of noise monitoring is concurrent on-the-ground observation. ("A part of any ambient noise study needs to include an explanation of the source of the sound causing the measured noise levels, especially when the location is far removed from typical man-made noise sources such as roads and railroads, and when the measured noise levels have such a drastic swing during late-night hours") Standlee Rebuttal p. 5.

³³ IDAHO POWER - Rebuttal Testimony of Mark Bastasch p. 27; ASC, Exhibit X, Section 3.4.5.2, Table X-6 (ODOE - B2HAPPDoc3-41 ASC 24 Exhibit X Noise ASC 2018-09-28 p. 28).

³⁴ IDAHO POWER - Rebuttal Testimony of Mark Bastasch, Table 1 pp. 67-68.

³⁵ Proposed Order at 628-629 (ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02 pp. 635-636).

³⁶ ODOE - B2HAPPDoc5-1 All DPO Comments Combined-Rec'd 2019-05-22 to 08-22 pp. 5594-5597; ODOE - B2HAPPDoc9 ApASC Golder Noise Memo 1788390 B2H Exhibit X 2017-12-19 pp. 1-3.

Corona noise can occur in conditions *under* 90% humidity.^{37, 38} "Foul weather" is estimated to occur 48 days a year or 13%.³⁹ Forty-eight days per year is not "infrequent" by any ordinary definition.⁴⁰

c. ODOE erred by approving the methodology presented by IPC in the ASC

ODOE's review process involves applying the facts to the relevant OARs, and concluding whether or not the applicant will, or will not comply with those standards. ODOE has discretion in interpreting its own rules, but when it interprets and applies another expert agency's rules, it should not be entitled to deference when determining whether, or to what extent, the rules administered by another agency apply. *See, e.g., New Jersey Air Nat'l Guard, supra*.

ODOE did not require IPC to use DEQ's NPSC-1 Noise Manual, because either IPC or ODOE apparently considered it "outdated."⁴¹

However, the Manual is current, and more importantly, it is valid law, incorporated into OAR 340-035-0035.⁴² Section 4.5.6 describes how to take ambient noise measurements.⁴³ Section 4.8.1-4.8.2 describe appropriate ways of measuring point source and line source noise emissions.⁴⁴ The question is whether the noise source is in, or out, of compliance at a given

³⁷ STOP direct testimony 9/17/2021, Exhibit #5 p. 5.

³⁸ Stop B2H Response to Objections 12-31-2021 p. 5 (noting audible corona noise along 230kV line at dew point).

³⁹ ODOE - B2HAPPDoc2-1 Proposed Order on ASC w Hyperlink Attachments 2019-07-02 p. 651.

⁴⁰ Exhibit #5, STOP Direct Testimony at p.2.

⁴¹ IDAHO POWER – Rebuttal Testimony of Mark Bastasch at p. 20-21; ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02 p. 7256.

⁴² See also, ODOE - B2HAPPDoc1-2 DEQ Noise Manual and Tables NPCS-1 - Added by ODOE OAR 340-035-0035.

⁴³ *Id* at p. 18.

⁴⁴ *Id* at 42, *see also*, *Id* at 18 (defining "line source" as a multiple source situation).

location along the line.

This, of course, depends on what constitutes an exceedance for a given property in the area of the noise source. An exception should only be granted as to particular NSRs where the facility is out of compliance, and where IPC can show that it meets the requirements for a variance/exception. ODOE interpreted the rule in this fashion early in the process,⁴⁵ but impermissibly changed its tack later in the process and created the proposed blanket variance applied in its Proposed Order. *Smith v. Veterinary Medical Examining Board*, *supra*. ODOE inappropriately approved the methodology used by IPC in analyzing noise impacts.

iv. NC-4: Neither the proposed mitigation, nor the proposed site conditions adequately protect the public health, safety, and welfare

Related to NC-3, but more a question of magnitude, NC-4 asks whether the mitigation or site conditions are sufficiently protective. This question can likely be disposed of on the facts and arguments above if the ALJ finds in STOP's favor on issue NC-3. However, STOP will provide more context around the five Noise Control Site Conditions proposed in the ASC.⁴⁶

NC-4 applies OAR 340-035-0035, OAR 345-029-000 *et seq*, and ORS 467.010 which require that site conditions provide "protection of the health, safety and welfare of Oregon citizens from the hazards and deterioration of the quality of life imposed by excessive noise emissions." As explained by Mr. Hector, the former DEQ noise control program manager, the variance sought by IPC (and inappropriately recommended by ODOE) is not of the kind granted

⁴⁵ See ODOE - B2HAPPDoc2-1 Proposed Order on ASC w Hyperlink Attachments 2019-07-02 p.650 (Draft Proposed Order utilizing site-specific analysis); *Cf* ODOE - B2HAPPDoc3-1 DPO Draft Proposed Order Hyperlink Attachments 2019-05-22 p. 561 (Proposed Order with "blanket" variance).

⁴⁶ See ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02. At pp. 746-49 (pp.42-45 in the Proposed Site conditions).

ordinarily by DEQ or CEQ.⁴⁷ If a cite certificate is ultimately granted, ODOE and/or EFSC must apply robust mitigation.

a. Condition 1: Pre-Construction NSR property owners

As discussed, ODOE impermissibly reduced the area required for identification of noise-sensitive property owners from one mile from the project boundary to one-half mile from the project boundary. This Condition is where that becomes a problem. Noise Control Condition 1 asks IPC to "work with the . . . property owners identified in Attachment X-5 of the Final Order . . . to develop mutually agreed upon Noise Exceedance Mitigation Plans, specific to each NSR location." This process should clearly set forth the Mitigation and Complaint process in the Final Order, so that noise-sensitive landowners are aware of the process and requirements for filing a complaint. As proposed, these noise control site conditions will apply to NSRs *in addition to* those listed in X-5.49 Consequently, it is imperative for landowners to know that *they are an NSR* and what to do if they need to report a noise compliance issue.

To be able to comply with this proposed condition, IPC must first provide a complete list of *all* NSRs–132 at a minimum–since the current list is outdated and has never correlated to the maps or lists in Attachments X-4, X-5 or X-7.⁵⁰ ORS 467.010 requires that any Decision, (including this "plan") will protect the public health, safety and welfare of Oregonians. There has

⁴⁷ STOP Direct Exhibit 5, pp.12-13.

⁴⁸ ODOE – B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02 at p.746.

⁴⁹ ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02. p. 653; and in Proposed NC Condition 2.

⁵⁰ STOP TESTIMONY OF FUJI KREIDER NC-1 p. 2, n. 7; PO, Exhibit X Attachments X-4: ODOE -B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02 p. 9803; ASC Attachment X-7: ODOE -B2HAPPDoc3-41 ASC 24_Exhibit X_Noise_ASC 2018-09-28 p. 333-335; Maps Attachment X-5: ODOE -B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02 p. 9812, map 14 and 15; Errata X-5: ODOE -B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02 p. 9860.

been no contact⁵¹ by the developer or ODOE to assess the potential impact to the health, safety and welfare of these forty-plus landowners and/or residents. Therefore, in the step of this "plan" when the certificate holder works with the NSR property owners identified in Attachment X-5, medical conditions and reasonable accommodation must be considered and permissible in any agreement(s).

IPC has recommended including its "window program"⁵² into the site conditions as a mitigation measure for NSRs where exceedances are predicted, as well as alternatives "such as performing air sealing, planting trees or installing insulation."⁵³ While these are welcomed ideas and suggestions for at least part of a given mitigation agreement, they should not be considered to be all-inclusive. These half-measures are merely suggested measures that the NSR landowner and IPC might consider in their negotiation. As noted above, this process must be done on a parcel-by-parcel basis. Additionally, if the Idaho Power recommendation⁵⁴ for "window treatment" or "retrofit" with new windows to improve sound insulation, makes its way into these site conditions, ODOE should assure that they are for NSRs with predicted (or actual) exceedances of 10 dBA or greater **before** the exception/variance is applied, and if an exceedance is predicted for *any* NSR it should be applied.

Condition NC1 does not have a plan for resolution if proposed sub-section b. occurs, that is: "If the certificate holder cannot reach an agreement with the NSR property owner..." There should be a list of optional next steps, "to include but not [be] limited to" purchase of noise

Page 18 – STOP B2H CLOSING ARGUMENT

 $^{^{51}}$ STOP NC-4 Direct testimony of Fuji Kreider, pp.2-3; Exhibits $\#1,\,12$ and 13.

⁵² IDAHO POWER - Rebuttal Testimony of Mark Bastasch pp.55-56.

⁵³ *Id* at p.56

⁵⁴ *Id* at pp. 53-56.

easement⁵⁵ or payments in lieu of other mitigations.⁵⁶ Again, given strong language in the statute for protecting Oregonians' health, safety and welfare, and the possibility of complete variance to the noise control rules and standards, this mitigation plan must be as robust as possible. As drafted today, Noise Control Condition 1 does not adequately protect potentially-impacted property, or the people who reside on those properties.

b. Noise Control Condition 2: Complaint Procedure and Response Plan

Idaho Power's proposed complaint and response procedure and plan is problematic

because it relies on a faulty baseline, as noted above regarding issue NC-3. This is further

exacerbated by the lack of site-specific ambient baseline measurements. Additionally,

landowners should not be burdened with the costs of monitoring to resolve complaints.

Landowners (at the very least) should be given notice of the specific kinds of monitoring

equipment IPC will find acceptable for monitoring for exceedances.

Under the Proposed Order's draft proposed NC Condition 2.c.iii., the Department recommends additional language: "...the complaint shall be verified through site specific sound monitoring conducted by the certificate holder a noise specialist, employed or contracted by the certificate holder, in accordance with NPCS-1 unless otherwise approved by the Department." Further, IPC suggests additional language: "The certificate holder shall use a contractor that is approved by ODOE and that shall be an Oregon registered Professional Engineer, Board Certified by the Institute of Noise Control Engineering." (Idaho Power's Response to Proposed

⁵⁵ ODOE Rebuttal Testimony, Declaration of Ken Kosky p.17.

⁵⁶ IDAHO POWER – Rebuttal Testimony, Mark Bastasch p.55.

⁵⁷ ODOE Rebuttal to Direct Testimony, Evidence and Response to Proposed Site Certificate Conditions p. 69.

Site Certificate Conditions (Nov. 12, 2021)).⁵⁸ STOP agrees that these are likely good additions to this Condition, but the 'noise specialist' must be acceptable to all parties, including the complainant. Considering the fact that this process is intended to resolve the matter, all parties must agree on the contractor as an initial step.

> c. Noise Control Condition 3: Design and Construction Techniques to limit corona noise during operations

The additional recommendations found largely in Mr. Bastasch's rebuttal testimony appear to represent additional measures IPC could take, to make Noise Control Condition 3 more acceptable. Mr. Bastasch suggested that IPC use materials that have been designed and tested specifically to minimize occurrence of corona sound during project operations, and larger conductors with subconductor spacing to limit audible noise and interference."59 Further, IPC should be required to use conductors that have a "non-specular" finish, which is a method of sandblasting to age the conductor artificially to make it less reflective. The sandblasting process also cleans the conductors of most of the manufacturing oils that would otherwise contribute to additional sound.60

The Noise Control Conditions, as presented so far, do not sufficiently protect public health, safety, and welfare, and both the Conditions, and the information used to set the Conditions, should be modified. IPC should take steps to ensure that on a property-by-property basis, it is in compliance with the noise control standards.

⁵⁸ IDAHO POWER - Rebuttal Testimony, Mark Bastasch p.48 n. 136.

⁵⁹ IDAHO POWER - Rebuttal Testimony, Mark Bastasch p 43.

⁶⁰ Id.

B. ODOE failed to comply with the statutes and rules relevant to issue SR-7 by approving IPC's methodology for determining the extent of adverse impacts from the proposed B2H Project on scenic resources, protected area, and recreation along the Oregon Trail.

IPC failed to incorporate an important aspect of "significance" into its methodology for determining the extent of adverse impacts to visual resources along the Oregon Trail (which it developed in-house) when it failed to incorporate constituent information and viewer perception into its determination of significance. ODOE failed to review IPC's methodology with sufficient depth⁶¹ to ensure it would be more than merely self-serving, creating significant problems with the methodology, and thereby, accepting the unsupported conclusions based on the applicant's analysis. Further, IPC's latest proposal for site conditions on SR-7 do not adequately address the issues raised herein.

a. IPC's methodology for scenic resource analysis was flawed, developed without peer review, and does not adequately protect from significant adverse impacts

OAR 345-022-0080 provides that "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 values⁶³ identified as significant or important..." OAR 345-001-0010(52) provides the relevant definition for "significance."

IPC's analysis methods do not sufficiently protect against the permanent, significant adverse impacts to important, irreplaceable visual resources along the National Historic Oregon Trail or near its National Historic Oregon Trail Interpretive Center (NHOTIC). The analysis did not include any constituent information to determine the impact on the affected human

⁶¹ Cross Examination Hearing Day 6 (Louise Kling) pp. 117-118 (acknowledging that IPC's in-house-developed methodology was not peer reviewed)

⁶³ Also applicable, OAR 345-022-0040 Protected Areas, lists the areas that should be protected including, (o) BLM areas of critical environmental concern, outstanding natural areas and research natural areas.

population. Table R-1-1⁶⁴ defines "on the affected human population" as "[t]he impact on the human population is measured in terms of the viewer's perception of impacts to valued scenic attributes of the landscape." In the methodology, viewer perception is derived from viewer characteristics: location (distance) viewers geometry (angles), and viewer duration or exposure⁶⁵—not how they experience change (as noted in the BLM methodology)⁶⁶ or the expectations, desires, preferences, acceptable levels of quality, behaviors and values (USFS 1994 SMS).⁶⁷

The experience of being "on the trails" and re-tracing the steps of the pioneers is not something measured by a stationary KOP. The human population was not studied to determine the "impact on the affected human population." Only the human viewpoints were considered, NOT how they feel or experience or how it affects them.

ODOE initially raised the issue of significance in 2016 with RAI #24,⁶⁸ requesting that the methodology incorporate the Council's definition of "significant" when drawing conclusions concerning visual impacts. Four years later, in the Proposed Order the Department is still pointing to EFSC's definition of "having an important consequence . . . based upon the magnitude and likelihood of the impact on the affected human population" citing the hundreds

⁶⁴ ODOE - B2HAPPDoc3-35 ASC 18_Exhibit R_Scenic Resources_ASC 2018-09-28 p. 144.

⁶⁵ IDAHO POWER – Rebuttal Testimony (Kling) p. 35

⁶⁶ IDAHO POWER – Rebuttal Exhibit C (Kling) pp. 4, 6

⁶⁷ IDAHO POWER – MSD Issues SR-1, SR-4, SR-5 & SR-6 Exhibit G, pp. 65-69.

⁶⁸ ODOE - B2HAPPDoc1-20.1 ApASC Exhibit R_Scenic Resources-Includes RAIs 2013-2016_2017-06-28 p. 5 (Noting that Exhibit R does "not consider the definition of 'significant' set forth in the Councils rules . . . when drawing its conclusions using the BLM/USFS methodologies," and instead relies on a "rating" system to support a significance finding.)

⁶⁹ ODOE – B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02 at p. 531.

of commenters during the DPO and public hearings who spoke about negative visual impacts.⁷⁰ The methodology created by Ms. Louise Kling, in conjunction with IPC attorneys⁷¹ is a self-serving piecemeal approach made up of portions of legitimate, comprehensive visual resource impact methodologies. However, because this applicant-created methodology is missing critical pieces, such as subjective viewer perceptions of the project's proposed impacts, it is hardly useful; it is inaccurate and misleading in its current form. The bottom line is that IPC removed (or ignored) key portions of the various methodologies it used, apparently because IPC felt those components would be unfavorable to IPC's project.

While no *particular* methodology may have been required, IPC was required to analyze the project's visual impacts and present those impacts accurately. IPC presented impacts on certain scenic, protected and recreational areas, not the impact on the viewers who would visit those areas. IPC's position that its methodology was "protective" should be given little weight in the face of IPC's clear interest in limiting its own costs in building this power line.

A regulated entity should not be permitted to interpret and reimagine regulatory methodologies- that should be the sole domain of the agency which promulgates those methodologies, and ODOE has not been appropriately attentive. As Ms. Kling noted, IPC did try to apply BLM methods of scenic resource analysis to non-forested areas, and the USFS methods of scenic resource analysis for forested areas.⁷² IPC was able to apply different methods to different areas, yet it provided no adequate justification for avoiding the use of the SMS on

⁷⁰ *Id*.

⁷¹ Cross Examination Hearing Transcript Day 6 (Louise Kling) at p. 68, lines 6-14.

⁷² *Id* at p. 50, lines 8-12.

forested lands. The only thing IPC points to is the assertion that no particular methodology is required by ODOE rules for visual impact analysis.

Further complicating its position, IPC appears to have used outdated methodology as the foundation for its own methodology. No specific, cohesive, complete scenic visual impact methodology was used. Idaho Power (IPC) in the ASC Exhibit R pages 7-8 refers to Attachment R-1 as a complete description of the methodology. However, throughout the ASC, and with ODOE approval, IPC also claims to have used select portions of various methods (most of them outdated), to yield desired conclusions of the project's less-than significant impact. This was done without applying the best practices applied today. For example, IPC directs readers to a methodology explained in Exhibit R, Attachment R-1 (the 1974 VMS)⁷⁴. However, IPC later insists they have used the most current methodology, which as a factual matter would be the 1995 SMS not the 1974 VMS.

IPC's methodology for visual impact assessment was not sufficient to meet the requirements of OAR 345-022-0080, or OAR 345-022-0040, given the definition of "significance" provided by OAR 345-001-0010(52).

b. IPC's newest proposed site conditions fail to address the concerns raised by STOP in this matter

IPC's analysis methods do not sufficiently protect against significant adverse impacts to irreplaceable visual resources along the National Historic Oregon Trail. Of particular significance are the scenic resources within and surrounding the National Historic Oregon Trail

⁷⁵ *Id. at* p.147 of 570 (under scenic); ODOE - B2HAPPDoc3-37 ASC 20_Exhibit T_Recreation_ASC 2018-09-28. Page 106 of 291 (under Recreation); and Discovery response to Lois Barry: DO question #8 p 11.

⁷³ ODOE - B2HAPPDoc3-35 ASC 18_Exhibit R_Scenic Resources_ASC 2018-09-28 pp.7-8.

⁷⁴ *Id*.

⁷⁶ ODOE - B2HAPPDoc3-35 ASC 18 Exhibit R Scenic Resources ASC 2018-09-28 p. 147.

Interpretive Center (NHOTIC). Under Section 2 in Protected Areas standard (345-022-0040), IPC should not be able to build the B2H in the protected area if another way to construct the project is available. While STOP has argued for years about alternatives to the project itself, for the purposes of this Site Condition recommendation, STOP responds with two exclusive mitigation measures for the NHOTIC, that is: avoidance or undergrounding. The legal and technical reasons supporting undergrounding are argued by Mr. Carbiener under issue SR-2.

STOP supports undergrounding the transmission line for 1.7 miles as a mitigation measure for non-compliance with SR-7. Cross examination of Dennis Johnson explains that this is a feasible technology.⁷⁷ Given that the NHOTIC scenic resource is iconic and meets the Council's definition of significant, the most robust mitigation is required, if avoidance (e.g.: moving the line) cannot be attained.

In describing the NHOTIC, the word and meaning of "significant" can't be overlooked. The "affected human population" at issue is significant. This is demonstrated by: (i) the annual attendance figures, (ii) the sheer number of people who testified at public meetings and hearings over the past decade with concerns over the viewscapes and visual resources, (iii) the continued concerns raised by Baker county's publicly elected officials and county commission, and (iv) the direct and indirect potential impacts to a significant component of Baker county's economic base (tourism at NHOTIC). Thus, this mitigation is imperative.

C. ODOE erred when it did not require IPC to analyze soil compaction, soil productivity, soil structure loss and infiltration, and loss of stored carbon in approving IPC's Application for Site Certificate, under Issue SP-1.

⁷⁷ Cross Examination Day 6 (Johnson) p. 18.

Stop B2H/100 Kreider/1010 Page 39

As noted, STOP B2H Coalition adopts co-petitioner Dr. Suzanne Fouty's argument on

Issue SP-1.

D. ALJ Webster erred by Ordering Issues FW-1, SR-6, N-1, N-2, and N-3 be dismissed in

summary determination.

In her July 29, 2021 Ruling and Order on Motions for Summary Determination of

Contested Case Issues N-1, N-2, and N-3; her August 5, 2021 Ruling and Order on Motions for

Summary Determination of Contested Case Issue FW-1; and, her July 26, 2021 Ruling and Order

on Motions for Summary Determination of Contested Case Issue SR-6, ALJ Webster held that

for each issue, there existed no issue of material fact, and that therefore Idaho Power Company

(and ODOE, as to N-2) was entitled to Summary Determination on those issues as a matter of

law. Having had no opportunity to respond to that Order, STOP does so here, for the purpose of

preserving that issue for Exceptions to the Final Order.

As outlined in each of STOP's briefs on Summary Determination, for each issue there

exist issues of material fact. And, even if there were no issues of material fact, ODOE and IPC

are not entitled to rulings in their favor as a matter of law. STOP will outline its position further

in its Exceptions to the Proposed Final Order in this case, depending on the extent to which these

issues are raised in the Proposed Final Order.

DATED: February 28, 2022

Respectfully Submitted,

|s| Karl G. Anuta

Karl G. Anuta

Law Office of Karl G. Anuta, PC

735 SW 1st Ave. 2nd Floor

Portland, OR 97204

(503) 827-0320

kga@integra.net

Mike J. Sargetakis
Law Office of Mike Sargetakis
735 SW First Ave, 2nd Floor
Portland, OR 97204
(971) 808-1495
<u>mike@sargetakis.com</u>
Attorneys for STOP B2H Coalition

CERTIFICATE OF MAILING

On February 28, 2022, I certify that I filed the foregoing CLOSING ARGUMENT with the Hearings Coordinator via electronic mail, and with each party entitled to service, as noted below.

/s/ Mike J. Sargetakis
Mike J. Sargetakis
Attorney for STOP B2H Coalition

By: Arrangement for hand delivery:

John C. Williams PO Box 1384 La Grande, OR 97850

By: Electronic Mail:

David Stanish Attorney at Law Idaho Power Company dstanish@idahopower.com

Lisa Rackner Attorney at Law Idaho Power Company lisa@mrg-law.com

Jocelyn Pease Idaho Power Company Attorney at Law jocelyn@mrg-law.com

Alisha Till alisha@mrg-law.com

Joseph Stippel
Agency Representative
Idaho Power Company
jstippel@idahopower.com

Kellen Tardaewether
Agency Representative
Kellen.tardaewether@oregon.gov

Sarah Esterson
Oregon Department of Energy
Sarah.Esterson@oregon.gov

Patrick Rowe Assistant Attorney General Patrick.g.rowe@doj.state.or.us

Jesse Ratcliffe Assistant Attorney General jesse.d.ratcliffe@doj.state.or.us

Jeffery R. Seeley jeff.seeley@doj.state.or.us

Mike Sargetakis Attorney at Law mike@sargetakis.com

Karl G. Anuta Attorney at Law Law Office of Karl G. Anuta kga@integra.net

Stop B2H Coalition fuji@stopb2h.org

Stop B2H Coalition
Jim Kreider
jkreider@campblackdog.org

Colin Andrew candrew@eou.edu

Kathryn Andrew (a)gmail.com

Susan Badger-Jones sbadgerjones@eoni.com

Lois Barry loisbarry 31@gmail.com

Peter Barry petebarry99@yahoo.com

Ryan W. Browne browner@eou.edu

Gail Carbiener mcgccarb@bendbroadband.com

Matt Cooper mcooperpiano@gmail.com

Whit Deschner deschnerwhit@yahoo.com

Jim and Kaye Foss onthehoof1@gmail.com

Suzanne Fouty suzannefouty2004@gmail.com

Susan Geer susanmgeer@gmail.com

Irene Gilbert ott.irene@frontier.com

Charles H. Gillis charlie@gillis-law.com

Dianne B. Gray diannebgray@gmail.com

Joe Horst and Ann Cavinato joehorst@eoni.com

Jim and Jane Howell d.janehowell@gmail.com

Virginia and Dale Mammen dmammen@eoni.com

Anne March <u>amarch@eoni.com</u>

Kevin March amarch@eoni.com JoAnn Marlette garymarlette@yahoo.com

Michael McAllister wildlandmm@netscape.net

Jennifer Miller rutnut@eoni.com

Sam Myers sam.myers84@gmail.com

Louise Squire squirel@eoni.com

Stacia Jo Webster staciajwebster@gmail.com

Jonathan White jondwhite418@gmail.com

John Winters wintersnd@gmail.com

Charles A Lyons marvinroadman@gmail.com

Svetlana Gulevkin Svetlana.m.gulevkin Odoj.state.or.us

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS STATE OF OREGON for the OREGON DEPARTMENT OF ENERGY

IN THE MATTER OF:

BOARDMAN TO HEMINGWAY TRANSMISSION LINE STOP B2H COALITION CLOSING ARGUMENT RESPONSE TO IPC AND ODOE

OAH Case No. 2019-ABC-02833

I. INTRODUCTION

Idaho Power Company's (IPC's) Application for Site Certificate in the proposed Boardman to Hemingway project suffers from numerous defects. For the reasons set forth below, as well as in its initial Closing Argument, IPC has failed to meet its burden of proof on each of the issues presented by STOP.

The Oregon Department of Energy (ODOE) and IPC have failed to address the contentions raised by STOP throughout this process. The ODOE & IPC Closing Arguments do not cure those shortcomings.

The issues specifically addressed in this Closing Argument Response on behalf of STOP are NC-1, NC-2, NC-3, NC-4, and SR-7. In its continued effort to avoid duplicative effort and briefing, STOP adopts the Closing Argument Response of co-petitioner Dr. Suzanne Fouty on the Soil Protection issue for which STOP also has standing (SP-1).

II. ARGUMENT

Both IPC and ODOE for the most part present familiar arguments on each of the issues. STOP will refrain from re-stating arguments already made in STOP's Closing Argument Opening Brief, and instead respond only to those matters which were not already directly addressed in the prior STOP filing.

- A. ODOE failed to comply with the statutes and rules relevant to issues NC-1, NC-2, NC-3, and NC-4 when it issued its final Order on IPC's Application for Site Certificate.
 - i. NC-1: The Department improperly modified/reduced the noise analysis area, and OAR 345-021-0010(x)(E) requires notification to all owners of noise sensitive property within one mile of the site boundary

ODOE presented no argument on NC-1 different from IPC. To reduce repetition, STOP only presents arguments with citations to IPC Closing arguments, but the same points apply to ODOE's closing arguments on NC-1.

IPC's first argument on this issue rests on the notion that OAR 345-021-0000(4) provides authority to modify any requirement under OAR 345-021-00010. STOP agrees that the regulation provides for modification authority. However, in order to rely on the Rule for such authority, ODOE & IPC must demonstrate that they actually complied with the requirements of the Rule.

In its Closing Argument IPC refers to the Rule, but it fails to quote the actual procedural requirements in OAR 345-021-0000(4). There is likely a reason for that. IPC's attorneys most likely understand that they (and ODOE) have not actually complied with the Rule.

OAR 345-021-0000(4) provides that "[i]f the applicant submits a written request for a waiver or modification of requirements in OAR 345-021-0010, the department may waive or modify those requirements that the department determines are not applicable to the proposed facility." (emphasis added). Based on the plain language of ODOE's own rules, ODOE would not have jurisdiction to modify an ASC requirement absent "a written request" from the applicant to do so – and also absent a finding that the requirement in question is "not applicable."

¹ See IPC Closing Argument for Contested Case Issues NC-1, NC-2, NC-3, NC-4, and NC-6 at p. 94-95. (hereafter IPC Noise Closing Argument).

There are two problems for IPC (and ODOE) here. First, IPC points to no place in the Record where it ever submitted "a written request" for a waiver or modification of the 1 Mile noise analysis area. Nor is STOP aware of any such written request in the Record. The regulation is clear, a written request must be filed. Absent proof of such a request in the Record, ODOE did not have authority under the Rule to issue a modification.

Second, IPC ignores the threshold requirement set by the Rule, for a modification or waiver. The Rule is clear that ODOE must determine that the requirement the applicant wants changed/waived, is "not applicable to the proposed facility" in order for it to be modified or waived.² It is undisputed that IPC was required to prepare Exhibit X, and that OAR 345-021-0010(1)(X) does apply to this application for site certificate. Neither ODOE or IPC ever challenged this regulation's applicability. Since the regulation applies, ODOE has no authority under OAR 345-021-0000(4) to waive or modify the scope of the list in Exhibit X. The Rule that IPC cites only provides authority to modify or waive if ODOE has made a determination that 0010(1)(X) is "not applicable."

No such determination by ODOE exists in the Record. Nor does the Record contain a written request by IPC for waiver or modification of 0010(1)(X). Consequently, IPC's reliance on OAR 345-021-0000(4) is without merit.

IPC's next argument amounts to little more than post-hoc rationalization of ODOE's actions improperly modifying the boundary for Exhibit X. IPC posits that it has satisfied "the intent of the original analysis area." Where the plain language of the regulation is clear, there is no "original intent" to satisfy. IPC must follow the Rule as written. *See, e.g., Wetherell v.*

³ IPC Noise Closing Argument p.96.

² See OAR 345-021-0000(4).

Douglas County, 342 Or 666, 678 (2007) (noting that courts follow the same methodology for interpreting administrative rules as for construing statutes); *State v. Gaines*, 346 Or 160, 171-172 (2009)(noting that in interpreting a statute, Courts first view the text and context before viewing legislative history or other potentially relevant materials). Where IPC faces an unambiguous regulation, it cannot (on behalf of ODOE) re-interpret that regulation in a self-serving way for a favorable outcome.

IPC argues that STOP's contention was around notification.⁴ This is not STOP's contention, as clarified in its petition for contested case (post-DPO comment).⁵ Instead, STOP hopes that a *remedy* in this matter would be for landowners to be notified. IPC's continued reliance on this argument is a distraction from the actual requirement to **identify and list** all NSRs in Exhibit X.⁶

Finally, IPC discusses a letter sent by Mr. Mark Stokes on March 24, 2020.⁷ STOP's arguments about this letter were a result of the last two paragraphs of the letter, which communicated to property owners along the Mill Creek Route that they "don't need to take any further action." And that was, according to the letter, because "[o]ver the past two years, the community has shown a preference for the Morgan Lake Alternative. **That's why we are pursuing it instead of the Mill Creek Route.**" STOP's contention is that this letter was misleading. It was intended to, or did, mislead property owners along the proposed Mill Creek Route into believing that their participation in the public process around the B2H siting was

⁴ IPC Noise Closing Argument p.99.

⁵ STOP B2H-Petition for Party Status-Contested Case-B2H Transmission 8-27-2020 p.9.

⁶ OAR 345-021.0010(1)(x)(E).

⁷ IPC Noise Closing Argument pp.100-102.

⁸ STOP B2H Exhibit 1, Declaration of Fuji Kreider, Issues NC-1, NC-2, NC-3 and NC-4, p.2 (emphasis added).

finished. That was despite the fact that the Mill Creek Route, according to IPC "is still a viable option for the project" to this day.⁹

IPC claims that because *some* property owners who received this letter continued to participate in the public process around B2H, the misleading nature of the letter could not have or did not prejudice anyone who received this letter. This is nonsense. Just because some property owners were not misled, does not change the misleading nature of the letter. A letter from the applicant, telling a property owner that the applicant is no longer pursuing a particular alternative that may impact the property owner and that the recipient does not need to take further action - when in fact that alternative is still actively being pursued - is plainly or per se misleading.

ii. NC-2: The Department erred in recommending that Council grant a variance/exception from the Oregon DEQ's Noise Rules, OAR 340-035-0035, and the variance/exception is inconsistent with ORS 467.010

Both ODOE and IPC presented additional arguments on Issue NC-2. Both ODOE and IPC hinge their primary arguments on how they define "infrequent" with regard to foul weather events. ODOE and IPC further argue that ODOE's authority extends to the application of the Department of Environmental Quality's (DEQ's) regulations. ¹⁰ IPC also argues that because in prior siting applications, it failed to establish any ambient background noise baseline, its baseline here is gratuitous and should not have to be considered. STOP will address the arguments more completely, and in turn, below.

a. ODOE failed to overcome the evidence presented by STOP regarding the frequency of foul weather events.

⁹ IPC Noise Closing Argument p.102.

¹⁰ As STOP noted in its initial Closing Argument, only the Environmental Quality Commission (EQC) has authority to issue a variance, and even if ODOE had authority to apply the DEQ regulations that have to do so in the way the regulations are written and intended by DEQ to apply rather than some different interpretation proposed by ODOE/IPC. *See*, STOP Closing Argument pp.5-9.

Regarding arguments not already addressed by STOP in its opening brief, ODOE's position now is that exceedance frequency should be measured by *hours* per year, as opposed to *days* per year. As a preliminary matter, ODOE is not owed any deference when interpreting the relevant rules here, because the rules under OAR 340-035-0000 *et seq* are administered by the DEQ, not ODOE. ODOE is not entitled to deference when interpreting regulations administered by another agency. *See e.g., New Jersey Air Nat'l Guard v. FLRA*, 677 F.2d 276, 281-82 n. 6 (3rd Cir 1982), *cert. den.* 459 U.S. 988 (1982).¹¹

OAR 340-035-0035(1)(b)(B)(i) implicitly recognizes that the proper measure of exceedances is days, not hours. The Rule provides that no new industrial noise source can operate "if the noise levels generated or indirectly caused by that noise source increase the ambient statistical noise levels ... by more than 10 dBA in any one hour...". ¹² If the approach that IPC/ODOE is arguing for were accurate there would be no need for such language and in fact that language would not only be superfluous, but also contradictory. To give that language in the Rule meaning, the exceedances need to be viewed on a 24 hour or daily basis, not on an hourly basis.

Moreover, it fundamentally makes more sense to view the exceedances in terms of the number of days per year they will be experienced, because that is the lens through which the landowners and residents in the area affected each day by the development of this industrial noise source will perceive those exceedances. ODOE has merely attempted to choose a different statistical presentation, to try to minimize how the impacts to those who currently enjoy an

¹¹ See also, STOP Closing Argument at p.7.

¹² See also, OAR 340-035-0015(59)(defining "statistical noise level" as "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, or for 6 minutes." (emphasis added).

exceptionally quiet landscape are presented. One could use the same logic to insist that exceedances should be measured on a minute-by-minute basis (to make them look even smaller) or on a weekly or a monthly basis (to make the numbers look bigger). ODOE's attempt to use statistical gamesmanship to try to make the number of IPC exceedances look smaller should be ignored.

ODOE's other primary argument is that the proposed B2H facility's noise emissions will, by and large, fall below the 50 dBA maximum allowable sound level threshold in OAR 340-035-0035(1)(b)(B)(i). While that fact is true, it completely fails to address the antidegradation standard in that same regulation subsection, which is the primary issue here. The fact that people won't suffer immediate hearing loss is a good thing, but it does not change the fact that those same people will have their baseline quiet rural noise levels degraded on a daily basis. The maximum allowable standard exists in conjunction with the antidegradation standard, and ODOE/EFSC cannot ignore the other half of the proverbial equation. ODOE has failed to completely address the requirements of OAR 340-035-0035(1)(b)(B) by impermissibly leaning exclusively on the "maximum allowable" part of standard, and ignoring the antidegradation component of the standard.

b. IPC failed to overcome the evidence presented by STOP regarding the frequency of foul weather events

IPC makes arguments in favor of ODOE's authority to grant a variance, and in favor of the variance itself. Regarding the authority to grant a variance, STOP discussed that issue at length in its initial Closing Arguments, and will not repeat all of those arguments here. Suffice to say, the EQC has authority to grant a variance, not ODOE.¹³

. .

¹³ See Section a. above; STOP Closing Argument pp.5-9.

In support of the variance itself, IPC sets forth two basic arguments. First, they argue that the variance will be fully protective given the proposed facility routing, and its use of some (but not all) available technology to mitigate noise. Second, IPC claims that this project is 'urgently needed,' and therefore it should be allowed to exceed the antidegradation standards.

IPC opens its brief with a two-pronged statement, claiming that the variance *and* an exception are appropriate because coupled with mitigation and conditions, the project will be "fully protective of the health and safety of Oregonians." ¹⁴ IPC goes further to admit that "without an exception or variance, [it] would be forced to restart the lengthy and complicated siting process." ¹⁵

The latter point is the most outrageous. IPC must comply with the law, regardless of how long it takes to do so. IPC is not entitled to an exception or variance simply because it has invested a great deal of time and (sadly) taxpayer money into what is fundamentally an unworkable strategy. IPC's statement about having to re-start this process is revealing of its treatment of compliance with relevant laws. There is no law that says an industrial entity gets to build what ever and where ever it wants. Similarly, there is no law that says every project that is proposed, can or should be authorized/permitted/sited.

Laws enacted to protect the environment and public health have the same force of law as any other law. They cannot be ignored simply because they are inconvenient for the entities which those laws are designed to limit. IPC has not been shy about admitting that this project as currently proposed may actually be "unpermittable." If that is truly the case, then EFSC is

¹⁴ IPC Noise Closing Argument p.1.

¹⁵ *Id*.

¹⁶ ODOE - B2HAPPDoc3-41 ASC 24 Exhibit X Noise ASC 2018-09-28 p.5.

obligated to tell IPC it is not entitled to a Site Certificate to build this power line.

IPC goes on to describe the variance standards and process in detail, but as with ODOE's Closing, IPC utterly fails to acknowledge that these rules are not intended to be administered by ODOE (or IPC for that matter), and the relevant statute instead specifically and exclusively delegates EQC authority to grant (or not grant) a variance. IPC's primary point regarding why it should be granted a variance boils down to the undisputed fact that the proposed B2H facility cannot meet the antidegradation standard. If a regulated entity is simply granted an exception from every rule it cannot satisfy, then the rules have no meaning.

In an effort to show it has at least considered the issue, IPC cites its own proposed use of tension, and limiting scratches and nicks on power lines as its way of limiting noise exceedances. However, IPC basically recognizes that this is insufficient, and therefore it seeks to externalize these costs onto the public. This is unacceptable.

IPC details the procedures used by its consultant Tetra Tech, but here again, fails to address the heart of STOP's contentions. As outlined in STOP's Closing argument, Tetra Tech failed to comply with the procedural requirements codified in the DEQ noise manual at OAR 340-035-0035 when it measured ambient sound at times when the wind was above 10mph, and included those noise readings in its calculations on rebuttal.¹⁷ Mr. Bastasch did correct this during cross-examination, but only after Mr. Standlee noted those errors.¹⁸

Because IPC never provided the full set of raw data used to calculate its L₅₀ values at MP11 (or other monitoring points) which it used to establish the baseline noise levels in its application, we cannot know whether that same error exists in that data. Given (1) the evidence

¹⁷ Cross Examination Hearing Day 1 p.58

¹⁸ Id

of the use of improper data (when winds were above 10 MPH) in IPC's rebuttal, (2) the anomalously-high noise baseline in and around the La Grande area, ¹⁹ and (3) no other evidence to the contrary, STOP (and presumably the ALJ) are simply left to wonder about the veracity of the data used for Union County in the Application for Site Certificate. IPC's briefing discusses procedure at length, but the best evidence does not demonstrate that the data was appropriately obtained nor analyzed. Proper collection and analysis of data is critical to the outputs under any methodology, and cannot be brushed aside as IPC suggests.

IPC next argues that when it built a transmission line near the Steens Wilderness, the project resulted in greater exceedances, and yet IPC was never required to set a baseline for antidegradation, and that apparently did not elicit a challenge.²⁰ IPC's argument here is not entirely clear. They appear to be claiming that because IPC apparently *got away with not doing a baseline previously*, IPC should not have to follow the law in **this** powerline siting case.

A prior incorrectly done powerline siting does not create binding precedent. EFSC cannot ignore the law here, simply because the law was allegedly not properly applied previously (i.e. just because someone got away with driving drunk once, does not create a right for them to drive drunk each time thereafter). Furthermore, IPC should not be rewarded for prior bad acts that created noise exceedances - by being granted an illegal variance that would allow further degradation of the ever-dwindling wild and unmarred natural spaces in the State of Oregon.

The next matter addressed by IPC regarding the appropriateness of a variance are "other" factors relevant to an exception under OAR 340-035-0010(2). IPC posits that because it will meet *one* standard (the 50 dBA cap on new industrial noise sources), it is *per se* protective of the

¹⁹ Cross Examination Hearing Day 1 at pp.13-14 (Mr. Bastasch discussing baseline dBA readings in Umatilla County (25 dBA), Baker County (24-27 dBA), & Malheur County (24-27 dBA)).

²⁰ IPC Noise Closing Argument pp.32-33.

public health, safety, and welfare.²¹ As noted previously, that makes no sense. Protecting that public from noise disturbance requires more than just not creating immediate hearing loss.

IPC further argues that in Washington, another standard exists, and there is no antidegradation standard.²² IPC's argument is essentially that because the Oregon legislature and Oregon's DEQ have set forth a uniquely protective collection of environmental rules and statutes, IPC should not be required to follow those rules and statutes. This makes no sense. EFSC/ODOE have to apply Oregon law, not worry about what other states have or have not done. Nor does the IPC argument address the question of whether the public health, safety, and welfare will in fact be fully protected.

The IPC argument in favor of an exception due to alleged infeasibility and cost of noise abatement, is similarly unconvincing. IPC suggests that it will do three things (triple bundle conductor configuration, maintain tension on insulator assemblies, and avoid damage to the line).²³ IPC is not willing to do a host of *other* things, things that IPC recognizes are available, but which IPC claims are "not reasonable" to pursue for this project.²⁴ Here again we see IPC simply being unwilling to pay what it takes to comply with the law. That is not a basis for an exception.

Next, regarding 'past, present, and future patterns of land use and relative timing of land use changes,' IPC argues that an exception is warranted because the proposed B2H project is "not located within residential use zoned land." This argument conflates the character of a

²¹ IPC Noise Closing Argument p.36.

²² Id.

²³ IPC Noise Closing Argument pp.38-39.

²⁴ *Id*.

²⁵ IPC Noise Closing Argument p.39.

landscape with the zoning present on a zoning map. The regulation does not reference zoning, it references the "pattern of land use," or character of the properties at issue.²⁶ IPC completely fails to address or consider the rural and residential **character or pattern of use** of the areas that will be affected by this proposed facility.

Land that happens to be *zoned* residential is not necessarily the same thing as land actually used for residential purposes. The criterion does not mention zoning. IPC's sudden focus on zoning, rather than actual current use (which is rural residential) is telling. IPC apparently realizes it does not meet the criteria as written, so it is attempting to finesse or weasel its way around the problem by pretending the words in the regulation mean something different that what they say.

In reality, land zoned for residential uses would probably be *less* sensitive to noise impacts, because of the relative density of development in such non-EFU land designations. That is not the land at issue here. The land here is rural residential, and typically very quiet (as evidenced by the lower baseline conditions in the surrounding rural residential County's). That is why identifying the correct baseline noise levels, and how past, present, and future land use changes will impact those noise levels – as well as the likely degradation of the low ambient noise baseline created by this powerline – is so important.

IPC then shifts gears, and while responding to the limited parties' arguments regarding the appropriateness of an exception IPC claims that Kerrie Standlee's noise monitoring results are "invalid." As STOP has previously noted, Mr. Standlee was doing a spot check to determine whether MP 11 readings were (or were not) likely representative. He was not

²⁶ OAR 340-035-0010(2).

²⁷ IPC Noise Closing Argument p.44.

intending to, and did not set out to, completely replicate the baseline monitoring of the area. That was IPC's job, not his. He was merely doing a basic "quality control" check on what IPC claimed were the conditions. His cross check showed there were serious concerns about whether MP 11 was in fact representative.

Next, contrary to testimony from its own expert (noting humidity as a contributing factor to corona noise), IPC posits that its *own* failure to account for humidity does not invalidate the IPC predictions regarding exceedances.²⁸ In light of IPC's own expert's recognition of humidity as a contributing factor to corona noise, this argument by IPC is completely unconvincing.²⁹

IPC asserts that the 'burn-in' or maintenance issues should not be included in estimations of exceedances.³⁰ IPC cites no regulation which would allow ODOE/EFSC to ignore either burn-in, or for maintenance issues which will inevitably arise during the 100 year operation of the B2H line. Neither OAR Chapter 340 or OAR Chapter 345 create such a carve-out. IPC's arguments here are not consistent with the applicable regulations, and they should be disregarded.

In response to a letter from John Hector, who was the DEQ Noise Control Program Manager from 1973-1986 and basically wrote the DEQ Noise Handbook that is in evidence, IPC asserts that Mr. Hector's statements are not convincing.³¹ To the contrary, Mr. Hector's statements, which support Mr. Standlee's testimony and report, are likely the **most** persuasive evidence of how DEQ interprets and applies the noise regulations.

²⁸ IPC Noise Closing Argument pp.44-45.

²⁹ Cross Examination Hearing Day 1 pp.30-31 (describing necessary elements for noise exceedance, including, "high humidity").

³⁰ IPC Noise Closing Argument p.47.

³¹ IPC Noise Closing Argument p.49.

IPC offers no credible expert opinion to rebut that of Mr. Hector. IPC basically presents argument that the Hector opinion is not persuasive simply because it is contrary to their position. Perhaps in IPC's world merely disagreeing with what IPC wants the answer to be, should be enough to make an expert's conclusion wrong. That is not, however, the world that STOP, the ALJ, or EFSC live in. Mr. Hector's expert opinion is credible and persuasive in this instance.

As to the factors under ORS 467.060, IPC argues that this statute was promulgated in 1977 after the DEQ rules were allegedly found to be too restrictive. Notably, Mr. Hector, who was the DEQ noise program manager from 1973-1986 would have had experience in both a preand post- ORS 467.060 world. Thus, his opinion remains the most valid and persuasive one on these points.

Moreover, the Senate meeting minutes that IPC cites do not actually support IPC's assertion that ODOE somehow has authority to grant variances under ORS 467.060. Senator Young is discussing the tension between DEQ's noise control program, and flexibility needed when a local jurisdiction *fails to enact or adopt a noise ordinance*.³² This has nothing to do with re-delegation of authority to a non-expert agency. Further, as IPC noted, the Legislature acted on this matter. Contrary to IPC's point however, when the Legislature acted on this matter it specifically granted authority to grant variances to the EQC (and only to the EQC).³³

IPC then moves on to discuss the standard under ORS 467.060(1)(b), which requires an applicant to demonstrate that "[s]pecial circumstances render strict compliance unreasonable, unduly burdensome or impractical due to **special physical conditions** or cause." (emphasis added). IPC simply rehashes familiar arguments about its inability to change physics, and its

³² IPC Noise Closing Argument, Attachment A, pp.3-4.

³³ See ORS 467.060(1) "**The Environmental Quality Commission** by order may grant specific variances..." (emphasis added).

inability (which is really an unwillingness) to re-route the line (a different alignment already exists in the NEPA documents,³⁴ IPC just does not want to use that alignment). What IPC fails to present is any kind of special physical condition or cause for its inability to meet the antidegradation standard.³⁵

In reality, IPC could build a much smaller line, or underground the line near more or all NSRs, or use other readily-available technology to address its shortcomings. A variance is certainly less expensive for IPC, but that is not the test set up by the law. What is really happening here is that IPC is trying to get EFSC to let IPC externalize the actual costs of the IPC line, onto the noise sensitive property owners, park users, and other people in Oregon who value the natural world. This is unacceptable, and contrary to the purpose of the antidegradation standard.

While still discussing ORS 467.060(1)(b), IPC transitions into an argument about the alleged *need* for this line. ³⁶ There actually is no such need. STOP (and others) presented extensive evidence and argument on that issue (showing there was no actual need, and many other viable alternatives) during the DPO comment process, ³⁷ and during the early phases of this matter. ³⁸ However, because the need issues were eliminated during the MSD phase, STOP did not further address the need (or lack thereof) issues thereafter. STOP plans to appeal the Summary Determination on those issues, which it hopes will provide it an opportunity to more

. .

³⁴ Idaho Power Rebuttal Testimony of Joseph Stippel pp. 9-10 (describing alternate routing options) S]

³⁵ IPC Noise Closing Argument pp.53-54.

³⁶ IPC Noise Closing Argument p 55.

³⁷ ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02. pp. 6325-6335; STOP B2H Coalition Petition for Party Status-Contested Case-B2H Transmission pp. 4-7.

³⁸ STOP B2H Coalition Memorandum in Opposition to IPC Motion for Summary Determination on Issues N-1, N-2, and N-3 and ODOE Motion for Summary Determination on Issue N-2 (June 25, 2021).

fully refute the inaccurate assertions made by IPC on this issue.

Thereafter, IPC yet again returns to its argument that the reference to "additional statutes" and rules in ORS 469.370(7) gives EFSC authority to interpret and administer the rules promulgated by DEQ, and the laws which the Legislature specifically directed EQC to administer. ³⁹ IPC and ODOE read this sentence of the statute too broadly. As far as STOP can tell, no court has approved such an expansive reading of that one sentence in subsection (7). It is noteworthy that neither IPC, nor ODOE, cited any cases that address this particular subsection of the statute.

The plain language of the statute gives EFSC authority to "approve or reject" an application, based on "any additional statutes or rules" identified in a project order. Since the DEQ noise rules and statutes are identified in the project order, EFSC would presumably have authority to find that IPC's project (as currently proposed) either meets, or fails to meet, the requirements of and standards set forth in the DEQ noise rules.

What the sentence does not do, is give EFSC authority to do something that the Legislature has expressly already delegated to another entity (the DEQ or the EQC). That is, whether or not to grant an exception or a variance from the noise regulations. Nor does the sentence give EFSC authority to reinterpret the DEQ noise laws, in ways that are at odds with how DEQ/EQC interpret them.

If the Legislature had intended EFSC to have authority to waive compliance with such "additional statutes, rules, or local ordinances" it would have said that EFSC had authority to waive compliance or to grant variances. The statute does not say that. Instead, the language of (7) says that EFSC has authority to find compliance and "approve" or to find lack of compliance and "reject." That is all it authorizes.

Page 16 – STOP B2H CLOSING ARGUMENT – RESPONSE

³⁹ IPC Noise Closing Argument pp.57-58.

This makes sense. EFSC/ODOE can look at another governmental bodies' rules and evaluate whether or not the project complies, or does not comply. EFSC/ODOE do not have the expertise and the policy skills necessary to determine whether a variance or waiver of those rules should be granted. EFSC/ODOE do not have the expertise or the lawful ability to grant exemptions or variances from those standards.

Yet that is precisely what ODOE/IPC are arguing for here. They seek to broaden the scope of the authority that the Legislature actually granted to EFSC, so that it covers not only determining compliance with all applicable laws - and to expand that authority to also cover granting waivers or variances from those same laws. While that may be a broad statewide authority that ODOE/EFSC would **like** to exercise, that is **not** the authority that this subsection of the statute actually expressly or implicitly creates.

IPC even goes so far as to argue that if the EFSC cannot issue a noise variance that would lead to "an absurd result." This highlights the unrealistic approach driving much of IPC's arguments. It appears that in IPC's view any denial of the project it wants to build, is "an absurd result." Yet rejection of a project for failure to comply with the applicable standards is precisely what EFSC is tasked with doing - if that project does not meet the applicable standards.

This too makes sense. EFSC/ODOE are not supposed to be proverbial "ticket machines" that simply issue permits to any applicant who pays enough money or has the right consultants. EFSC is supposed to be evaluating whether an applicant's project will (or will not) comply with all the public health & safety codes that apply. Denial of a Site Certificate for failure or inability to comply with the noise laws would not be "absurd", but rather it would be a totally appropriate result consistent with the authority given to EFSC by the Legislature.

0 т

⁴⁰ IPC Closing Argument p.59.

If IPC wants to get a variance from the noise rules, IPC needs to persuade the EQC to issue such a variance. The EQC, not EFSC, is the entity with authority to issue (or deny) a variance. The same is true for exceptions. The DEQ rules give the DEQ authority to grant exemptions. They do not give EFSC/ODOE authority to do so. If IPC wants an exception, it needs to persuade DEQ to issue one. EFSC can then evaluate whether the IPC project complies with the noise laws, given the existence of an exception or variance.

The Legislature's lack of funding for DEQ to actively administer the noise program is irrelevant. The laws still exist. The laws still have to be applied as written, regardless of what the Legislature does or does not fund.⁴¹ EFSC/ODOE do not have authority to change the laws, because of Legislative funding decisions. EFSC has authority to evaluate compliance (or failure to comply) with the law. That is what ORS 469.370(7) says, and ODOE/IPC's efforts to broaden the scope of that subsection should be rejected.

IPC's Attachment B to its Closing brief provides support for STOP on this point. Attachment B contains commentary from 1971 on the Noise Control Act by Dominick Vetri, in which he states that "EQC would have the power to grant variances from its regulations, but each variance must be limited in its duration and may be revoked on notice." Yet what IPC/ODOE are proposing here is exactly the opposite. They are proposing the EFSC (not EQC) grant a variance that will – like the power line it would apply to – essentially last for 100 years or more.

For each of the reasons set forth above, and those in STOP's initial Closing brief, neither IPC nor ODOE have presented a compelling argument that EFSC has the authority to waive or to reinterpret the noise rules and laws.

Page 18 – STOP B2H CLOSING ARGUMENT – RESPONSE

⁴¹ Of note, the Legislature has not repealed the statute authorizing EQC, and only the EQC, to grant a variance.

iii. NC-3: The methodologies used for the noise analysis were not appropriate, and, ODOE erred in approving the methodology used to evaluate compliance with OAR 340-035-0035.

Issue NC-3 touches on many of the same issues as NC-2. ODOE presented brief argument on this issue, as did IPC. Most of these arguments have been discussed already in STOP's initial Closing Argument, or above. STOP addresses new or additional arguments from each party below.

a. ODOE cannot usurp authority held exclusively by DEQ and EQC

ODOE's discussion of NC-3 opens with an analysis of ORS 467.010, which contains the policy statement for the noise control statutes, noting that "it is desirable to centralize in the Environmental Quality Commission the authority to adopt reasonable statewide standards for noise emissions..." (emphasis added); and OAR 340-035-0010, DEQ's noise control exception rule. Citing OAR 340-035-0010, ODOE then goes on to assume that when DEQ proclaims that "the Department may authorize..." DEQ is referring not to itself (the agency promulgating a rule about its own procedure for an exception), but rather to ODOE. This is plainly improper. ODOE has no authority to act on DEQ's behalf. DEQ provided itself with authority to grant an exception. It did not grant that authority to other agencies.

This is the same problem that was just outlined as to EQC variances. ODOE is effectively trying to usurp DEQ authority to grant exceptions – rather than evaluate compliance (or lack thereof) with the existing standards. Under ODOE's theory, EFSC would potentially have authority to modify water quality standards (OAR 340-041-0001(3) which provides that "...the Department will review..."); or instream water rights (OAR 340-056-0005(1)(which provides that "These rules provide the framework for the Department to apply...") or any other laws.

ODOE and EFSC can (and should) do what the Legislature directed them to do, which is to

approve or reject based on whether a project meets (or does not meet) standards deemed applicable. They cannot do what is proposed here, which is to create exceptions to or variances from those same standards.

b. IPC overstates the weight of its evidence, and misunderstands the purpose and weight of STOP's evidence

First, STOP will address IPC's concession regarding MP 100. Then STOP will address IPC's arguments on NC-3.

IPC concedes in its closing that "it is appropriate to use the MP 100 ambient sound level to calculate exceedances for the NSRs along the Morgan Lake Alternative." That level is 31 dBA, rather than the 32 dBA that IPC previously proposed. STOP appreciates this concession. However, STOP urges that this baseline should be further reduced to 24 (so that it might be in line with the rest of Umatilla County⁴³) or at least 26 dBA so that it is consistent with other surrounding rural Counties along the B2H route, 44 and in line with what Mr. Standlee's spot check showed to be more representative of the actual low ambient background noise level in this rural area. 46

The remainder of IPC's Closing argument (those portions not previously addressed by STOP) on NC-3 concerns IPC's objection to Mr. Standlee's sound monitoring data and collection, and information read into the Record by Mr. Standlee at the request of counsel for IPC. First, IPC claims that Mr. Standlee's did not follow normal procedures for assuring that his

⁴² IPC Noise Closing Argument at p.87.

⁴³ Cross Examination Hearing - Day 1, pp. 13-14.

⁴⁴ *Id*

⁴⁵ STOP B2H Direct Testimony, Exhibit 5, pp.3-4

⁴⁶ See also, OAR 345-035-0035(1)(b)(B)(iii)(I) (DEQ rule for new wind energy facility noise emissions "is based on an assumed background L50 ambient noise level of 26 dBA or the actual ambient background level.").

monitoring equipment was properly calibrated.⁴⁷ Mr. Standlee testified to the contrary, and even IPC's own expert witness (Mr. Bastasch) agreed that Mr. Standlee's equipment **was** properly calibrated when checked by a laboratory following Mr. Standlee's data collection.⁴⁸

IPC's attacks on Mr. Standlee and his sound monitoring data are quite telling. IPC apparently recognizes that the Standlee testimony and the data he collected show that MP 11 is not in fact representative. Otherwise, why spend so much time and argument trying to discredit the Standlee data and testimony?

The other primary argument set forth by IPC (and not already addressed by STOP) concerns the weight of Standlee testimony given at the request of counsel for IPC. According to IPC an email message read into the Record by Mr. Standlee should "be given no weight."⁴⁹ IPC asserts that because "Mr. Standlee offered no documentary evidence" to support his assertion that there are 25-35 trains which pass this area each day, it was not persuasive testimony.

That makes no sense. Mr. Standlee testified to facts that he (an expert) learned of. They are the type of facts that he (as an expert) would normally rely on. He also testified (during cross examination done by IPC's counsel) that he indeed did have documentary evidence to support his testimony - an email that he received that was sent by Union Pacific Railroad that contained the 25-35 trains per day figure.⁵⁰

The fact that the email he had read was not offered into evidence does not make Mr.

Standlee's testimony in any way less persuasive. That testimony still described the most up to

⁴⁷ IPC Noise Closing Argument p.77.

⁴⁸ Cross Examination Hearing – Day 1, pp.76-77 (Testimony of Mark Bastasch).

⁴⁹ IPC Noise Closing Argument p.74.

⁵⁰ Cross Examination Hearing – Day 1, pp.151-53.

date and accurate assessment (from a highly credible source) of the number of trains that typically pass MP 11 on a daily basis.

IPC confusingly asserts that even if there were 15 trains per day "passing MP 11, it is highly unlikely that sounds from such trains would influence the mean L50, which was averaged over hundreds of hours." This makes no sense. The number of hours used to determine the L50 still rely on 24 hours existing in each day. STOP's point is that on average, there is one or more trains each hour. If you have 100 hours of average sound data, you have, on average 100 or more instances of a train passing the microphone and altering the data for all NSRs that IPC proposes to use the MP 11 readings as a baseline f0r. Those are NSR's that do not have anywhere near that trains passing near them currently.

Further, as noted by Mr. Standlee during the cross examination, trains have an impact on ambient noise levels both as they approach, **and** after they have departed, an area where one may be observing noise - thereby expanding the *time* for the average noise increase.⁵¹ This goes to the larger point STOP made in its initial Closing Argument about the problem with using these supposedly-representative Monitoring Points for multiple NSRs.⁵² In a landscape as rural and quiet as this, IPC should be required to either put in the work to monitor noise relative to *each* NSR to assure that exceedances will be avoided or mitigated properly and according to the law, or to find actually representative MP's from which ambient baseline noise could be accurately determined.

iv. IPC and ODOE's most recent proposed site conditions inch closer to satisfying NC-4's issue statement, but still do not sufficiently protect the public health, safety, and welfare.

⁵¹ Cross Examination Hearing – Day 1, pp.148-50 (testimony of Kerrie Standlee).

⁵² STOP Closing Argument at pp.11-14.

a. Specific responses to IPC arguments on NC-4

IPC notes that it will be required to minimize operational noise to the extent feasible through the life of the project, using the techniques outlined above in discussion around NC-2.⁵³ IPC's position here is that, because they are doing what they **claim** is enough, they should be allowed to build this facility. As STOP has noted previously, what IPC is proposing is not the true extent of what is feasible. Instead, it is merely what IPC wants to do. IPC could underground the line in key locations, or it could forgo the line altogether. As outlined by STOP, not every project is permittable, which means not every project gets to get built.

IPC argues next that it will work with the NSR property owners.⁵⁴ However, IPC has not actually identified *all* NSR property owners, because it has reduced the area from one mile to one-half mile, thereby leaving many potentially affected people vulnerable.

IPC's next argument appears to be resolved by STOP's Proposed Noise Control Condition 1, which IPC and STOP appear to agree on. IPC states that if it receives a complaint regarding noise from a landowner not already identified in Exhibit X, it "will have in place a system to receive and respond" to those complaints. ⁵⁵ IPC sets forth an extra layer of procedure for these landowners to wade through, with little to no accountability available, if IPC chooses to ignore such a complaint, or if IPC investigates itself and finds it did not do wrong.

The disagreement remains around *who* may qualify for this without this extra layer of process. This process should preemptively identify all landowners within one mile, as the regulation requires. It should also provide a method by which a landowner may challenge IPC's

⁵³ IPC Noise Closing Argument p.104.

⁵⁴ IPC Noise Closing Argument p.109.

⁵⁵ IPC Noise Closing Argument p.105.

determination regarding noise exceedances, to dispose of this unnecessary extra layer of process for landowners and residents (who never asked to be impacted by IPC's proposed project). IPC appears to agree with this, because in the next section, IPC notes that it "agrees in part with Section 4 of STOP B2H's Proposed Noise Control Condition 1" which sets forth a process for resolving complaints.⁵⁶

b. STOP's Responses to IPC and ODOE Proposed Site Conditions

In each of their respective closing arguments, both IPC and ODOE presented further amendments to proposed site certificate conditions as described in the Proposed Order.⁵⁷ STOP proposes the following further modifications, in response to the proposed site conditions presented by IPC and ODOE.

1. Noise Control Condition 1

STOP's proposed version of Noise Control Condition 1 has been modified below for several purposes, including to place the burden on the applicant, who will be creating the new industrial noise source; and to clarify and enhance and make more transparent the process around pre- and post-construction complaints and mitigation.

Amended Recommended Noise Control Condition 1:

"PRE-NC-01" phase:

- a. Prior to construction ALL NSRs within 1 mile of the facility will be notified in writing that they may be an impacted NSR and they will be informed of the mitigation process and of the complaint process.
- b. The notice will include:
 - i. The parameters of the mitigation and who is eligible.

⁵⁶ IPC Noise Closing Argument p.110.

⁵⁷ See IPC Noise Argument pp.107-120, ODOE Closing Argument pp.107-118

- ii. A list of mitigation options: to include but not limited to, IPC's suggested window treatments, home retrofits, air-sealing residences, outdoor plantings, and the purchase of noise easement or payments in lieu of other mitigations.
- iii. It should be stated that the above list is "illustrative" and will likely change with technological advances in the future
- iv. A description of the complaint process, including how to file a complaint, the necessary technical information, the ODOE/EFSC contact, and the certificate holder's contact information.
- c. Prior to construction, the certificate holder will work initiate discussions with the 41 NSR property owners identified in Attachment X-5 of the Final Order on the ASC (NSR: 8, 9, 10, 11, 5002, 69, 70, 5004, 46, 119, 121, 125, 5010, 5011, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 518, 111, 112, 133, 5008, 5009, 113, and 115) to develop mutually agreed upon Noise Exceedance Mitigation Plans, specific to each NSR location. The site-specific Noise Exceedance Mitigation Plans will include agreed upon measures that would be implemented at the NSR location to minimize or mitigate the ambient antidegradation standard noise exceedance.
- d.⁵⁸ a.If the certificate holder executes an agreement with and the NSR property owner agree upon a specific Noise Mitigation Plan, the certificate holder will submit a signed acknowledgement from the property owner to the Department for its records.
- e. b.If an agreement between certificate holder and NSR property owner is not obtained, the certificate holder shall concurrently notify the Department and NSR property owner of the dispute and of Council review of the dispute to occur at a minimum of 30 days or the next regularly scheduled Council meeting, to the extent possible, from the date of the certificate holder's notice. The notice shall explain that the NSR property owner will be given an opportunity to provide comments to Council on the dispute, unless the Council Chair defers the dispute review to the Department. If this review is deferred to the Department, appeals would be taken to EFSC. Review of the dispute will be based on the information per sub(i) below, and any other relevant facts provided by the NSR property owner and will result in a determination of the appropriate mitigation measure(s), proportional to the facility operational noise levels in excess of the ambient degradation standard, as determined to occur at the NSR property. The Council or Department's determination of appropriate mitigation is not binding on the NSR property owner or certificate holder if the NSR property owner opts not to accept the mitigation.
 - i. At the time of issuance of the notice per (b) above, certificate holder will submit to the Department:
 - (1) the mitigation measures it offered the NSR property owner, the mitigation measures that the NSR property owner requested and an explanation of the dispute;

⁵⁸ Sections (d) and (e) are essentially the same as ODOE proposed changes to this Site Condition.

- (2) a list of the dates that the certificate holder communicated with, or attempted to communicate with, the NSR property owners; and (3) the names, addresses, and phone numbers of the NSR owners.
- f. e. In working with NSR property owners under this condition, the certificate holder will review and discuss various options for mitigation, including those listed under (b) above.
 - For NSRs where an 11 to 14 dBA sound level increase above ambient noise levels are expected, certificate holder will purchase and install sound attenuating windows with an STC rating of 25-40.
 - For NSRs where a 15 dBA or greater sound level increase is expected, certificate holder will purchase and install sound attenuating windows with an STC rating of above 40.
 - If an owner of an NSR where an 11 dBA or greater sound level increase is expected provides a letter from a heath care provider indicating that health care provider's belief that the owner has a health condition that is exacerbated by increased sound levels, upon request, certificate holder will purchase and install sound attenuating windows with an STC rating of over 40 and would work with the NSR property owner to consider other mitigation options, as appropriate.
 - At the request of an NSR property owner, certificate holder will offer alternative mitigation proposals, such as performing air-sealing of the NSR residence, planting trees, or installing insulation.
- g. d. Prior to operation, the certificate holder will implement the mitigation measures agreed upon with the NSR property owners and/or as determined by EFSC to be the appropriate mitigation measures.

Much of the Amended Noise Control Condition 1 above is consistent with ODOE's latest Amended Noise Control Condition 1, with some exceptions.

- STOP has added detail to the Notice requirement to ensure that complaints from NSR property owners are aware of the procedural requirements for pursing a complaint; and,
- Some specific remedies suggested by ODOE were removed, because they could
 be read to limit remedies for exceedances in any given range. STOP seeks to
 preserve flexibility and have remedies proscribed on a case-by-case basis.

2. Noise Control Condition 2

Similar to STOP's recommendations under Noise Control Condition 1, Condition 2 is set forth with the belief that the notification process needs to maintain the highest level of accessibility and transparency *before* construction begins. This process will impact no fewer than 131 Oregonians who deserve to be informed of potential impacts to their property, and their lives. All NSRs need to be made aware—before construction— what the parameters of mitigation and the complaint process will be, and how to file a valid, procedurally-correct complaint with all necessary information. Without knowing this information in advance, there is significant risk of a homeowner not including all of the proper information, or not knowing where to file a complaint, or filing an improper complaint, burdening IPC, or ODOE, with unnecessary process. STOP has used ODOE's now proposed Noise Condition 2 as the base template, and has suggested changes to that form of the condition. Additions are in red, deletions are in red strikeout.

Amended Recommended Noise Control Condition 2:

- a. Prior to construction, the certificate holder shall develop and submit to the Department an operational noise complaint response plan, that discusses the information necessary to support a complainant's complaint, what corona noise and corona noise levels and effects are, and provides a process to verify actual noise levels of events resulting in complaints. The plan will be noticed to all NSRs per NC Condition 1 "PRE-NC-01".
- b. Under this plan, it shall be specified that the plan is intended to address complaints filed by persons falling into one of the following categories: (1) the owner of an NSR property identified in Noise Control Condition 1, and for whom has received mitigation under Noise Control Condition 1, but who believes that exceedances (as measured at their NSR property) are occurring in a manner not otherwise allowed under Noise Control Condition 4 or Noise Control Condition 5; or (2) An owner of an NSR property within one mile of the site boundary who was not identified under Noise Control Condition 1 and who has not received mitigation from the certificate holder, but who nevertheless believes that exceedances above the ambient degradation standard have occurred at their NSR property.

- c. The plan shall include the following: Scope of the complaint response plan, including process for complaint filing, receipt, review and response. The scope shall clearly describe how affected persons will be provided necessary information for filing a complaint, and receiving a response, and the process for reaching a resolution of the complaint.
- d. The plan shall require that the certificate holder notify the Department within three working days of receiving a noise complaint related to the facility. The notification shall include the date the certificate holder received the complaint, the nature of the complaint, weather conditions of the date for which the complaint is based (including wind speed, temperature, relative humidity, and precipitation) as described by the complainant, duration of perceived noise issue, the complainant's contact information, the location of the affected property, and a schedule of any actions taken or planned to be taken by the certificate holder (including inspection and maintenance actions, or actions taken or planned to be taken pursuant to the processes described in subsection e of this condition).
 - e. The plan shall identify the following process if a noise complaint is received:
 - i. The certificate holder shall assess possible causes of the corona noise. If the complaint is received within the first 12 months of operation, the certificate holder will assess whether the corona noise is typical of noise that occurs during the transmission line "burn in period" (the first 12 months of operation) and ensure that it has taken appropriate measures near that NSR to minimize corona noise that may occur during the burn in period (e.g., use conductors with a nonspecular finish/sandblasting of conductors to make them less eflective and clean them of manufacturing oils, protect the conductors to minimize scratching and nicking during construction).
 - ii. If it is determined the corona noise is not typical burn in period noise, the certificate holder will assess whether the noise exceeds the ambient antidegradation standard in a manner not otherwise allowed under Noise Control Condition 4 or Noise Control Condition 5. If the complainant's noise sensitive property or properties are included in Attachment X-5 of the Final Order on the ASC, the modeled sound level increases as presented in Attachment X-4 of the Final Order on the ASC may be relied upon to determine whether the corona noise exceeds the ambient antidegradation standard, unless the complainant voluntarily provides alternative noise data.
 - iii. If the complainant's NSR property or properties are not included in Attachment X-5 of the Final Order on the ASC, the certificate holder shall monitor and model the sound level increases using the methods set forth in ASC Exhibit X, unless the complainant voluntarily provides alternative noise data.

- iv. If the complainant voluntarily provides alternative noise data and it suggests an exceedance that had not previously been identified and mitigated, and/or an exceedance not otherwise allowed under Noise Control Condition 4 or Noise Control Condition 5, the complaint shall be verified through site specific sound monitoring conducted by an Oregon registered Professional Engineer, Board Certified by the Institute of Noise Control Engineering noise specialist, employed or contracted by the certificate holder, in accordance with NPCS-1 unless otherwise and if approved by the Department. If site specific sound monitoring is not authorized by the complainant, the certificate holder's modeling results may be relied upon to determine compliance.
- v. In the event of a dispute regarding complainant's noise data and the certificate holder's data from site specific sound monitoring, certificate holder shall request that EFSC, in consultation with the Department's noise consultant, if necessary, make the final determination regarding which data will be used to determine whether corona noise exceeds the ambient antidegradation standard and/or in a manner not allowed under Noise Control Condition 4 or Noise Control Condition 5. The EFSC Chair may direct the Department to make this determination, but if there has been a delegation, the Departments decision can still be appealed to EFSC.
- f. The plan shall specify that if it is determined pursuant to the process described in subsection e. of this condition that corona noise at the complainant's NSR property exceeds the ambient antidegradation standard in a manner not allowed under Noise Control Condition 4 or Noise Control Condition 5, and/or exceeds the ambient antidegradation standard at an NSR property that had not previously been predicted to experience exceedances under Noise Control Condition 1, the certificate holder will be considered to be in violation of the site certificate and subject to the Council enforcement program rules in OAR 345 Division 29, until the certificate holder and the NSR property owner develops a mutually agreed upon mitigation plan to include agreed upon measures that would be implemented at the NSR location to minimize or mitigate the ambient antidegradation standard noise exceedance.
 - i. If the NSR property was identified in Noise Control Condition 1 and has previously received mitigation by the certificate holder, and if it has been determined that the NSR property experiences exceedances not allowed under Noise Control Condition 4 or Noise Control Condition 5, the certificate holder will work with the complainant to identify supplemental mitigation measures, which may include any of the measures discussed in the ASC, in Condition 1 of site certificate, or other measures requested by the complainant.
 - ii. If the NSR property was not identified in Noise Control Condition 1 and has not been provided with mitigation by the certificate holder, certificate holder will work with the NSR property owner to identify appropriate mitigation

measures, which may include any of the measures discussed in the ASC, in Condition 1 of site certificate (per above), or other measures requested by the landowner.

iii. If, through the efforts described above, the certificate holder executes an agreement with the NSR property owner, the certificate holder will submit a signed acknowledgement from the property owner to the Department for its records. If an agreement between certificate holder and NSR property owner is not obtained, the certificate holder shall concurrently notify the Department and NSR property owner of the dispute and of Council review of the dispute to occur in 30 days or at the next regularly scheduled Council meeting, whichever is later, to the extent possible, from the date of the certificate holder's notice. The notice shall explain that the NSR property owner will be given an opportunity to provide comments to Council on the dispute, unless Council defers the dispute review to the Department, in which case the Council remains as an appellate body. Review of the dispute will be based on the information per sub(a) sub(d) above and iv. below and any other relevant facts provided by the NSR property owner and will result in a determination of the appropriate mitigation measure(s), proportional to the facility operational noise levels in excess of the ambient degradation standard, as determined to occur at the NSR property. The Council or Department's determination of appropriate mitigation is not binding on the NSR property owner or certificate holder if NSR property owner opts not to accept the mitigation.

iv. At the time of issuance of the notice per (iii) above, certificate holder will submit to the Department: (1) the mitigation measures it offered the NSR property owner, the mitigation measures that the NSR property owner requested and an explanation of the dispute; (2) a list of the dates that the certificate holder communicated with, or attempted to communicate with, the NSR property owners; and (3) the names, addresses, and phone numbers of the NSR owners.

g. The certificate holder shall provide necessary information to the complainant to support understanding of corona noise, corona noise levels and effects, and of the process to verify actual noise levels of events resulting in complaints. If the complainant opts not to authorize the certificate holder to conduct monitoring, and it is otherwise determined pursuant to the process described in subsection e of this condition that corona noise does not exceed the ambient antidegradation standard, the noise complaint shall be considered fully resolved and no mitigation shall be required.

Information about corona noise should not be treated as an afterthought. This information should be included at the outset with all other relevant information. This streamlines the process and gives NSRs a clearer, more comprehensive picture.

Some specific justification for changes follows:

- The one-mile condition under "b" was removed because it is not relevant how far
 away the NSR is from the noise source. A person should be able to file a
 complaint about corona noise, even if they are not a previously-identified NSR
 with predicted exceedances.
- Under "e. iii." "monitor" was added, because the collection of noise data is
 "monitoring," as opposed to "modeling," which is using data already collected to forecast possible outcomes.
- Under "e. iv." STOP merely aims to correct what IPC and ODOE agreed to
 previously, i.e., that the contractor should be *approved* by ODOE; this is
 particularly important if IPC and the complainant cannot come to an agreement on
 a licensed contractor to collect sound data.
- STOP supports ODOE's amendment which keeps the burden of the cost of noise monitoring on the developer whose project is emitting the noise.
- STOP recommends retaining one of ODOE's proposed amendments from its

 Rebuttal Testimony (at p. 69) regarding the application of the EFSC enforcement program rules, to retain consistency with other site conditions and remedies.
- The remaining edits are an effort to connect Condition 2 with applicable parts of Condition 1, and maintain internal consistency.

3. Noise Control Condition 3

The required design specifications, as proposed by IPC approach a threshold of reasonableness. However, given the current best available technology, and testimony of Mr. Bastasch, these specifications are not enough on their own to comply with the statutes and

adequately protect public health. Further, because this project is projected to have a 100-year lifespan, and there is currently no technology available to sufficiently mask corona noise, conditions should be added which will require regular inspections to assure proper maintenance, and to preserve opportunities to update these conditions if technology is developed in the future which can more completely address the remaining issues with IPC's proposed design. STOP proposes the following additions in red, to strengthen the proposed conditions:

Recommended Noise Control Condition 3 (CON-NC-01 and OPR-NC-02): During construction, the certificate holder shall implement the following design measures and construction techniques to minimize potential corona noise during operations; and inspect, monitor, and implement necessary maintenance throughout the operational life of the project:

- a. For 500 kV transmission lines, use a triple bundled conductor configuration.
- b. Maintain tension on all insulator assemblies to ensure positive contact between insulators.
- c. Protect conductor surface to minimize scratching or nicking; and clean debris from all conductors (e.g.: bird feces, tree debris, and oil, grease and other maintenance contaminants that may be utilized.)
- d. Use conductors that have a "non-specular" finish on all conductors within a mile of an NSR.
- e. The certificate holder will monitor and inspect the line, conductors, and assemblies to determine, and conduct, required maintenance and cleaning necessary to adhere to the conditions set forth in the site certificate. The inspection will take place on a monitoring schedule that aligns with the OPUC required Utility Wildfire plans or more frequently as needed or specified by the Department. A monitoring and maintenance report will be sent to the Department after such monitoring inspection (and maintenance) occurs.
- f. The certificate holder will upgrade and/or apply technologies as they become available to mitigate for corona noise (i.e.: sound masking) in collaboration with the Department and property owners affected by corona throughout the life of the project.

STOP recommends additional language to Condition 3 or a new NC Condition OPR-NC-XX:

- a. Prior to operation, the certificate holder will develop a monitoring plan to collect data and assess the corona noise at key NSRs on a periodic basis for the life of the project. The plan will be approved by Council.
- b. During operation, the certificate holder shall monitor for corona noise at key NSRs, on a periodic and/or rotating basis (based on the approved plan) and submit all data to the Department. The certificate holder will also report any changes or maintenance activities that have occurred to the Department per the schedule set forth in the approved plan.
- c. In addition, before the end of each 10 year period of operation, the certificate holder shall complete an assessment of available new technology to further reduce corona or other noise from operations, and shall deliver that assessment to the Department. The Department shall

review that assessment, withing 90 days of its receipt, and shall provide directions to the certificate holder as to which new technologies the certificate holder needs to adopt and implement during the following 10 year period.

The primary issue STOP sought to remedy in its Amended Noise Control Condition 3 relates to the lack of a Monitoring Plan for noise control.⁵⁹ Specifically, the changes are:

- STOP added language to ensure that IPC's stated mitigation measures would be implemented, but that mitigation would not be limited to exclusively those measures, as technology changes and other options become available; and,
- One condition was added to require periodic review and updates to available technology for mitigation.

4. Site Conditions 4 and 5

To the extent that Site Conditions 4 and 5 are invoked by IPC and ODOE's arguments in closing, STOP urges the ALJ to disregard those site conditions – as they both presuppose ODOE/EFSC authority to grant a variance or exception. As outlined, that authority does not exist.

- B. ODOE failed to comply with the statutes and rules relevant to issue SR-7 by approving IPC's methodology for determining the extent of adverse impacts from the proposed B2H Project on scenic resources, protected area, and recreation along the Oregon Trail.
 - i. IPC and ODOE have not overcome their burden of demonstrating that the methodology complies with the law

IPC presents familiar arguments here as well. It begins by arguing that it was not required to use any particular methodology, and for that reason did not have to use an established methodology. Its point is undermined by its own description of that methodology, however. IPC

⁵⁹ See ODOE - B2HAPPDoc2 Proposed Order on ASC and Attachments 2019-07-02 p. 656

notes that its methodology is "rooted in USFS and BLM methodologies but tailored to address the EFSC definition of 'significant.'"⁶⁰ IPC notes that it used the BLM and USFS methodologies because "those agency methodologies are widely acceptable methods." However, IPC fails to recognize and acknowledge that by modifying those methodologies, and removing a key component (constituent perception) that acceptability and credibility are diminished, because the methodologies are now incomplete. As STOP has argued throughout this process, by removing the subjective input portion of the current USFS methodology, IPC has eliminated a critical piece of that methodology – one that is needed to meet the EFSC definition of "significant."

For ODOE's part, it "agrees that there are internal inconsistencies within the applicant's analysis and ultimate evaluation of the significance of visual impacts." ⁶¹ Despite that ODOE does not take the next step and recognize that IPC's methodology was fatally flawed. Aside from that one concession, ODOE's position is generally consistent with that of IPC. ⁶²

IPC sets forth three points STOP raised in its DPO comments, and takes issue with STOP's framing of the sub-issues raised within SR-7, to the extent that they have been re-framed or honed since the initial drafting of the DPO comments.⁶³ As framed by IPC, STOP's contentions are significantly narrowed and siloed, removing the context and intertwined nature of those three particularized complaints. STOP already set forth its arguments in its initial Closing Argument, and it relies on the full explanation of the issue and sub-issues therein.⁶⁴

⁶⁰ Idaho Power Company's Closing Arguments for Contested Case Issues R-1, R-2, R-3, R-4, SR-2, and SR-7 (hereafter IPC SR-7 Closing Argument).

⁶¹ ODOE Closing Brief p.200.

⁶² *Id*.

⁶³ IPC SR-7 Closing Argument p.19.

⁶⁴ STOP Closing Argument pp.21-26.

Aside from that point, IPC attempts to argue that STOP is procedurally precluded from raising issues regarding the application of the USFS 1994 SMS methodology - by claiming that STOP suddenly does not have standing to discuss this methodology.⁶⁵ IPC describes a specific contention involving Lois Barry's concession that she did not raise a narrow and specific issue (whether IPC was *required* to apply the SMS).

STOP has not argued that IPC is required to apply the SMS specifically. As noted in STOP's Closing Argument, the fundamental problem with IPC's in-house methodology is the incomplete and self-serving nature of the methodology. STOP may raise issues with IPC's methodology, and the SMS, to the extent that they go to the issue raised in SR-7, as framed by the ALJ. IPC over-states the preclusion around these issues, failing to recognize that many of these matters are inextricably intertwined.

ii. Response to ODOE's Amended Scenic Resource Condition 3

ODOE presented an Amended Scenic Resource Condition 3 in its Closing Argument.⁶⁶ This proposed Condition impacts the NHOTIC, and thereby implicates SR-7, as demonstrated below. STOP provides the following amendments, because it finds the proposed Amended Scenic Resource Condition 3 unacceptable because it does not protect this significant and irreplaceable scenic, recreational, and protective area. It should be amended as follows:

Amended Scenic Resources Condition 3: At final facility design, the certificate holder shall select transmission structures, to be constructed

- a. Commission a full engineering design study and specifications for undergrounding the 500kV transmission line in the vicinity of the National Historic Oregon Trail Interpretive Center between approximately Milepost 145.1 and Milepost 146.6 (or the 1.7 mile stretch recommended by consultant Johnson) with the following design modifications:
- b. Construct the B2H line underground in the designated area.
- a. H-Frames;

⁶⁵ IPC SR-7 Closing Argument p.22 citing Order on Petitions for Party Status, November 25, 2020.

⁶⁶ ODOE Closing Argument pp.185-186

- b. Tower height no greater than 130 Feet; and
- c. Weathered steel (or an equivalent coating)

Additionally, the certificate holder shall construct the facility using tower structures that meet the following criteria between approximately Milepost 146.6 and Milepost 146.7

- a. H-Frames;
- b. Tower heights no greater than 154 Feet; and
- c. Weathered steel (or an equivalent coating)
- B. ODOE erred when it did not require IPC to analyze soil compaction, soil productivity, soil structure loss and infiltration, and loss of stored carbon in approving IPC's Application for Site Certificate, under Issue SP-1.

As noted, STOP B2H Coalition adopts co-petitioner Dr. Suzanne Fouty's arguments in response to IPC and ODOE Closing Arguments on Issue SP-1.

III. Conclusion

For the foregoing reasons, and those articulated in its initial Closing Arguments, STOP B2H has met its burden of proof. IPC and ODOE have failed to demonstrate compliance with each of the relevant criteria as stated in NC-1, NC-2, NC-3, NC-4, SR-7, and SP-1.

DATED: March 30, 2022

Respectfully Submitted,

/s/ Karl G. Anuta Karl G. Anuta Law Office of Karl G. Anuta, PC 735 SW 1st Ave, 2nd Floor Portland, OR 97204 (503) 827-0320 kga@integra.net

Mike J. Sargetakis Law Office of Mike Sargetakis 735 SW First Ave, 2nd Floor Portland, OR 97204 (971) 808-1495 <u>mike@sargetakis.com</u> Attorneys for STOP B2H Coalition

CERTIFICATE OF MAILING

On March 30, 2022, I certify that I filed the foregoing CLOSING ARGUMENT RESPONSE with the Hearings Coordinator via electronic mail, and with each party entitled to service, as noted below.

/s/ Mike J. Sargetakis
Mike J. Sargetakis
Attorney for STOP B2H Coalition

By: Arrangement for hand delivery:

John C. Williams PO Box 1384 La Grande, OR 97850

By: Electronic Mail:

David Stanish Attorney at Law Idaho Power Company dstanish@idahopower.com

Lisa Rackner Attorney at Law Idaho Power Company lisa@mrg-law.com

Jocelyn Pease Idaho Power Company Attorney at Law jocelyn@mrg-law.com

Alisha Till alisha@mrg-law.com

Joseph Stippel Agency Representative Idaho Power Company jstippel@idahopower.com

Kellen Tardaewether
Agency Representative
Kellen.tardaewether@oregon.gov

Sarah Esterson
Oregon Department of Energy
Sarah.Esterson@oregon.gov

Patrick Rowe Assistant Attorney General Patrick.g.rowe@doj.state.or.us

Jesse Ratcliffe Assistant Attorney General jesse.d.ratcliffe@doj.state.or.us

Jeffery R. Seeley jeff.seeley@doj.state.or.us

Mike Sargetakis Attorney at Law mike@sargetakis.com

Karl G. Anuta Attorney at Law Law Office of Karl G. Anuta kga@integra.net

Stop B2H Coalition fuji@stopb2h.org

Stop B2H Coalition
Jim Kreider
ikreider@campblackdog.org

Colin Andrew candrew@eou.edu

Kathryn Andrew (agmail.com)

Susan Badger-Jones sbadgerjones@eoni.com

Lois Barry loisbarry31@gmail.com

Peter Barry petebarry 99@yahoo.com

Ryan W. Browne browner@eou.edu

Gail Carbiener mcgccarb@bendbroadband.com

Matt Cooper mcooperpiano@gmail.com

Whit Deschner deschnerwhit@yahoo.com

Jim and Kaye Foss onthehoofl@gmail.com

Suzanne Fouty suzannefouty 2004@gmail.com

Susan Geer susanmgeer@gmail.com

Irene Gilbert ott.irene@frontier.com

Charles H. Gillis charlie@gillis-law.com

Dianne B. Gray diannebgray@gmail.com

Joe Horst and Ann Cavinato joehorst@eoni.com

Jim and Jane Howell d.janehowell@gmail.com

Virginia and Dale Mammen dmammen@eoni.com

Anne March amarch@eoni.com

Kevin March amarch@eoni.com

JoAnn Marlette garymarlette@yahoo.com

Michael McAllister wildlandmm@netscape.net

Jennifer Miller rutnut@eoni.com

Sam Myers sam.myers84@gmail.com

Louise Squire squirel@eoni.com

Stacia Jo Webster staciajwebster@gmail.com

Jonathan White jondwhite418@gmail.com

John Winters wintersnd@gmail.com

Charles A Lyons marvinroadman@gmail.com

Svetlana Gulevkin Svetlana.m.gulevkin doj.state.or.us

EXHIBIT 11

Stop B2H Comments

Docket UM 2209

February 25, 2022

https://edocs.puc.state.or.us/efdocs/HAC/um2209hac163939.pdf

and

April 18, 2022

https://edocs.puc.state.or.us/efdocs/HAC/um2209hac82111.pdf



"Protect Our Land, Preserve Our Heritage"

STOP B2H Coalition

60366 Marvin Road La Grande, Oregon 97850 info@stopb2h.org

February 25, 2022

Re: UM 2209 Idaho Power Wildfire Protection Plan

Greetings docket members,

The STOP B2H Coalition appreciates the opportunity to provide input to Idaho Power's (IPC) 2022 Wildfire Protection Plan. Our comments will focus on the Boardman to Hemingway transmission line (B2H) through eastern Oregon.

As mentioned in the January 31, 2022 Evaluation of Wildfire Mitigation Plans Workshop we thought IPC was just looking at their service territory and not the entire B2H route per AR 860-300-0002(B). IPC did not identify any Wildfire Risk zones in eastern Oregon. STOP knows that the B2H goes through several Wildfire Risk zones in Union county. When IPC was asked if they included B2H in their Wildfire Protection Plan they indicated they did and this was surprising because of the Wildfire Risk zones in Union county that are known. There may be other unidentified Wildfire risk zones along the B2H route as well, namely in Morrow and Umatilla counties, due to commonly occurring and excessive winds.

After conferring with Union County Commissioner Matt Scarfo and Union County Emergency Manager Director Nick Vora, STOP can confirm and document with county and state data that there are clearly identified Wildfire Risk zones along the B2H and alternative routes in Union county. Rather than try to explain what is in the reports STOP provides links to the following reports:

<u>Union County Community Wildfire Protection Plan</u> (8-10-05)

<u>Communities at Risk and WUI Zone Priority Setting</u> (Chapter 7 June 2016);

<u>Full Index to Union County Wildfire Protection Plan</u> (June 2016)

<u>Greater Morgan Lake Area Fire Risk Report Wildfire Report 2-18-22</u>

In addition, STOP entered into a dialog with IPC asking clarifying questions in relation to sections: 3.2 Identifying Areas of Elevated Wildfire Risk, 3.2.1. Wildfire Risk Modeling Process, 3.2.2. Wildfire Risk Areas, and general questions of IPC's 2022 Wildfire Protection Plan. STOP wished to have a better understanding of what information was gathered, how it was gathered and from who, how the data sets were created, and how those data sets derived the final numbers. STOP wanted to understand how these inputs were plugged into the formula, Wildfire Risk = Fire Probability x Consequence, to develop the two-tier risk map.

As with most inquires the first set of questions and answers lead to a second set of questions. Appendix A contains the question and answer sessions thus far with IPC. STOP would like to see and examine all data and formulas to understand why IPC found no high risk wildfire areas when the county and state have documented high wildfire risk areas in Union county for decades. A similar analysis should be done along the entire route as STOP believes other counties in eastern Oregon have similar Wildfire Risk zones.

With respect,

/s/Jim Kreider STOP B2H Coalition

Appendix A

Subject:Re: [EXTERNAL]Contact info for new Wildland Fire person

Date:Thu, 3 Feb 2022 15:59:59 -0800

From:jim kreider < jkreider@campblackdog.org>

To:Williams, Alison < A Williams@idahopower.com>

Hey Alison,

Thanks for getting back to me. My questions below are based on the companies 2022 Wildfire Mitigation Plan (WMP) and the B2H route through eastern Oregon.

3.2 Identifying Areas of Elevated Wildfire Risk

I would like to understand 1) the underlying information that was used and how it was combined to derive the 4 data inputs used in the fire spread model to determine the fire volume (Fire Probability); and 2) how the grouping/density of structures is formulated into a score for consequences.

3.2.1. Wildfire Risk Modeling Process

In this section I'd like to know 1) has the 20 year fire weather climatology has been adjusted (weighted) for climate change that has occurred in the later half of the 20 year modeling period; 2) what historical fuel measurements and/or weather station observations were used to develop the estimates of seasonal variation in live fuel moisture.

3.2.2. Wildfire Risk Areas

How were the necessary adjustments to account for unique aspects of certain areas, including factors that may increase or decrease risk, which would not be accounted for in the computer modeling made? There are 6 factors that were considered and I'd like to understand what information went into those 6 factors and how the results from each factor were combined to be manually input into the model.

I'd also like to see the results/outputs of this Wildfire Risk Modeling.

Thanks - jim

Subject:RE: [EXTERNAL]Contact info for new Wildland Fire person

Date: Fri. 18 Feb 2022 22:20:04 +0000

From: Williams, Alison < A Williams@idahopower.com> **To:** jim kreider < jkreider@campblackdog.org>

Dear Jim,

Please find attached responses to your questions on Idaho Power's Wildfire Mitigation Plan. Many thanks for your patience.

Don't hesitate to follow up with me if you have additional questions or comments.

My best and have a lovely weekend,

Alison

Attachment below



IDAHO POWER RESPONSES TO QUESTIONS FROM MR. JIM KREIDER

February 18, 2022

<u>Jim Kreider Question:</u> I would like to understand 1) the underlying information that was used and how it was combined to derive the 4 data inputs used in the fire spread model to determine the fire volume (Fire Probability); and 2) how the grouping/density of structures is formulated into a score for consequences.

Idaho Power's Response:

This question relates to Idaho Power's Wildfire Mitigation Plan, Section 3.2: Identifying Areas of Elevated Wildfire Risk.

- 1) The four data inputs are used to develop the fundamental physical and environmental features that lead to an elevated likelihood of wildfires. The data inputs were derived from the following sources:
 - a. Historical weather was created using the Weather Research and Forecasting model, a widely used numerical weather prediction model.
 - b. Topography information was derived from the LANDFIRE database which provides geo-spatial information.
 - c. Fuel inputs were also obtained from the LANDFIRE database.
 - d. Fuel moisture content was calculated from the Weather Research and Forecasting model using Standard National Fire Danger Rating System (NFDRS) methodology.

Weather conditions, topography, fuel types, and moisture content were used to determine the fire spread, flame lengths, and spotting that hinders control operations. Monte Carlo analysis was performed using these inputs to simulate fire progression based on millions of separate ignition locations near Idaho Power's distribution and transmission lines under a range of weather conditions.

2) The Monte Carlo analysis includes structure density as an input so that impacts to people or improved property can be quantified. Census data was used to determine structure density and each fire simulation determined the number of structures affected by a given fire. The number of structures affected is the consequence used in the risk calculation.

<u>Jim Kreider Question:</u> In this section I'd like to know 1) has the 20 year fire weather climatology has been adjusted (weighted) for climate change that has occurred in the later half of the 20

year modeling period; 2) what historical fuel measurements and/or weather station observations were used to develop the estimates of seasonal variation in live fuel moisture.

Idaho Power's Response:

This question relates to Idaho Power's Wildfire Mitigation Plan, Section 3.2.1: Wildfire Risk Modeling Process.

- 1) In an attempt to capture extreme heat that may result from climate change, the quantification uses the 50 most severe fire weather days within Idaho Power's service territory since 1979.
- 2) The North American Regional Reanalysis (NARR) is a model produced by the National Centers for Environmental Prediction and was used to acquire data for temperature, wind, moisture, soil, and atmospheric conditions. In addition, Remote Automated Weather Stations located in Eastern Oregon were analyzed over a period of 20 years from January 1, 2000 to August 31, 2021.

<u>Jim Kreider Question</u>: How were the necessary adjustments to account for unique aspects of certain areas, including factors that may increase or decrease risk, which would not be accounted for in the computer modeling made? There are 6 factors that were considered and I'd like to understand what information went into those 6 factors and how the results from each factor were combined to be manually input into the model.

Idaho Power's Response:

This question relates to Idaho Power's Wildfire Mitigation Plan, Section 3.2.2: Wildfire Risk Areas.

The computer model produced initial tier levels throughout Idaho Power's service territory. The company then reviewed the tiers to determine necessary adjustments based on unique aspects of the area not captured by the computer model.

Jim Kreider Request: I'd also like to see the results/outputs of this Wildfire Risk Modeling.

Idaho Power Response:

The results of the risk modeling are provided in the company's Wildfire Mitigation Plan. The underlying dataset and output of the model are not public information.

Subject: Re: [EXTERNAL]Contact info for new Wildland Fire person

Date: Wed, 23 Feb 2022 17:13:46 -0800

From: jim kreider < jkreider@campblackdog.org>
To: Williams, Alison < A Williams@idahopower.com>

Hi Alison and Wildfire team,

Thank you for the answers to my questions. Like most answers they raise more questions and these are my follow up questions to the answers provided. Unless otherwise noted these questions are focused on the primary B2H and alternate routes in Union county.

3.2 Identifying Areas of Elevated Wildfire Risk

Thank you for sharing the sources of the 4 data inputs used to develop the fundamental physical and environmental features that lead to an elevated likelihood of wildfires. Please share with me the actual data sets by year and calculations to reach the final number(s) used as inputs for the 1) weather conditions, 2) topography, 3) fuel types, and 4) moisture content to determine the: a) fire spread, b) flame lengths, and c) spotting calculations. Please show the calculation(s) for how 1-4 created a-c and the final Fire Probability input value used in the Wildfire risk calculation.

Additionally please share the: x) census data used to determine structure density and the final input values used and y) how each fire simulation determined the number of structures affected by a given fire. Show the calculation(s) for the resulting consequence input value used in the Wildfire risk calculation.

Please show the values of the Fire Probability and Consequence multiplied to calculate the Wildfire Risk values for all segments developed along the two-kilometer buffer evaluated for the B2H in Union county.

3.2.1. Wildfire Risk Modeling Process

Please share the locations of the Remote Automated Weather Stations used in Eastern Oregon, the raw data and calculations used for the final value of seasonal variation in live fuel moisture per location or segment.

3.2.2. Wildfire Risk Areas

Please share all 3 tier levels along the B2H route in Union county. Show how the unadjusted data compiled for the 6 factors was input into the model? Show unadjusted tier levels on the B2H route and alternates in Union county.

Show each adjustment made, why the adjustment was made, the value of the adjustment and the final input into the model. Show adjusted tier levels.

If the unadjusted data is manually adjusted and produces a change in a tier level what appear to be the data point(s) that modified the tier classification?

General Question

Why is the underlying dataset and output of the model not public information? If we cannot see and understand how Idaho Power came to these conclusions why should we believe them to be accurate?

Trust but verify and that is what I am trying to do. Respectfully – jim



"Protect Our Land, Preserve Our Heritage"

STOP B2H Coalition

60366 Marvin Road La Grande, Oregon 97850 info@stopb2h.org

April 18, 2022

Re: UM 2209 Idaho Power Wildfire Protection Plan

Greetings docket members,

The STOP B2H Coalition appreciates the opportunity to continue to provide input for Idaho Power's (IPC) 2022 Wildfire Protection Plan. Our comments will focus on the Boardman to Hemingway transmission line (B2H) through eastern Oregon.

In concluding our opening comments we stated that the first set of questions and answers lead to a second set of questions. Those questions were submitted to IPC and in email exchanges with the company it appeared that we were going to get answers to the second round of questions. There were a series of delays in getting a response but the companies responses always lead one to believe that the questions were going to be answered. In a March 29, 2022 email we were informed that the company would not be answering the questions submitted.

What follows is the second round of questions, at bottom, and the email thread in date order, from newest to oldest, following up when deadlines slipped and the concluding denial of the request.

Idaho Powers refusal to clarify and show their work on how they determined that the B2H Power line would pose no fire risk to eastern Oregon is unacceptable. STOP demonstrated how Union County and the state of Oregon determined that areas the B2H ran through in the county were high risk fire areas. Someone's work must be incorrect. Until Idaho Power can prove that their work is correct or the states and counties work is wrong Idaho Powers 2022 Wildfire Plan must be denied.

Thank You

Jim Kreider

for the STOP B2H Coalition

----- Forwarded Message ------

Subject:Re: [EXTERNAL]Contact info for new Wildland Fire person

Date:Wed, 6 Apr 2022 09:17:49 -0700

From:jim kreider <jkreider@campblackdog.org> **To:**Williams, Alison <AWilliams@idahopower.com>

Hi Alison,

I'm disappointed in the companies lack of response. Feel like I was lead to believe we were in a dialogue on discussing the details of the fire methodologies per my questions. The company fire risk information did not match Union counties fire risk assessments. Nor other eastern Oregon county's fire risk assessments.

I look forward to discussing IPC's fire management plan.

Thank you -- jim

On 3/29/2022 2:20 PM, Williams, Alison wrote:

Hi Jim,

I hope you're doing well following hand surgery and that recovery hasn't been too bad!

I wanted to follow up on your earlier requests. Having discussed with various people within the company, we cannot respond to detailed data requests outside of a formal process or proceeding at the OPUC. We are certainly appreciative and understanding of your interest in Idaho Power's Wildfire Mitigation Plan.

Please don't hesitate to reach out if you would like to discuss further. There will be future opportunities to hear more and participate in exercises about the Company's wildfire mitigation efforts, and I am happy to keep you abreast of those activities if you are interested.

My best, Alison

__

Alison Williams

Regulatory Policy & Strategy Advisor Idaho Power | Regulatory Affairs 1221 W. Idaho St. | Boise, ID | 83702

Office: 208.388.2872 Mobile: 202.674.2447

From: jim kreider <jkreider@campblackdog.org>

Sent: Tuesday, March 22, 2022 5:10 PM

To: Williams, Alison < A Williams@idahopower.com >

Subject: Re: [EXTERNAL]Contact info for new Wildland Fire person

KEEP IDAHO POWER SECURE! External emails may request information or contain malicious links or attachments. Verify the sender before proceeding, and check for additional warning messages below.

Hi Alison,

Checking in wondering if a response to my last set of questions is coming?

h	Kreider/1011 Page 11
Thanks jim	
On 3/17/2022 3:21 PM, jim kreider wrote: Happy St Patties Day,	
Just checking in as you mentioned the company would have a response this week to my last set of quest comments due next Friday I'd like to know what my universe of material is. I'm scheduled for a hand sur would like to wrap this up.	
Thanks jim	
On 3/8/2022 7:32 AM, Williams, Alison wrote: Slow and steady/marathon not a sprint are my shared mantras for the time being. Thanks again, Jim. Ar with you again next week. My best, Alison	nd I'll connect
From: jim kreider <i kreider@campblackdog.org=""> Sent: Monday, March 7, 2022 4:30 PM To: Williams, Alison AWilliams@idahopower.com Subject: Re: [EXTERNAL]Contact info for new Wildland Fire person KEEP IDAHO POWER SECURE! External emails may request information or contain malicious links or att the sender before proceeding, and check for additional warning messages below.</i>	achments. Verif
Thanks and I realize most everyone is busy beyond belief. I'm trying to make slow and steady my mantr realize the world isn't cooperating. Thanks jim	a for march but
On 3/7/2022 3:19 PM, Williams, Alison wrote: Good afternoon, Jim. We are currently working on our reply comments in AR 648. I'm aiming to get bac	k to your secon

d round of questions next week.

Thank you for your patience!

-Alison

From: jim kreider <jkreider@campblackdog.org>

Sent: Monday, March 7, 2022 4:18 PM

To: Williams, Alison AWilliams@idahopower.com

Subject: Re: [EXTERNAL]Contact info for new Wildland Fire person

KEEP IDAHO POWER SECURE! External emails may request information or contain malicious links or attachments. Verify the sender before proceeding, and check for additional warning messages below.

Hi Alison - checking in since I have not heard back regarding this set of questions. Do you have an ETA?

Thanks -- jim

On 2/23/2022 5:13 PM, jim kreider wrote:

Hi Alison and Wildfire team,

Thank you for the answers to my questions. Like most answers they raise more questions and these are my follow up questions to the answers provided. Unless otherwise noted these questions are focused on the primary B2H and alternate routes in Union county.

3.2 Identifying Areas of Elevated Wildfire Risk

Thank you for sharing the sources of the 4 data inputs used to develop the fundamental physical and environmental features that lead to an elevated likelihood of wildfires. Please share with me the actual data sets by year and calculations to reach the final number(s) used as inputs for the 1) weather conditions, 2) topography, 3) fuel types, and 4) moisture content to determine the: a) fire spread, b) flame lengths, and c) spotting calculations. Please show the calculation(s) for how 1-4 created a-c and the final Fire Probability input value used in the Wildfire risk calculation. Additionally please share the: x) census data used to determine structure density and the final input values used and y) how each fire simulation determined the number of structures affected by a given fire. Show the calculation(s) for the resulting consequence input value used in the Wildfire risk calculation.

Please show the values of the Fire Probability and Consequence multiplied to calculate the Wildfire Risk values for all segments developed along the two-kilometer buffer evaluated for the B2H in Union county.

3.2.1. Wildfire Risk Modeling Process

Please share the locations of the Remote Automated Weather Stations used in Eastern Oregon, the raw data and calculations used for the final value of seasonal variation in live fuel moisture per location or segment.

3.2.2. Wildfire Risk Areas

Please share all 3 tier levels along the B2H route in Union county. Show how the unadjusted data compiled for the 6 factors was input into the model? Show unadjusted tier levels on the B2H route and alternates in Union county. Show each adjustment made, why the adjustment was made, the value of the adjustment and the final input into the model. Show adjusted tier levels.

If the unadjusted data is manually adjusted and produces a change in a tier level what appear to be the data point(s) that modified the tier classification?

General Question

Why is the underlying dataset and output of the model not public information? If we cannot see and understand how Idaho Power came to these conclusions why should we believe them to be accurate? Trust but verify and that is what I am trying to do.

Respectfully – jim

EXHIBIT 12

EFSC Contested Case

OAH Case No. 2019-ABC-02833

Written Direct Testimony, LU-9, Same Myers

BEFORE THE OFFICE OF ADMINISTRATIVE HEARINGS STATE OF OREGON for the OREGON DEPARTMENT OF ENERGY

IN THE MATTER OF:)	DIRECT TESTIMONY OF PETITIONER
)	SAM MYERS'; ISSUE LU-9
BOARDMAN TO HEMINGWAY)	DATED SEPTEMBER 17, 2021
TRANSMISSION LINE)	
)	OAH Case No. 2019-ABC-02833

Subject Matters of Testimony: Wildfire Risk (OAR 345-022-0030)

Whether Applicant adequately analyzed the risk of wildfires from operation of the proposed transmission lines, especially during "red flag" warning weather conditions.

Question: Mr. Myers, you are giving testimony regarding the risk of wildfire danger during operation and the consequential soil damage and whether the B2H transmission line project proposed by IPC has mitigated that danger and rehabilitation treatments. Can you briefly share your qualifications?

Answer: I have standing with Wildfire Risk (OAR 345-022-0030) as a limited party petitioner. Additionally, I am a local farmer and have over five decades of full-time experience. I have a lifetime lease with my parents on dryland farm ground that the B2H transmission line directly traverses. My family has farmed the same land for over a century and I have personally witnessed the effects of fire and the damage it causes to the soil both immediately and over time.

Question: In your analysis of the Proposed Order (PO) does IPC admit to the risk that the operation of the proposed transmission lines will start fires?

Answer: Yes. Their admission is found in *Attachment U-3: Draft Fire Prevention and Suppression Plan*. Listed below, IPC admits, during operation, weather conditions are contributing factors to line ignition.

"During operation, the risk of fire is primarily from vehicles and maintenance activities that require welding. Additionally, weather events that affect the transmission line could result in the transmission line igniting a fire."

^{3. &}lt;sup>1</sup> Attachment U-3 Draft Fire Prevention and Suppression Plan, September 2018; June 2020. Page 1

However, they fail to admit weather conditions are contributing factors to fires during operation, in the PO. In fact, as seen below, they completely omit the confession in the PO.

"During operation, the risk of fire would be primarily from vehicles and maintenance activities that require welding." ²

Question: Does IPC have a plan that minimizes the ignition risk from the powerline or transmission towers during operation and provide immediate fire suppression?

Answer: IPC does claim in *Attachment U-3: Draft Fire Prevention and Suppression Plan* to have standards and practices in place for such risks during construction or maintenance. However, after reviewing both the PO and the above document, no such plan exists to minimize risk for fires caused by the combination of weather events and tower/line operation. Though they admit this is a valid risk, the plan does not contain any specific methods or equipment design that actually minimizes fire ignition. Whatever plans or standards IPC has, admittedly, does not completely mitigate the risk of the transmission lines igniting a fire. They admit that the risk is 'minimal,' but not zero. In my opinion, they completely downplay the potential for a catastrophic fire event caused by the transmission lines. In recent fires occurring in Oregon and surrounding states, we can clearly see that the impacts and risks are anything but 'minimal'.

Question: Does IPC identify the weather events that may cause transmission lines to ignite fires during operation?

Answer: No. Besides the brief admission in *Attachment U-3: Draft Fire Prevention and Suppression Plan* that such an event could occur, there is no other mention of 'weather events that affect the transmission line' being the source of fire ignition. Though IPC does admit in the PO excerpt, referenced below, that operational fire-related risks do exist, contradictory to their claim in the above document, weather events is not listed as one of those risks.

"While uncommon, the operational risk of the proposed facility igniting a wildfire may be caused by overgrown vegetation contacting the transmission line, a tree falling on the transmission line, or from equipment failure."

Question: Has IPC adequately analyzed the weather conditions known as 'red flag' warnings or high winds as they relate to in operation transmission lines igniting fires?

Answer: No. They have omitted both from being sources of operational fire ignition. The majority of their transmission line traverses areas in Eastern Oregon known for such reoccurring red flag warnings, which include high winds, low humidity and flammable landscape. Based on an

² ODOE - B2HAPPDoc2-1 Proposed Order on ASC w Hyperlink Attachments 2019-07-02. Page 46 of 699

³ ODOE - B2HAPPDoc2-1 Proposed Order on ASC w Hyperlink Attachments 2019-07-02. Page 588 of 699

excerpt from *Power Lines and Catastrophic Wildland Fire in Southern California*, attached below, such conditions highly contribute to a catastrophic event occurring. Yet, IPC has not addressed nor analyzed such an event occurring during operation, though the majority of their line, and the land they will be constructed on, is directly impacted by such weather events. One could easily see by looking at recent fires in both California and Oregon, powerline operation combined with low humidity and high winds have been responsible for these catastrophic events.

"Fires starting under high-wind conditions have been shown above to be larger than fires starting in calm conditions, even when including other weather variables such as relative humidity. The tendency of power line fires to become more frequent during extreme events, such as in October 2007 when they were responsible for up to nine of 20 major fires, is due to the fact that the ignition probability rises under high-wind conditions as well."

Question: Based on these findings Mr. Myers, does IPC have a mitigation plan for suppressing and extinguishing such catastrophic fires?

Answer: The only fire plan IPC has stated, is that the responsibility and management of such an event relies solely on local fire districts within the transmission line ROW. However, as stated below in the PO, privately owned land accounts for seventy-two percent of the transmission line, most of which are managed by rural, volunteer fire departments with limited personal, most of which are local farmers, and equipment. Not to mention, the response time in such areas varies widely. From personal experience, I know with most of the landscape containing combustible material, the likelihood of a fire spreading quickly and becoming out of control before adequate resources can reach it, is a high probability. It is my concern that these services would be completely overwhelmed responding to a catastrophic fire.

"As described in ASC Exhibit U, federal agencies are responsible for fire suppression efforts on federal lands in the analysis area, including BLM-managed and National Forest (NF) lands. The BLM has jurisdiction over fire suppression on BLM-managed lands; the USFS has jurisdiction over fire suppression on NF lands. Son The State of Oregon is responsible for fire suppression on state lands. The Oregon Department of Forestry is the primary wildland fire protection agency on forested private and state lands and much of the nonforested lands. Municipal fire departments and rural and rangeland fire districts are the primary responders for incidents on private land. The applicant explains that approximately 72 percent of the land within the site boundary is privately owned. The BLM manages about 25 percent of the land in the site boundary, with the remaining three percent managed by other federal (USFS and U.S. Bureau of Reclamation) or State agencies. Table PS-9, below, summarizes staffing levels, equipment, and estimated response times for fire departments, rural fire protection districts, and rangeland fire

⁴ Power Lines and Catastrophic Wildland Fire in Southern California: Mitchell, Joseph W.

protection associations that respond to incidents on privately-owned lands within the analysis area."⁵

Question: Has IPC adequately analyzed the risk of placing a 500-kilivolt transmission line in Morrow County, which currently does not have any lines of such voltage?

Answer: No. It is my contention that the local area and its weather concerns deserve more study to determine if the potential fire ignition risks involved with this high voltage line are much greater than previously assessed.

Question: Has IPC adequately evaluated the risks of extreme whirlwind events?

Answer: No. In my experience in this area we have seen whirlwinds reaching hundreds of feet tall, which could directly interact with the transmission lines creating a reaction discussed below. These, so called 'dust devils', create a vertical column of dirt and this weather/soil phenomena occurs over plowed ground which is common to this landscape. It is my concern that under the perfect conditions, these whirlwinds could create an electrical pathway in the dust column which could create a spark arcing between the transmission line and the ground. Thus, becoming a potential ignition source. This argument is supported in below excerpt of the *Electrification of Particulate Entrained Fluid Flows – Mechanisms, Applications, and Numerical Methodology.*

"Electric fields in wind-blown sand flows, dust storms and dust evils could be as strong as several kilovolts per meter which may introduce flashover and breakdown of transmission lines, attenuation (or even interruption) of electromagnetic wave propagation, etc ... In strong sand storms, E-fields produced by charged sand particles could potentially lead to many failures, such as electric spark, electric corona and point discharge of measuring instruments."

Question: Does IPC have any mitigation plans in place to rehabilitate soils damaged in a catastrophic fire?

Answer: No. IPC seems to be unaware that long-term soil damage occurs in catastrophic fires. In the testimony referenced below from local farmer, Roger Morter, after a localized fire, that occurred shortly after a wheat crop was harvested, we see a crop yield decrease over the next three cropping cycles which encompass an eight-year span of negative soil impacts. These impacts were immediately present in the soil and lessened over time, directly effecting each year's harvest yield. Mr. Morter points out that in his case relatively small acres were affected, however, if a fire were to occur on a larger scale it would be mortally damaging to the livelihood and sustainability to dryland the wheat farm. Thus, soil rehabilitation would be a necessary expense to heal the soil. If IPC is placing their transmission line on ground that could potentially

⁵ ODOE - B2HAPPDoc2-1 Proposed Order on ASC w Hyperlink Attachments 2019-07-02. Page 578/579 of 699

⁶ Electrification of Particulate Entrained Fluid Flows – Mechanisms, Applications, and Numerical Methodology. Zhaolin Gu, Wei Wei, Physics Reports; 2015

be impacted and damaged through a catastrophic fire to the point of affecting local livelihoods, IPC better have such a plan in place for immediate soil rehabilitation or compensation.

"To Whom It May Concern:

Below is the account of the effect and subsequent aftermath that fire had on soil used for wheat production on my farm in Morrow County, Oregon and is an example of the long term danger posed by fire risk.

In August of 2012 there was a fire that occurred on approximately 10 acres of a field that I own and that I have farmed since 1985. The fire was due to an ignition caused by a passing car on a nearby roadway. As previously mentioned the fire burned the remaining residue that was left after harvest (4-5 weeks prior to fire, the field was harvested). Due to the protection of the residue being removed and the heat of the fire the soil was subsequently damaged by reduction in both the lack of the conservation action that is normally due to residue coverage, and the heat killing the microbial population that lives in the top soil. In addition the damaged acres were more subject to noxious weed populations also as a result of the removal of the residue.

As a result of these conditions the next crop year produced approximately 21% less crop yield than comparable acres. The second crop year the yield was approximately 14% less. The third crop year the yield was approximately 6% less. The fourth crop year the soil was almost back to "normal", however the noxious weeds were still present and not fully in control due multiple crop years where the crop failed to thrive.

Between the loss of crop production as well as the increase cost of weed control these acres were farmed at a loss for a total of 8 years. Had this been a wide spread event on more than just small acreage, such an event would be mortally damaging to the livelihood and sustainability to dry land wheat farm.

Thanks to new conservation practices and no till or minimum till farming the residue left on the ground after a crop is harvested not only serves as a barrier to wind and rain erosion (protecting the top soil) but it also acts as a natural barrier to noxious weed populations. The protection of this residue is of paramount importance to a sustainable farming system. Putting this resource at risk is putting valuable land and resources in jeopardy which will have a chain reaction on the ecosystem as a whole." ⁷

Additionally, climate change as expressed in the PO may make soil rehabilitation efforts from fire damage more challenging and less effective. I do not see a mitigation plan that encompasses these difficulties.

⁷ Direct Email from Roger Morter, 2021

I hereby declare that the above statements are true to the best of my knowledge and belief, and that I understand they are made for use as evidence in administrative and court proceedings and are subject to penalty for perjury.

Dated this 17th day of September, 2021.

CERTIFICATE OF MAILING

On September 17, 2021, I certify that I filed the foregoing TESTIMONY OF Sam Myers with the Hearings Coordinator via electronic mail, and with each party entitled to service, as noted below.

/s/ Sam Myers Sam Myers

By: First Class Mail:

John C. Williams PO Box 1384 La Grande, OR 97850

By: Electronic Mail:

David Stanish Attorney at Law Idaho Power Company dstanish@idahopower.com

Lisa Rackner Attorney at Law Idaho Power Company lisa@mrg-law.com

Jocelyn Pease Idaho Power Company Attorney at Law jocelyn@mrg-law.com

Alisha Till alisha@mrg-law.com

Joseph Stippel Agency Representative Idaho Power Company jstippel@idahopower.com

Kellen Tardaewether
Agency Representative
Kellen.tardaewether@oregon.gov

Sarah Esterson

Oregon Department of Energy Sarah. Esterson@oregon.gov

Patrick Rowe Assistant Attorney General Patrick.g.rowe@doj.state.or.us

Jesse Ratcliffe
Assistant Attorney General
jesse.d.ratcliffe@doj.state.or.us

Jeffery R. Seeley jeff.seeley@doj.state.or.us

Mike Sargetakis Attorney at Law Oxbow Law Group, LLC mike@oxbowlaw.com

Karl G. Anuta Attorney at Law Law Office of Karl G. Anuta kga@integra.net

Stop B2H Coalition fuji@stopb2h.org

Stop B2H Coalition
Jim Kreider
jkreider@campblackdog.org

Colin Andrew candrew@eou.edu

Kathryn Andrew <u>(agmail.com</u>)

Susan Badger-Jones sbadgerjones@eoni.com

Lois Barry loisbarry31@gmail.com

Peter Barry petebarry99@yahoo.com

Ryan W. Browne browner@eou.edu

Gail Carbiener mcgccarb@bendbroadband.com

Matt Cooper mcooperpiano@gmail.com

Whit Deschner deschnerwhit@yahoo.com

Jim and Kaye Foss onthehoofl@gmail.com

Suzanne Fouty suzannefouty 2004@gmail.com

Susan Geer susanmgeer@gmail.com

Irene Gilbert ott.irene@frontier.com

Charles H. Gillis charlie@gillis-law.com

Dianne B. Gray diannebgray@gmail.com

Joe Horst and Ann Cavinato joehorst@eoni.com

Jim and Jane Howell d.janehowell@gmail.com

Virginia and Dale Mammen dmammen@eoni.com

Anne March <u>amarch@eoni.com</u>

Kevin March amarch@eoni.com

JoAnn Marlette garymarlette@yahoo.com

Michael McAllister wildlandmm@netscape.net

Jennifer Miller rutnut@eoni.com

Sam Myers sam.myers84@gmail.com

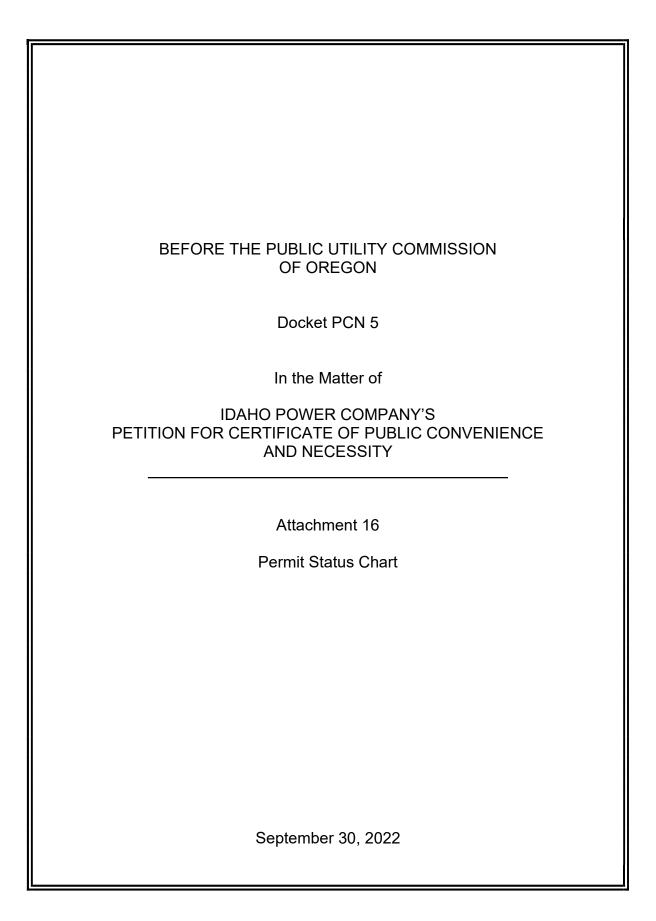
Louise Squire squirel@eoni.com

Stacia Jo Webster staciajwebster@gmail.com

Jonathan White jondwhite418@gmail.com

John Winters wintersnd@gmail.com

Charles A Lyons marvinroadman@gmail.com



Land Use Approvals and Permits Required for the B2H Project

Permit or Approval	Regulatory Authority	Federal /State/ Local	Included in EFSC Site Certificate	Status	Date Issued or Expected
Bureau of Land Management ROW Grant	U.S. Bureau of Land Management	Federal	No	Issued	January 2018
Cultural Resource Use Permit and Site-Specific Authorizations	U.S. Bureau of Land Management	Federal	No	Issued	June 2022
Permit for Archaeological Investigations	U.S. Bureau of Land Management	Federal	No	Issued	Contractor-held ¹
Paleontological Resources Use Permit	U.S. Bureau of Land Management	Federal	No	Issued	Contractor-held
Navy Easement	U.S. Department of Navy	Federal	No	Issued	March 2020
Forest Service Easement	U.S. Forest Service	Federal	No	Issued	May 2019
Special Use Authorization for Archaeological Investigations	U.S. Forest Service	Federal	No	Issued	July 2022
Archaeological Excavation Permit	Oregon State Historic Preservation Office	State	No	Issued	August 2022
Energy Facility Site Certificate	Oregon Energy Facility Siting Council	State	Yes	Approved	September 2022
Fish Passage Plan Approval	Oregon Department of Fish and Wildlife	State	Yes	Pending	October 2022
Removal-Fill Permit	Oregon Department of State Lands	State	Yes	Pending	October 2022
Baker County Land Use Permits	Baker County	Local	Yes	Pending	October 2022
City of Huntington Land Use Permits	City of Huntington	Local	Yes	Pending	October 2022
City of North Powder Land Use Permits	City of North Powder	Local	Yes	Pending	October 2022
Malheur County Land Use Permits	Malheur County	Local	Yes	Pending	October 2022

 $^{^{1}}$ Contractor-held permits are held by Idaho Power's contractors as part of their ordinary course of business rather than being obtained specifically for B2H.

Permit or Approval	Regulatory Authority	Federal /State/ Local	Included in EFSC Site Certificate	Status	Date Issued or Expected
Morrow County Land Use Permits	Morrow County	Local	Yes	Pending	October 2022
Umatilla County Land Use Permits	Umatilla County	Local	Yes	Pending	October 2022
Union County Land Use Permits	Union County	Local	Yes	Pending	October 2022
Federal Notice of Proposed Construction or Alteration	Federal Aviation Administration	Federal	No	Pending	Prior to Construction
Clean Water Act Section 404, Nationwide Permit 57 ²	U.S. Army Corps of Engineers	Federal	No	Pending	Prior to Construction
Special Use Permit for Logging Activities	U.S. Forest Service	Federal	No	Pending	Prior to Construction
Oregon Notice of Proposed Construction or Alteration	Oregon Department of Aviation	State	No	Pending	Prior to Construction
National Pollutant Discharge Elimination System Permit 1200-C	Oregon Department of Environmental Quality	State	No	Pending	Prior to Construction
National Pollutant Discharge Elimination System Permit 1200-A	Oregon Department of Environmental Quality	State	No	Pending	Prior to Construction
Air Contaminant Discharge Permit	Oregon Department of Environmental Quality	State	No	Pending	Prior to Construction
Permit to Operate Power Driven Machinery	Oregon Department of Forestry	State	No	Pending	Prior to Construction
Burn Permit	Oregon Department of Forestry	State	No	Pending	Prior to Construction
Plan for Alternate Practice	Oregon Department of Forestry	State	No	Pending	Prior to Construction
Permit to Construct a State Highway Approach	Oregon Department of Transportation	State	No	Pending	Prior to Construction

-

² Nationwide Permit 57 was formerly known as Nationwide Permit 12 prior to being renumbered in 2021.

Permit or Approval	Regulatory Authority	Federal /State/ Local	Included in EFSC Site Certificate	Status	Date Issued or Expected
Oversize Load Movement Permit/Load Registration	Oregon Department of Transportation	State	No	Pending	Prior to Construction
Permit to Occupy or Perform Operations Upon a State Highway	Oregon Department of Transportation	State	No	Pending	Prior to Construction
Road Approach Permit	Baker County	Local	No	Pending	Prior to Construction
Work in County Right-of- Way Permit	Baker County	Local	No	Pending	Prior to Construction
Flood Plain Development Permit	Baker County	Local	No	Pending	Prior to Construction
Permit to Occupy or Perform Operations upon Public Roads	Malheur County	Local	No	Pending	Prior to Construction
Flood Plain Development Permit	Malheur County	Local	No	Pending	Prior to Construction
Utility Crossing Permit	Morrow County	Local	No	Pending	Prior to Construction
Access Approach Site Permit	Morrow County	Local	No	Pending	Prior to Construction
Construction Permit to Build on Right-of-Way	Morrow County	Local	No	Pending	Prior to Construction
Flood Plain Development Permit	Morrow County	Local	No	Pending	Prior to Construction
Installation of Utilities on County and Public Roads Permit	Umatilla County	Local	No	Pending	Prior to Construction
Road Approach and Crossing Permit	Umatilla County	Local	No	Pending	Prior to Construction
Flood Plain Development Permit	Umatilla County	Local	No	Pending	Prior to Construction
Road Approach Permit	Union County	Local	No	Pending	Prior to Construction
Work in County Right-of- Way Permit	Union County	Local	No	Pending	Prior to Construction
Flood Plain Development Permit	Union County	Local	No	Pending	Prior to Construction
Conditional Use Permit	Owyhee County (Idaho)	Local	No	Pending	Prior to Construction