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March 19, 2021

VIA ELECTRONIC FILING

Attention: Filing Center
Public Utility Commission of Oregon
P.O. Box 1088
Salem, Oregon 97308-108

Re: LC 74 – Idaho Power Company’s 2019 Integrated Resource Plan (“IRP”)

Attention Filing Center:

Attached for filing in the above-captioned docket is Idaho Power’s Comments on Staff Report for Special Public Meeting April 6, 2021.

Please contact this office with any questions.

Thank you,

Jennifer Miller
Legal Assistant

Attachment

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

LC 74

In the Matter of
IDAHO POWER COMPANY
2019 Integrated Resource Plan.

Idaho Power’s Comments on Staff Report
for Special Public Meeting April 6, 2021

I. INTRODUCTION

Idaho Power Company (“Idaho Power” or “Company”) appreciates Staff’s thorough review of the Company’s *Second Amended 2019 Integrated Resource Plan* (“IRP”) and Staff’s thoughtful consideration of strategies to improve future IRP processes, as set forth in Staff’s recent Report for Special Public Meeting April 6, 2021 (“Staff Report”). The Company appreciates and supports many of Staff’s recommendations—in particular, the recommended acknowledgment of pursuing early exit from Jim Bridger units and conducting ongoing Boardman-to-Hemingway (“B2H”) permitting and construction activities.¹ With respect to Staff’s recommendations for future IRP processes and methods, the Company disagrees on only two points and offers clarification on a third, with reasoning provided below.

The Staff Report includes an extensive list of additional recommendations for the 2021 IRP, most of which the Company has already accepted.² Specifically, Idaho Power accepts the following recommendations:

- Report on qualitative benefits and risk by portfolio.³
- Optimize resource buildouts based on the Company’s system.⁴
- Incorporate qualitative risks into the portfolio development process.⁵

¹ Staff Report at 2.

² A full list of Staff’s additional recommendations can be found in the Staff Report at 4-5.

³ Idaho Power’s Final Comments at 28.

⁴ *Id.* at 30.

⁵ *Id.* at 28.

- 1 • Review the Energy Trust of Oregon’s piloted measures from 2018-2020 and share the
2 results of the review with the Energy Efficiency Advisory Group (“EEAG”).⁶
- 3 • Include load forecasting improvements with respect to indicator variables and out-of-
4 sample testing.⁷
- 5 • Address whether the upper and lower bounds on the Company’s customer load
6 stochastic risk analysis are wide enough.⁸
- 7 • Present the impacts of the economic recession caused by COVID-19 on long-term
8 load growth.⁹
- 9 • Update the levelized cost of capacity (“LCOC”) for expanded demand response
10 (“DR”).¹⁰
- 11 • Provide an update on the Oregon Residential Time-of-Day Pilot Plan, including
12 number of participants, total costs, and a venue for reporting on the pilot results moving
13 forward.¹¹
- 14 • Conduct sensitivity analysis to address different renewal assumptions for wind
15 Qualifying Facilities.¹²
- 16 • Update the capacity contribution analysis for solar using newly available data,
17 according to one of the two Commission-approved methods.¹³
- 18 • Remove the threshold of 80 MW for solar-plus-storage resources.¹⁴
- 19 • Model the production tax credit benefits for wind resources to the extent technically
20 achievable.¹⁵
- 21 Idaho Power provides these comments on the Staff Report for the limited purpose of
22 addressing only three of Staff’s additional recommendations: (1) requiring a continued 20 percent

⁶ *Id.* at 56.

⁷ *Id.* at 70.

⁸ Staff Report at 4.

⁹ Idaho Power’s Final Comments at 69.

¹⁰ *Id.* at 60.

¹¹ *Id.* at 65 (providing the requested report).

¹² *Id.* at 67.

¹³ *Id.* at 48. Note, on page 5 of the Staff Report, Staff states that the Company should perform its “approved capacity factor approximation method”; however, on page 48 of the Report, Staff notes its continued support for moving to the Effective Load Carrying Capability (“ELCC”) method. Idaho Power understands Staff to support Idaho Power’s future use of the ELCC method as a replacement for the previous capacity factor (“CF”) approximation method. See Idaho Power’s Final Comments at 47-48 (explaining the need to transition away from the CF approximation method).

¹⁴ Idaho Power’s Final Comments at 49-50 (explaining that no cap was applied to standalone storage, and agreeing to remove the threshold for solar-plus-storage).

¹⁵ *Id.* at 53.

1 cost contingency for B2H; (2) requiring a cross-validation plan for load forecasting; and
2 (3) developing a new modeling approach for behavior-based DR programs.

3 II. DISCUSSION

4 A. The Commission Should Preserve Flexibility for the B2H Cost Contingency.

5 Staff recommends that Idaho Power be required to continue using a 20 percent
6 contingency estimate for B2H in the 2021 IRP.¹⁶ Idaho Power disagrees with this
7 recommendation for two reasons.

8 **First**, continuing to use a 20 percent cost contingency may functionally duplicate the
9 Company's forthcoming cost sensitivity analysis.¹⁷ Per Staff's recommendation, Idaho Power
10 agreed to incorporate a cost-sensitivity analysis for B2H into the 2021 IRP.¹⁸ The purpose of a
11 cost contingency is to account for potential cost increases in the planning process. A sensitivity
12 analysis serves a similar purpose—with greater detail—by examining the impacts of various
13 degrees of cost increases and decreases on the broader portfolio. Where a cost sensitivity
14 analysis accounts for potential increases in costs, including an additional 20 percent contingency
15 may distort the analysis.

16 **Second**, as Idaho Power's Final Comments explained, the Company is currently working
17 with an engineering consultant to update the B2H estimate.¹⁹ The project is moving closer to
18 completion, there are fewer unknowns, and this refinement process will allow the Company to
19 provide a more robust and detailed breakdown of the B2H cost components in the 2021 IRP.²⁰
20 With the benefit of an updated cost estimate, it may no longer be appropriate to include a
21 20 percent cost contingency for future planning processes. Particularly given that no other
22 resource includes a contingency, the continued use of a 20 percent contingency has the potential

¹⁶ Staff Report at 2.

¹⁷ Idaho Power's Final Comments at 13.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

1 to skew resource selection in formation of the 2021 IRP's least-cost, least-risk portfolio. To the
2 extent a contingency may be appropriate, the amount should be based on factors identified
3 through the process to develop a refined cost estimate.

4 In sum, Idaho Power agrees with Staff that a cost sensitivity analysis for B2H is appropriate
5 and valuable; however, a 20 percent cost contingency may no longer be a reasonable base
6 assumption for IRP purposes. Idaho Power believes it is premature to decide whether, or to what
7 extent, a B2H cost contingency should be applied in the 2021 IRP; that determination should be
8 made based on the latest project information and in consultation with project partners and
9 consultants. Considering the above, the Company respectfully requests that the Commission
10 decline to require a specific cost contingency amount in the 2021 IRP analysis.

11 **B. The Commission Should Allow Flexibility for Error Testing of Load Forecasting.**

12 Staff recommends that Idaho Power be required to present a plan for cross-validation (or
13 a similar approach) to check whether Autoregressive Integrated Moving Average ("ARIMA")
14 modeling is likely to reduce load forecast error.²¹ In light of Idaho Power's ongoing investigation
15 into load forecasting methodologies and error testing, including a recent workshop with Staff, the
16 Company believes that alternatives to ARIMA may be more appropriate to error-test the
17 Company's load forecasts for the upcoming IRP.

18 By way of background, Staff expressed concern that the Company's regression modeling
19 might result in errors related to stationarity, and that "[o]ne of the easiest ways" to handle the
20 issue would be through employing ARIMA models.²² In response, Idaho Power noted that ARIMA
21 models "produce highly significant results for short-term forecasts," but that the long-term nature
22 of IRP processes "introduces a potential risk of inaccuracy and interpretability of moving averages
23 throughout the forecast period without thorough testing."²³ Nonetheless, the Company committed

²¹ Staff Report at 4.

²² Staff's Opening Comments at 19.

²³ Idaho Power's Reply Comments at 62.

1 to using ARIMA models to test for after-the-fact stationarity, and further agreed to use other
2 statistical methods to test for stationarity issues.²⁴ In Staff’s Final Comments, Staff asked Idaho
3 Power to identify what statistical method the Company would use to evaluate whether ARIMA
4 models can reduce forecast error.²⁵ Staff also asked the Company to convene a workshop “to
5 present a statistical method addressing this issue.”²⁶

6 In Idaho Power’s Final Comments, the Company explained that it had continued to assess
7 possible improvements to its load forecasting analysis, remained committed to using ARIMA error
8 testing and to exploring other statistical methods, and would host a workshop to discuss these
9 improvements.²⁷

10 Since Final Comments were filed on February 5, 2021, the Company has continued to
11 expand its load forecasting and error testing analysis. This investigation yielded two key findings:
12 **First**, using additional statistical error-testing methods, the Company was able to confirm that its
13 load forecasting model performed to a high degree of accuracy with minimal forecasting error—
14 demonstrating that the stationarity concerns that ARIMA could address did not exist. Specifically,
15 results from the Company’s model were shown via Jarque-Bera, Lung-Box, and Durbin Watson
16 testing to fall within a 1 percent margin of accuracy, which is highly reliable. **Second**, as the
17 Company looked to implement the ARIMA model, it became clear that incorporating ARIMA would
18 require a substantial overhaul of the entire load forecasting methodology. Given that (1) ARIMA
19 was intended as “[o]ne of the easiest ways” to reduce stationarity-related errors, and (2) the
20 Company’s additional statistical error testing demonstrates that such errors are largely non-
21 existent, the Company has concluded that ARIMA modeling is not appropriate for the 2021 IRP
22 load forecasting analysis. In the February 23, 2021, workshop with Staff, the Company explained
23 both this additional analysis and the Company’s ultimate findings.

²⁴ *Id.*

²⁵ Staff’s Final Comments at 5.

²⁶ *Id.*

²⁷ Idaho Power’s Final Comments at 70.

1 Idaho Power appreciated Staff's proposal to convene a technical workshop and believes
2 that it enabled a more robust analysis of the Company's load forecasting process, as well as
3 examination of the efficiency and reasonableness of using ARIMA modeling in the 2021 IRP.
4 While Staff did not specifically indicate at the workshop whether it supports or opposes the
5 Company's updated analysis, the Staff Report continues to recommend incorporating ARIMA
6 modeling. Idaho Power has since conferred with Staff regarding this issue, and the Company
7 proposes addressing Staff's recommendation in a near-term meeting between Staff and the
8 Company to discuss the validity of implementing ARIMA modeling in the 2021 IRP.

9 Moving forward, and informed by recent discussions with Staff and other members of the
10 IRP Advisory Council ("IRPAC"), Idaho Power respectfully requests that the Commission allow
11 the Company to flexibly determine the appropriate means of evaluating and reducing potential
12 load forecast error in cooperation with other parties.

13 **C. The Company Offers Clarification on Staff's Recommendation to Model Behavior-**
14 **Based DR.**

15 Staff recommends that the Company "develop a new modeling approach suitable for
16 behavior-based DR programs that reflects such programs' lower costs and less certain results."²⁸
17 Idaho Power understands this recommendation to refer to the development of a new modeling
18 approach only—not necessarily to develop a new behavior-based DR program that would modify
19 the Company's existing DR programs. Since 2014, the Company has offered its existing DR
20 programs in accordance with settlement agreements approved by the Oregon and Idaho
21 commissions.²⁹ Per these agreements, Idaho Power's DR programs must remain in place until

²⁸ Staff Report at 5.

²⁹ Or. Pub. Util. Comm'n, *In re Idaho Power Co. Staff Evaluation of the Demand Response Programs*, Docket No. UM 1653, Order No. 13-482 (Dec. 19, 2013); Id. Pub. Utils. Comm'n, *In re Continuation of Idaho Power Co.'s A/C Cool Credit, Irrigation Peak Rewards, and FlexPeak Demand Response Programs for 2014 and Beyond*, Docket No. IPC-E-13-14, Order No. 32923 (Nov. 12, 2013).

1 Idaho Power experiences a change in system operations³⁰ or the Commission determines an
2 investigation is warranted.³¹

3 Given the interest raised by parties throughout the 2019 IRP, Idaho Power is committed
4 to conducting a comprehensive review of its DR programs (including DR program timing,
5 parameters, and pricing changes) concurrent with the 2021 IRP process. The Company will
6 engage with Staff and interested stakeholders throughout the evaluation. In the event the
7 comprehensive review indicates a need for modified DR programs, the Company will work with
8 the IRPAC and the EEAG in advance of any filing with the Oregon and Idaho commissions.

9 In sum, the Company does not oppose Staff's recommendation, but seeks to clarify its
10 scope to avoid any inconsistency with operative settlement agreements.

11 III. CONCLUSION

12 Once again, Idaho Power thanks Staff for its thoughtful report and recommendations on
13 the Company's *Second Amended 2019 IRP*. The Company recognizes that this was an extensive
14 IRP cycle and appreciates the Commission's, Staff's, and other parties' support for the Company's
15 ongoing efforts to ensure that this IRP was both rigorous and accurate. As noted earlier, Idaho
16 Power has agreed to most of Staff's recommendations (many of which were also stated or
17 supported by other parties) for improving future IRPs, beginning with the 2021 IRP.

18 By and large, the Company considers Staff's recommendations to be reasonable courses
19 of action. The Company takes issue with only three items and respectfully requests that the
20 Commission: (1) decline to require the inclusion of a 20 percent cost contingency when modeling

³⁰ Id. Pub. Utils. Comm'n, Order No. 32923 ("This Agreement shall be in effect . . . until a change occurs in Idaho Power's system operations or cost-effectiveness of a DR Program that would warrant reevaluation of the Agreements terms.").

³¹ Order No. 13-482, Appendix A at 2 ("This Agreement shall be in effect . . . until: a) a change occurs in Idaho Power's system operations or cost-effectiveness of a DR Program that Idaho Power determines would warrant reevaluation of the Agreement's terms; or, b) the Commission sua sponte determines that an investigation should be conducted into Idaho Power's DR programs; or c) Intervenors in this docket request that the Commission conduct an investigation of the DR programs covered in this docket and the Commission grants their request.").

1 B2H for the 2021 IRP; (2) decline to require the use of ARIMA modeling in the load forecasting
2 process, pending future conversations between Staff and Idaho Power; and (3) clarify that the
3 recommendation to establish a new modeling approach for behavior-based DR programs does
4 not require the creation of new DR programs at this time.

5 Respectfully submitted this 19th day of March, 2021.

McDOWELL RACKNER GIBSON PC



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