

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

LC 74

In the Matter of

IDAHO POWER COMPANY,

2019 Integrated Resource Plan.

Renewable Northwest's
Final Comments

January 8, 2021

I. INTRODUCTION

Renewable Northwest thanks the Oregon Public Utility Commission (the “OPUC” or the “Commission”) and OPUC Staff (“Staff”) for this opportunity to comment on Idaho Power Company’s (“Idaho Power” or the “Company”) 2019 Second Amended Integrated Resource Plan (“IRP”). Idaho Power filed its original IRP on June 28, 2019, and its Amended 2019 IRP on January 31, 2020. In June 2020, Idaho Power identified necessary changes in the Amended 2019 IRP, prompting a comprehensive review of its modeling and analysis conducted using AURORA Long-Term Capacity Expansion model. The Second Amended IRP followed on October 2, 2020. We appreciate Idaho Power’s efforts to deconstruct and refine the modeling inputs, assumptions, and outputs and appreciate the detailed clarifications provided in the IRP and a subsequent OPUC workshop held on October 22, 2020 where Idaho Power provided feedback on the recent changes and addressed stakeholder comments and questions.

In these comments, we first provide comments on Idaho Power’s iterative approach to portfolio modeling conducted as part of the IRP review process, which results in a Preferred Portfolio and Action Plan that appear to be reasonable, particularly within the Action Plan window. Next, we comment on the resource selection and retirement in the updated Action Plan provided in the IRP. Finally, we suggest a few avenues for potential improvement, including the possibility of further accelerating the transition to a modern, low-carbon system in Idaho Power’s next IRP, and the recommendation that Idaho Power explore options that could displace the 2031 gas peaker showing up in its modeling with emerging non-emitting capacity resources including long- and medium-duration storage, hybrid, and demand-response resources.

Finally, as noted in our initial comments, we particularly “appreciate that Idaho Power’s IRP reflects its ‘goal to provide 100 percent clean energy by 2045’” and support “Idaho Power’s strategy of achieving this goal by adding renewables, maintaining ‘the company’s existing backbone of nearly 50 percent hydropower, as well as continuing to reduce carbon emissions and

exiting participation in its share of coal plants” -- elements of the IRP that remain true after the Company’s additional efforts and amendments.¹ Idaho Power’s efforts begin the important work of carrying out the policy set forth in Governor Brown’s Executive Order 20-04, which provides (among other things) that “[i]t is in the interest of utility customers and the public generally for the utility sector to take actions that result in the rapid reduction of GHG emissions, at reasonable costs, to levels consistent with the GHG emission goals set forth in [this EO], including transitioning to clean energy resources.”² All in all, this IRP reflects the Company’s significant work to modernize its planning and modeling efforts in order to achieve a least-cost, least-risk portfolio of resources that support the Company’s 100% clean-energy goal.

II. COMMENTS

1. General Comments on Comprehensive Review of 2019 IRP Modeling

Renewable Northwest generally supports the IRP review methodology conducted by Idaho Power to provide clarity around the entire resource planning process. In addition to adjusting modeling inputs for coal units including Jim Bridger and North Valmy, the IRP review process included studying the accelerated retirement of coal units to ensure that the preferred portfolio selected would be aligned towards Idaho Power’s 100% clean-energy goal in addition to being a least-cost, least risk portfolio. Idaho Power conducted a thorough review of the entire IRP process through its IRP Review Team to ensure a fair, transparent and consistent methodology is followed throughout the process cycle.

The emerging preferred portfolio from the Second Amended 2019 IRP continues to show a clear path toward a clean energy future through the procurement of new solar resources, a transition away from coal, and the development of new transmission as a least-cost and carbon-free supply-side resource. A new update regarding the potential exit from Valmy Unit 2 in 2022 instead of 2025 offers exciting opportunities for Idaho Power to tap into the significant potential of clean and diverse energy resources available in the region to provide customers with cost-effective and reliable supply. As mentioned in our opening comments, we support Idaho Power’s conclusion that additional transmission builds can “provid[e] Idaho Power access to clean and low-cost energy in the Pacific Northwest wholesale electric market,” and the selection of B2H as a cost-effective resource highlights the fact that new long-distance transmission can help unlock the region’s clean energy potential to deliver energy to load centers.³

¹ Initial Comments of Renewable Northwest, Docket No. LC 74, at 2 (Apr. 2, 2020) (quoting Idaho Power’s initial IRP at 11).

² *Id.* at Section 5(A).

³ Initial Comments of Renewable Northwest at 4 (quoting initial IRP at 5).

2. Resources Selected for Action Plan (2020 - 2026)

Renewable Northwest appreciates the Company's update to the Action Plan resources in the Second Amended 2019 IRP, which identifies the "Preferred Portfolio as the Planning Gas/Planning Carbon scenario with B2H; exit dates for the Jim Bridger units in 2022, 2026, 2028, and 2030; and potential exit from Valmy Unit 2 in 2022."⁴ The updated Action Plan includes (1) addition of 120 MW of solar capacity by 2022; (2) exiting from four coal-fired generating units by year-end 2022, and from a total of five of the seven coal-fired units owned by Idaho Power by year-end 2026; and (3) the completion and operation of B2H in 2026.

While we support accelerated coal retirements and appreciate the company's efforts towards completion and operation of new transmission, additional changes outside the Action Plan window raise some concerns. Specifically, Table 1.1 ('Preferred Portfolio Additions and Coal Exits') shows reductions in wind and solar additions in the latter years of analysis and addition of 300 MW of gas resources in 2031. While we understand the premise suggesting diminishing contributions of variable resources with like generating profiles to meeting peak load, we strongly suggest Idaho Power study emerging flexible capacity resources including hybrid resources, *i.e.* wind and solar resources paired with 4- and 6-hour battery energy storage systems ("BESS") to supply energy during peak demand in addition to providing grid services such as regulation reserves, black-start and ramping reserves. BESS are increasingly becoming a staple of clean energy economies due to their flexibility, modularity and scalability, and when paired with non-emitting renewable resources, are able to provide capacity during hours with the highest probability of loss of load. Recent cost estimates⁵ show that Li-ion battery pack costs have reached new lows (below \$100/kWh) and this trend is likely to continue as standalone batteries and hybrid resources are cost-competitive with combined cycle (CC) and Combustion Turbine (CT or peaker) power plants. In future IRPs, it will be important to evaluate hybrid resources such as solar + battery storage and wind + battery storage in *separate resource classes* with multiple defined dispatch characteristics (depending on a typical loss of load heatmap) instead of pure endogenous selection inside a model, which may underestimate the flexibility provided by these resources.

3. Meeting Long-Term Capacity Needs Using Non-Emitting Resources

Renewable Northwest appreciates the detailed coal retirement analysis conducted by Idaho Power which resulted in accelerated exit dates for Jim Bridger units and potentially an earlier exit from North Valmy subject to reliability analysis. These coal retirements pose an opportunity

⁴ IRP Application at 6.

⁵ BloombergNEF, "Battery Pack Prices Cited Below \$100/kWh for the First Time in 2020, While Market Average Sits at \$137/kWh" (Dec. 16, 2020), *available at* <https://about.bnef.com/blog/battery-pack-prices-cited-below-100-kwh-for-the-first-time-in-2020-while-market-average-sits-at-137-kwh/>.

for Idaho Power to evaluate the portfolio of emerging long-term non-emitting capacity resources available in the region. Idaho Power mentions that:

Idaho Power will conduct a thorough modeling examination of flexible resources, as they become cost-effective, that would provide similar reliability and dispatchability as natural gas, but without the carbon footprint.⁶

The 300 MW capacity need that shows up as a gas addition in 2031 could be avoided if Idaho Power can assess potential non-emitting capacity resources such as pumped-hydro storage (long-duration storage), hybrid resources, and targeted demand response to meet that capacity need in a cost-effective, emission-free, and reliable manner. Each of these resources has the ability to provide capacity (or reduce or manage demand) without creating the costs and risks associated with stranded assets, especially given the possibility of a future policy scenario where most or all of the region’s supply must be generated using clean, non-emitting resources and the policy direction of EO 20-04.

4. Additional Clarifications on North Valmy Exit

Renewable Northwest supports the finding that exiting Valmy Unit 2 in 2022 would provide net economic benefits to Idaho Power and its customers subject to further reliability analysis. The IRP mentions that:

Exiting Valmy Unit 2 in 2022, rather than 2025, would provide approximately \$3 million in NPV savings due to avoided capital investment and net O&M reductions. However, potential savings based on a long-term analysis should not be the sole consideration. Rather, near-term economic and reliability impacts of an earlier exit must also be evaluated using data points such as forward market hub price forecasts, planned unit outages, Idaho Power’s customer risk management processes, and recent market conditions, among other items. The objective of this near-term analysis would be to identify any tradeoffs between an earlier exit date and the ability to provide reliable, affordable power.⁷

The IRP goes on to state that Idaho Power “will assess the feasibility of a 2022 exit, which would require 15 months of advance notice to the plant operator (i.e. a decision prior to September 30, 2021).”⁸ We recommend that Idaho Power conduct a transparent stakeholder process to provide inputs and feedback as to the process and implications of this reliability analysis in addition to specific details regarding the type of model, inputs, assumptions, scenarios and outputs that the Company will use. The metric used to define ‘reliability’ will also be a key indicator in this analysis, and careful considerations must be given to recent developments

⁶ IRP at 16.

⁷ IRP at 18.

⁸ *Id.*

regarding resource adequacy and reliability assessments in general. A transparent stakeholder process will be essential to ensure that any decision is reached in a fair and reasonable manner with stakeholder input and discussion. Renewable Northwest would welcome the opportunity to be part of those conversations in the future in this docket or in any other proceedings.

III. CONCLUSION

Renewable Northwest again thanks the Commission for this opportunity to comment on Idaho Power's 2019 IRP. We appreciate the Company's efforts to update its portfolio development process, to conduct additional review to ensure the soundness of its analysis, and ultimately to achieve a least-cost, least-risk, 100% clean energy supply in line with the Company's goal and EO 20-04's statement of public interest. We look forward to continued engagement in both this docket and future Idaho Power IRP development as the company continues working toward its 100% clean-energy goal.

Respectfully submitted this 8th day of January, 2021,

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