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IDAHO PUBLIC UTILITIES COMMISSION

April 30, 2021

VIA ELECTRONIC FILING

Jan Noriyuki, Secretary Idaho Public Utilities Commission 11331 W. Chinden Blvd., Bldg 8, Suite 201-A (83714) PO Box 83720 Boise, Idaho 83720-0074

> Re: Case No. IPC-E-21-12 In the Matter of Idaho Power Company's Application for a Determination Acknowledging its North Valmy Power Plant Unit 2 Exit Date

Dear Ms. Noriyuki:

Attached for electronic filing, pursuant to Order No. 34781, is Idaho Power Company's Application and a redacted version of the Direct Testimony of Jared L. Ellsworth with Exhibit Nos. 1-3. Mr. Ellsworth's unredacted testimony will be transmitted separately via encrypted email with a proposed protective agreement.

If you have any questions about the attached documents, please do not hesitate to contact me.

Very truly yours,

Lia D. Madotrom

Lisa D. Nordstrom

LDN:slb Attachments LISA D. NORDSTROM (ISB No. 5733) Idaho Power Company 1221 West Idaho Street (83702) P.O. Box 70 Boise, Idaho 83707 Telephone: (208) 388-6117 Facsimile: (208) 388-6936 Inordstrom@idahopower.com

Attorney for Idaho Power Company

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER COMPANY'S APPLICATION FOR A DETERMINATION ACKNOWLEDGING ITS NORTH VALMY POWER PLANT EXIT DATE.

CASE NO. IPC-E-21-12 APPLICATION

Idaho Power Company ("Idaho Power" or "Company"), in response to the Idaho Public Utilities Commission's ("Commission") directive in Order No. 34349¹, hereby respectfully makes application to the Commission for an order acknowledging its appropriate exit date from the North Valmy Power Plant ("Valmy") Unit 2 as December 31, 2025, based on information known today. The Company respectfully requests a Commission order no later than September 29, 2021, to allow adequate time for notification to plant operator NV Energy should the Commission determine an earlier exit date of Valmy Unit 2 is appropriate.

In support of this Application, Idaho Power asserts as follows:

¹ In the Matter of the Application of Idaho Power Company for Authority to Increase Its Rates for Electric Service to Recover Costs Associated with the North Valmy Power Plant, Case No. IPC-E-19-08, Order No. 34349 at 4-5 (May 31, 2019).

I. BACKGROUND

1. Valmy is a coal-fired power plant that consists of two units and is located near Battle Mountain, Nevada. Unit 1 went into service in 1981 and Unit 2 followed in 1985. Idaho Power owns 50 percent, or 284 megawatts² ("MW") (generator nameplate rating), of Valmy. NV Energy is the co-owner of the plant with the remaining 50 percent ownership and operates the Valmy facility. NV Energy and Idaho Power (collectively, the "Parties") work jointly to make decisions regarding Valmy. The plant is connected via a single 345 kilovolt ("kV") transmission line to the Idaho Power control area at the Midpoint substation. Idaho Power owns the northbound capacity and NV Energy owns the southbound capacity of this line.

2. The ownership and operation of Valmy is dictated by three agreements: the Agreement for the Ownership of the North Valmy Power Plant Project ("Ownership Agreement"), the Agreement for the Operation of the North Valmy Power Plant Project ("Operation Agreement"), both of which are dated December 12, 1978, and the North Valmy Station Operating Procedures Criteria, dated as of February 11, 1993, between Idaho Power Company and Sierra Pacific Power Company, as amended by Amendment No. 1 to the Operating Procedure Criteria for Valmy Coal Diversion Procedures and Usage, dated as of January 1, 2012. Additionally, the Parties entered into the North Valmy Project Framework Agreement between NV Energy and Idaho Power dated as of February 22, 2019 ("Framework Agreement"), memorializing the terms and conditions under which either partner may elect exit of participation of Valmy by means of a 15-month notice.

3. Idaho Power, in the Settlement Stipulation approved by the Commission with Order No. 33771 in Case No. IPC-E-16-24, agreed to use prudent and commercially

² For planning purposes, Idaho Power uses the net dependable capability of 262 MW. It should also be noted that the remaining capacity available to Idaho Power is 134 MW due to the Company's exit of coal-fired operations at Unit 1 at year-end 2019.

reasonable efforts to end its participation in the operation of Unit 1 by year-end 2019, and Unit 2 by year-end 2025³. On December 31, 2019, the Company's participation in coal-fired operations at Unit 1 concluded. The remaining capacity available to Idaho Power from Valmy Unit 2 is 134 MW.

4. Subsequent to Order No. 33771, the Company filed an application to increase its rates to recover costs associated with Valmy in Case No. IPC-E-19-08. During review of Idaho Power's Application in Case No. IPC-E-19-08, Commission Staff indicated that they reviewed the Company's Unit 2 closure analysis but did not have adequate information from Idaho Power at the time to determine whether the Company had completed a thorough review of a unit withdrawal date of December 31, 2025. Therefore, Order No. 34349 directed the Company to use best efforts to file within 21 days of the service date of the order: (1) an analysis validating the December 31, 2025, economic retirement date of Unit 2, or (2) an analysis supporting a different economic retirement date of Unit 2⁴.

5. On June 27, 2019, the Company filed a request for acknowledgement that it had sufficiently validated the economic retirement date of Valmy Unit 2 as year-end 2025 in Case No. IPC-E-19-18⁵. However, during processing of the case, the Company determined that further review of Idaho Power's 2019 Integrated Resource Plan ("IRP") modeling was necessary. Because the 2019 IRP modeling was also used to develop the Valmy Unit 2 closure analysis, the case schedule was suspended while the review was performed⁶. The review of the 2019 IRP modeling ultimately resulted in the filing with the

³ In the Matter of the Application of Idaho Power Company for Authority to Increase Its Rates for Electric Service to Recover Costs Associated with the North Valmy Plant, Case No. IPC-E-16-24, Order No. 33771 (May 31, 2017).

⁴ Order No. 34349 at 4-5.

⁵ In the Matter of the Application of Idaho Power for a Validated Economic Closure Date for North Valmy Power Plant Unit 2, Case No. IPC-E-19-18.

⁶ Id., Notice of Vacated Comment Deadlines, Order No. 34724 (July 16, 2020).

Commission of Idaho Power's Second Amended 2019 IRP7.

6. After performing a revised analysis based on adjustments stemming from the IRP review, certain modeling runs indicated the potential for additional savings from a Valmy Unit 2 exit date as early as year-end 2022. However, the potential savings included a key assumption that firm market purchases south of Idaho Power's service area would be available to replace Valmy Unit 2 capacity. This key assumption warranted further examination with regard to economics and reliability. As such, Idaho Power withdrew its Application in Case No. IPC-E-19-18 to perform the additional evaluation of both the economic and reliability impacts of an early Valmy Unit 2 closure. As initially directed by Commission Order No. 34349⁸, the Company is presenting the results of the additional evaluation in this case.

II. THE SECOND AMENDED 2019 IRP

7. Historically, as part of the development of the IRP, the Company developed portfolios to eliminate resource deficiencies identified in a 20-year load and resource balance. Under this process, Idaho Power developed portfolios which were demonstrated to eliminate the identified resource deficiencies. However, beginning with the Second Amended 2019 IRP, the Company began using AURORA's long-term capacity expansion ("LTCE") modeling capability to develop portfolios. As part of this robust method of assessing future resource options over a two-decade time frame, the AURORA modeling of the Preferred Portfolio consistently showed an economic exit of Valmy Unit 2 in 2025 in WECC-optimized runs. Following the refinement of these analyses specific to Idaho Power's service area, the potential for additional savings from earlier exit dates existed.

 ⁷ In the Matter of Idaho Power Company's 2019 Integrated Resource Plan, Case No. IPC-E-19-19. Filed on Oct. 2, 2020, the Second Amended 2019 IRP was acknowledged on March 16, 2021 by Commission Order No. 34959.
⁸ Order No. 34349 at 4.

8. As presented in the Second Amended 2019 IRP, Idaho Power does not believe that the potential savings based on a long-term analysis should be the sole consideration in the decision to exit Valmy Unit 2. A key component of the Second Amended 2019 IRP that allowed for the exit of Valmy Unit 2 at year-end 2022 was the availability of firm market purchases to the south over the transmission path currently utilized by Idaho Power's share of the Valmy plant output. As described below, Idaho Power subsequently evaluated this assumption in light of recent changes in regional transmission availability as well as the economic and reliability impacts of an earlier Unit 2 exit.

III. VALMY UNIT 2 EXIT ANALYSIS

9. The Company conducted focused system reliability and economic analyses to assess the appropriate timing of a Valmy Unit 2 exit between 2022 and 2025. The intent of these analyses is to ensure customer reliability, while considering more current operating budgets and up-to-date economics, to inform a decision that will minimize costs for customers while also maintaining system reliability. Idaho Power began the analysis with an evaluation of system reliability, as the Company must first ensure dependable capacity resources exist to meet expected load. Next, Idaho Power analyzed the economics of various portfolios with resources that could replace the Company's existing 134 MW at Valmy Unit 2. The result of the reliability and economic evaluations is the most reliable and economic path toward an exit from coal-fired operations of Valmy Unit 2.

10. <u>Reliability Evaluation.</u> To analyze the reliability impacts associated with an early exit from coal-fired operations at Valmy Unit 2, Idaho Power (1) refined the load and resource balance to determine any resource deficiencies, (2) enhanced the approach to computing the planning margin, and (3) identified multiple options to replace the 134 MW of firm capacity in the absence of Valmy Unit 2. The load and resource balance, which

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ensures Idaho Power has sufficient resources to meet projected customer demand plus a margin to account for extreme conditions and resource outages, was updated to include modifications to existing resource availability. The Company identified changes to its market purchase assumptions and revised the existing resource availability to include updated thermal capacity and reduced demand response capacity determined through the refinement of the planning margin calculation.

11. In the Second Amended 2019 IRP, the Company assumed Valmy Unit 2 could be replaced with capacity purchases from south of its service area. However, as explained in the direct testimony of Mr. Jared Ellsworth that accompanies this Application, market conditions have changed dramatically in the south because of ripple effects stemming from the energy emergency event in California in August 2020. Understanding the importance of transmission availability during times of high electricity demand, thirdparty marketing firms began reserving transmission capacity just outside the Company's border, significantly limiting Idaho Power's access to market hubs. Soon after the event, Idaho Power's own transmission service queue was flooded with multi-year requests. The transmission service requests have added to an already constrained market limiting the Company's access to the Mid-Columbia market hub ("Mid-C"). As a result, Idaho Power is testing the market availability with a market request for proposals ("RFP"), issued April 26, 2021, to further assess these transmission system constraints. Upon conclusion of the RFP, the Company will evaluate the various proposals received and supplement its filing in this case in June 2021 to inform stakeholders of proposals received.

12. <u>Economic Analysis of Resource Options.</u> Any number of resources can be added to a resource portfolio, and, provided the resource portfolio meets or exceeds the reliability threshold, the costs of the various portfolios can be compared. As described APPLICATION-6

more fully in Mr. Ellsworth's testimony, Idaho Power analyzed four portfolios. Each portfolio added a different resource in 2023 to replace the exit from Valmy Unit 2 at yearend 2022, and compared the cost of each to the portfolio cost of exiting Valmy Unit 2 at year-end 2025: (1) a Valmy Unit 2 exit in 2022 with the addition of solar plus battery storage in 2023, (2) a Valmy Unit 2 exit in 2022 with the addition of only battery storage in 2023, (3) a Valmy Unit 2 exit in 2022 with an expansion of Idaho Power's existing demand response programs in 2023, and (4) a Valmy Unit 2 exit in 2022 with a delayed Bridger unit exit from 2022 to 2025.

13. Using AURORA, the Company's electric modeling forecasting and analysis software, Idaho Power quantified the total portfolio costs of each of the portfolios for the 2022 through 2025 time period. As depicted below, the results are portfolio costs in the range of approximately \$15.89 - \$30.78 million more than the base portfolio, the Valmy Unit 2 exit of 2025.

| <u>Economic Analysis Results</u> Modeled Scenarios – Adjustments from the Second Amended 2019 IRP Preferred Portfolio | Results as Compared to 2025 Valmy Unit 2 Exit |
|---|--|
| 2025 Valmy 2 Exit | \$- |
| 2022 Valmy 2 Exit – Capacity Replaced with Solar + Battery (2023) | \$28.09 million |
| 2022 Valmy 2 Exit – Capacity Replaced with Battery (2023) | \$30.78 million |
| 2022 Valmy 2 Exit – Capacity Replaced with Expanded Demand Response ⁹ (2023) | \$23.70 million |
| 2022 Valmy 2 Exit – Capacity Replaced with Delayed Bridger Exit (2022 \rightarrow 2025) | \$15.89 million |

⁹ Assumes 134 MW of demand response program expansion at existing cost-effectiveness levels. Idaho Power is uncertain if this amount of program expansion at assumed cost effectiveness levels is achievable. Further, the ability for demand response under current program parameters to meet peak load capacity need is diminishing over time making it increasingly challenging to maintain existing demand response capacity.

These results indicate that the modeled scenarios are not more economically beneficial to meet Idaho Power's reliability needs through 2025 than retaining Valmy Unit 2.

IV. MODIFIED PROCEDURE

14. Idaho Power believes that a hearing is not necessary to consider the issues presented herein, and respectfully requests that this Application be processed under Modified Procedure; i.e., by written submissions rather than by hearing. RP 201, *et seq.* If, however, the Commission determines that a technical hearing is required, the Company stands ready to present its testimony and support the Application in such hearing.

V. COMMUNICATIONS AND SERVICE OF PROCEEDINGS

15. Service of pleadings, exhibits, orders, and other documents relating to this proceeding should be served on the following:

Lisa D. Nordstrom Idaho Power Company 1221 West Idaho Street (83702) P.O. Box 70 Boise, Idaho 83707 Inordstrom@idahopower.com dockets@idahopower.com Matt Larkin Idaho Power Company 1221 West Idaho Street (83702) P.O. Box 70 Boise, Idaho 83707 <u>mlarkin@idahopower.com</u>

VI. <u>REQUEST FOR ACKNOWLEDGEMENT</u>

16. The Company conducted focused, near-term system reliability and economic analyses on the timing of a Valmy Unit 2 exit between 2022 and 2025. After refining the load and resource balance, it is clear that Idaho Power is unable to meet reliability requirements if participation in coal-fired operations of Valmy Unit 2 ceases in 2022 without procuring an alternate source of peak capacity. The Company identified four alternatives to delaying a Unit 2 exit of Valmy until 2025 and performed an economic analysis on the resulting portfolio costs. The results indicate that operating Valmy Unit 2

through 2025 costs approximately \$15.89 million less on a net present value basis than the least-cost feasible alternative.

17. Idaho Power respectfully requests that the Commission issue an order acknowledging that, based on information known at this time, the appropriate exit date from Valmy Unit 2 is December 31, 2025. A Commission order issued no later than September 29, 2021, will allow Idaho Power adequate time to notify NV Energy should the Commission direct Idaho Power to pursue an earlier exit date of Valmy Unit 2.

DATED at Boise, Idaho, this 30th day of April 2021.

Lin D. Madotrom

LISA D. NORDSTROM Attorney for Idaho Power Company