Public Utility Commissioners

e-mail: puc.filingcenter@state.or.us

Re: LC 63 COMMENTS

This document provides comments from the Friends of the Grande Ronde Valley (FGRV) regarding unsupported information and inadequate analysis of issues required by the Integrated Resource Plan (IRP) submitted by Idaho Power for 2015. FGRV have identified significant concerns regarding the impacts of including the B2H transmission line in the preferred alternative. The IRP fails to address how the contribution of multiple issues impacting energy will increase costs to consumers and place those costs outside the control of the PUC. The IRP focus is on justifying the need for the line absent supporting documentation and fails to do a legitimate evaluation of forces which directly impact the need for this line.

We understand that Public Utility Commission (PUC) "acceptance" does not mean there is "agreement" with the IRP. However, including a 1.2 billion dollar project as part of Idaho Power's preferred portfolio absent justification for it appears to conflict with the Federal Energy Regulatory Commission's (FERC) rules requiring that Oregon customers receive benefits commensurate with the costs.

Our comments are organized following the headings listed in Order No. 07-002.

Guideline 1: Substantive Requirements

a. All resources must be evaluated in a consistent and comparable basis.

- --The IRP focus is on justifying the B2H line rather than providing an analysis of the options and using that analysis to determine the best alternative plan. For example, Idaho Power has provided a significantly inflated (1.5 percent per year) projection of customer and use increases compared to PacifiCorp (0.4 percent per year) and other utilities.
- --Idaho Power did not include the B2H line in the acknowledged 2006 or 2008 IRP's, or in the originally submitted 2010 IRP. It was included as an amendment to these three documents after the fact.

b.& c. Risk and uncertainty must be considered and portfolio must provide the best combination of expected costs and associated risks to the utility and it's customers.

---The IRP fails to evaluate how increases in private generation and microgrids will impact the number of customers and the average amount of electricity those customers will use. These impacts need to be reviewed in terms of the increased costs consumers will experience as a result of the B2H line development. Reductions in customers and use will mean the costs will be recovered from a reduced customer base and significantly inflate the cost of electricity for the remaining users.

Guideline 2: Procedural Requirements

a. The public which includes other utilities, should be allowed significant involvement in the preparation of the IRP and the public should be provided opportunity to review and comment prior to filing a final plan with the Commission

--Oregon citizens who will experience both financial and resource impacts from this development were not provided opportunity to have involvement in the preparation of the IRP. We have not been able to identify opportunities when Oregon citizens were provided opportunity to review and comment prior to the filing of a final plan with the Commission. The Citizens Utility Board inserted themselves into the process absent being provided critical information late in the process. CUB's focus on Renewable Energy development means it represents a limited sector of Oregon citizens. The Union County Commissioners and public were unaware of opportunities and the significance of the need to provide

comments on the IRP until approximately two weeks ago. Many citizens continue to be unaware of any opportunity to comment on the IRP.

Guideline 4: Plan Components

b. Analysis of high and low load growth scenarios in addition to stochastic load risk analysis with an explanation of major assumptions.

--The applicant failed to include known changes which will slow the growth in terms of number and quantity of electricity used by customers in their load growth figures. This has resulted in a gross exaggeration in the high growth future need for transmission capacity.

Partner utilities including Pacific Power have reported significantly lower rates of customer growth in their recently filed IRP. They also project no need for additional energy befor 2028 in their 2015 request to PUC requesting a reduction in the required contract length for PURPA solar (The Bend Bulletin, Wednesday, September 23, 2015, "PacifiCorp seeks change to green power rules"). The applicant should be required to explain why Idaho Power's projected increases in the number of customers and use rates are so much greater than their partner in this project. and other utilities in the state. Idaho Power's own document submitted to the Idaho PUC indicated that they currently are having to accept energy that they do not need due to the fact that it is PURPA certified, and yet in this document, they project ongoing increases in unmet need.

Idaho Power, in this IRP projects the following load growth figures relative to this proposed line of 250 MW in 2016, 350 MW in 2018, and up to 450 MW in 2020. These figures are not justified due to multiple predictable changes as included in this document.

c. For electric utilities, a determination of the levels of peaking capacity and energy capability expected for each year of the plan, given existing resources identification of capacity and energy needed to bridge the gap between expected loads and resources, modeling of all existing transmission rights, as well as future transmission additions associated with the resource portfolio tested.

–Idaho Power does not do any modeling of their existing transmission rights on the Idaho – Northwest path. Idaho Power states that, "The Idaho—Northwest transmission path consiste of the 500-kV Hemingway—Summer Lake line, the three 230-kV lines between the HCC and the Pacific Northwest, and the 115-kV interconnection at Harney Substation near Burns, Oregon. The Idaho-Northwest path is capacity-limited during summer months due to transmission-wheeling obligations for the BPA eastern Oregon and southern Idaho load and due to energy imports fom the Pacific Northwes to serve Idho Power retail load.

We cannot find in the IRP where Idaho Power studied upgrading these lines or running a double circuit to increase capacity to alleviate its stated capacity limitations.

In addition, taking Boardman off line will create 550 megawatts of capacity on the Idaho—Northwest path which is currently capacity-limied during summer months. This dditional capacity will allow the renewals that are being developed to be sold in the Pacific Northwest and mid-Columbia power grid thus alleviating Idaho Power's need for new sources of energy.

The same will be true when the North Valmy Power Plant has been taken off line freeing up 522 megawatts of capacity Idaho Power will have a surplus of energy and will save the rate payers money by refurbishing existing transmission lines. This would be a logical first step before proposing the construction of a 305 mile transmission line that will have significant negative impacts on the counties that it will passes through.

--Peaking capacity is exaggerated as a result of exaggerated projections of customers and energy consumption.

- --In the IRP acknowledged by the Idaho PUC, Idaho Power said that "it's 17 hydroelectric projects on the Snake River and its tributaries will remain a key ingredient to meeting greater demand." Idaho Power did not indicate in the Oregon IRP what portion of any increased demand would be assumed by the hydroelectric projects., (Houston Chronicle, Wednesday, December 30, 2015) Since Idaho has no Renewable Energy Portfolio requirements, they have significant flexibility in the source and location of the energy required for any future increases in need.
- --Idaho Power failed to analyze how the availability of additional energy resources which will come on line as a result of Gateway West which is projected to provide access to 2,500MW of energy to Idaho Power. It appears that there is more than enough energy available to Idaho power to meet and exceed all needs without any increase in transmission capacity or utilization of Oregon energy resources.

 --The IRP fails to address how Idaho Power's plans to let most of it's current wind energy contracts expire will impact the IRP since they have stated an intent to develope solar resources as a better match with their high use timeframes (afternoons in the summer). A comparison of Solar Power Resource Potential by State indicates Oregon is the second worse state for access to "sun energy". Idaho is significantly better at 9th from the top and Nevada and southern states are better yet. Idaho will get less quantity and less predictable energy from solar developments in Oregon than almost any other states . http://www.neo.ne.gov/statshtml/20l.htm
- --Oregon is eliminating all coal generated electricity from it's energy mix and shutting down the Boardman Coal Plant. This will reduce the energy flow from coal plants to the east which would have utilized the B2H transmission line. Currently coal represents approximately 1/3 of Oregon's energy consumption. This energy will be replaced by renewable energy developments such as wind, solar and hydro power.
- --Oregon currently generates renewable energy that exceeds 100% of it's energy needs and additional developments have been approved, but not yet built which will be able to meet additional renewable energy requirements as they become necessary. The reduced ongoing need for transmission between Oregon and Idaho needs to be evaluated as it supports the fact that the existing lines will be able to carry predictable future transmission needs. If predictable future load pressure were to be greater than that prediction, upgrades could be made to the existing infrastructure to accommodate that increase without the over-building of capacity that the B2H line represents.
- --Idaho Power predicts that they will realize a reduction through energy efficiency in 2015-2019 of 84 average megawatts for energy demand and 126 MW for peak demand. The partnering utility in the B2H line, PacifiCorp, projects that they will meet 86% of projected increases in electricity usage over the next decade by energy efficiency. In 2014 alone, they saved more than 553,200 megawatt-hours of electricity for their 730,000 customers. This amount of power could serve nearly 59,000 homes for a year. (PacifiCorp Long Range Energy Plan Calls for Less Coal, More Energy Efficiency, June 8, 2015, Published by PacifiCorp)

e. Identification and estimated costs of all supply-side and demand-side resource options, taking into account anticipated advances in technology.

--The applicant did a very marginal job of addressing this plan component. They did not even include the impact of currently existing technology in the projections of need for the B2H line even though it is clear that the locally generated energy which is supported by this technology will remove a significant amount of energy from the transmission infrastructure.

Some technology either available or which is predicted to be available soon include:

1)microgrids

--Developments in new energy storage technology provides the key ingredient which has limited the development of microgrids and distributed generation moving many people away from reliance on large utilities to provide their electricity. According to the director of the research arm of the US Department of Energy, "a number of breakthroughs in battery

technology have been achieved, with huge implications on the use of renewable energy and electric cars." http://www.thereregister.co.us/2016/03/04/us_hits_battery_storage_holy_grail/--Eugene Water and Electric is currently involved with a project combining energy storage and solar energy in their microgrid . This demonstration will provide resilient power within a microgrid which reduces the need for centralized energy distribution and provides power in the event of a grid wide failure. http://solarbuildermag.com/news/energy-storage-demonstration-in-oregon=earns=federal=funding

2)net metering

3)energy storage technology—Harvard University researchers have developed a new, less costly flow battery fluid (this battery type is already used in Japan to help manage the power grid, but currently are very expensive) https://www.technologyreview.com/s/523251/new-battery-material-could-help-wind-and-solar

4)small nuclear reactors such as the one currently planned for Idaho with the help of a grant from the US Department of Energy are expected to be operational by 2023. These will be safe and capable of providing energy to businesses and homes with the capability of installing connecting units to increase the output would significantly speed up the use of microgrids as an option to using the distribution system as a primary source of energy.

f. Analysis of measures the utility intends to take to provide reliable service, including cost-risk tradeoffs.

Using the argument that Idaho has increased power needs in summer as justification for the B2H line is hard to justify. (The "need" is for increased energy during hot afternoons 2 months out of the year due to irrigators using significant energy during that time.) Idaho Power is currently participating in a pilot program that has decreased that usage.

g. Identification of key assumptions about the future and alternative scenarios considered.

- --The applicant focused upon justifying their preferred option and failed to complete a thorough review of other options. There is practically no information on the "no action" option which should form the basis for evaluation of all other scenarios.
- --The applicant failed to analyze how the multiple transmission line upgrades and developments they are involved in and which are becoming available to Idaho Power will impact the availability of power and reduce the need for the Boardman to Hemingway transmission line. In all likelyhood, these changes to the transmission lines will show that the only need is to perform necessary maintenance, and perhaps upgrade the capacity of one or more of the existing lines. Idaho Power will increase load capacity for the Midpoint West rating from 1,027 M o 1,300 MW through incremental upgrades to existing transmission lines. This approach is going to cost a fraction of the cost to build an entirely new line.
- --The applicant appears to believe that energy production, transmission and distribution will continue to be primarily the responsibility of utilities. There is a great deal of evidence that this is a faulty assumption. For instance, the recent US Supreme court ruling that affirms that FERC has the authority to require energy producers to provide for demand response. Requiring producers to provide for demand response prior to placing energy on the infrasturcutre will greatly reduce the need for utilities to provide the level of transmission capacity that they are currently predicting. This requirement would also have a significant impact on assuring the reliability of the system without relying on actions of the utilities.

j. Results of testing and rank ordering of the portfolios by cost and risk meters.

--The applicant failed to justify the inclusion of the B2H line. Given the multiple known factors which will reduce the need for this transmission line, the risk is significant and the cost is far greater than any potential benefit of the line to Oregon. The Idaho PUC has also questioned the justification for inclusion of this development in their accepted IRP. This is in spite of the fact that for Idaho customers

it is easier to make the argument that there are more potential benefits justifying the cost than is the case for Oregon customers.

k. Analysis of the uncertainties associated with each portfolio evaluated.

- --All options including the B2H line should include the large number of uncertainties involved with this development that will make it likely that it is an unneeded resource and could, in fact, become completely unnecessary in the forseeable future due to the currently existing transmission lines being able to handle the energy transfer needs.
- --Idaho Power appears to be stating that they will be obtaining an increased amount of Energy from Oregon. This statement is questionable due to Idaho power's stated plans to move from the use of wind energy as a preferred renewable to the use of solar energy which is readily accessable in states south of Idaho.
- --The lack of actual costs to Oregon customers that this line represents in spite of requests for this information is of critical concern and is information required in any determination of costs vs. benefits of the B2H line.

l. Selecton of a portfolio that represents the best combination of costs and risk for the utility and its customers:

--It is clear to members of the Friends of the Grande Ronde Valley that including the B2H line in a portfolio for Idaho Power cannot be justified in terms of costs and risks for Oregon customers.

m. Identification and explanation of any inconsistencies of the selected portfolio with state and federal energy policies that may affect a utility's plan and any barriers to implementation.

- --FERC Order 1000 directs utilities to: "(2) ensure that the costs of transmission solutions chosen to meet regional transmission needs are allocated fairly to those who receive benefits from them." (Energy Policy Update: July 26, 20ll How FERC Order No. 1000 affects the US Electric Grid) Acceptance of an IRP that will result in no significant benefit to Oregon citizens, and yet require them to reimburse costs of the development for the next 40 years is contrary to this federal requirement. When asked, the developer has not provided information regarding what the actual dollars are projected to be for Oregon, but with PacifiCorp purchasing approx. 54% of the costs of the line projected to cost 1.2 billion dollars, it will have a substantial impact on Oregon citizens who are customers of both PacifiCorp and Idaho Power. According to the IRP, Bonneville Power has not committed to pay for a portion of the line, but if that occurs, it will add even more to the costs to Oregonians for a line being built primarily to benefit Idaho customers. Idaho Power only serves approx. 1% of the total Oregon electric customers, or approx. 18,000 households or businesses.
- --Oregon passage of the bill to remove coal from the energy mix for Oregon customers will have a large impact on the costs of energy to Oregon customers. It not only removes from PUC the ability to contol most costs associated with energy provided, but also adds multiple additional costs to those which utilities are allowed to pass on to customers. Adding the costs of the B2H line onto those already "approved" increases will be unreasonably damaging to Oregon citizens and businesses. Oregon law already allows utilities to charge 4% above the costs of development of other energy resources for renewable energy. This actually appears to be in conflict with FERC rules limiting the costs to the amount it would cost to produce other energy resources, but it is currently being done.

Guideline 7: Demand Response

--Idaho Power's IRP indicates a belief that the full responsibility for managing the reliability of the system lies with them. In fact, FERC currently is accepting comments on transferring the responsibility for providing for a consistent flow of energy (demand response) into the distribution lines to the developers of the energy. This will significantly reduce the maximum limits of energy that the transmission lines will be required to carry as well as reducing demand by as much as 188,000 megawatts according to FERC. Since this rule has been upheld by the US Supreme Court, there is

every reason to believe that actions are forthcoming. FERC is currently taking public comments regarding the best way to address this issue.

Guideline 11: Reliability

--The use of high voltage transmission lines carrying large quantities of energy on a single distribution line increases the risk of loss of power either from terrorist activities or natural events. The reliability of the grid is better served by utilizing multiple interconnecting lines that make it less likely that energy will be lost to large areas simultaneously.

Summary:

There are multiple issues which have not been addressed in the Idaho Power Integrated Resource Plan as currently before you. While PUC is not required to direct Idaho Power to address them, we encourage you to do so. While your approval does not indicate agreement with the plan, you cannot control uses of your document after it leaves your hands. The Department of Energy utilizes the IRP in a manner unsupported by any intended use. This makes the impacts of your decision critical for the citizens you are trying to protect from unwarranted increases in costs. The DOE interpret inclusion of a project in the IRP as documentation that "need" has been established and you have made a determination that this is the "Lease Cost Plan". According to the Department of Energy Project Order for the Boardman to Hemmingway Project, dated Jan. 26, 2009, Page 20, "If the transmission line, or a substantially equivalent project, is identified in the most recent Integrated Resource Plan (IRP) acknowledged by the Oregon Public Utility Commission, the Council's "Least Cost Plan" rule fits this project."

Given the multiple concerns and questions remaining regarding the need for this transmission line, and whether the costs are justified. We encourage you to either:

- 1. Require that those questions be answered, or
- 2. Remove this project from the IRP for 2015 and require Idaho Power to justify it's inclusion in the 2017 plan if they choose to include it in future IRP's. Idaho Power has indicated that they were working on the B2H plan prior to including it in the IRP, and there is nothing that would preclude that occurring now.

Uncontrolled and unquantified costs being placed on Oregon customers due to legislation requiring the removal of coal generated electricity and the requirement to have 50% renewables along with the inclusion of additional costs that have now been transferred from energy suppliers to Oregon customers will place a significant financial burden on Oregon citizens and businesses. Adding additional uncontrolled and unquantified costs of the B2H line on Oregon customers absent clear identification of exactly what those costs are and that they meet the FERC requirements for costs assumed by Oregon in this multi-state line is not justified based upon the information contained in the Idaho Power Integrated Resource Plan.

Thank you for considering our input. I will be present at the Mar. 24 hearing on this proposal and will be happy to respond to any questions you may have.

Friends of the Grande Ronde Valley Submitted by: Irene Gilbert, Legal Research Analyst 2310 Adams Ave.

La Grande, Oregon 97850 e-mail: ott.irene@fronter.com

Phone: 541-963-8160