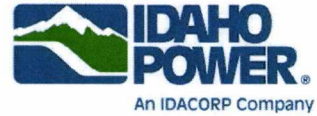


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IDAHO PUBLIC
UTILITIES COMMISSION



LISA D. NORDSTROM
Lead Counsel
lnordstrom@idahopower.com

March 15, 2022

Jan Noriyuki, Secretary
Idaho Public Utilities Commission
11331 W. Chinden Boulevard
Building 8, Suite 201-A
Boise, Idaho 83714

Re: Case No. IPC-E-22-08
In the Matter of the Application of Idaho Power Company for a Determination
of 2021 Demand-Side Management Expenses as Prudently Incurred

Dear Ms. Noriyuki:

Attached for electronic filing, pursuant to Order No. 35058, is Idaho Power Company's Application and the Direct Testimony of Robert Z. Thompson in support of the Application in the above entitled matter. Due to the voluminous nature of the attachments to the Application, the Company is posting the PDF files to the secure FTP site. The login information will be provided separately.

A Word version of the testimony will also be sent in a separate email for the convenience of the Reporter.

In addition, seven (7) copies of the Application, Direct Testimony, and the DSM 2021 Annual Report will be hand delivered to the Commission.

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

Sincerely,

Lisa D. Nordstrom

LDN:sg
Enclosures

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Attorney for Idaho Power Company

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)	
OF IDAHO POWER COMPANY FOR A)	CASE NO. IPC-E-22-08
DETERMINATION OF 2021 DEMAND-SIDE)	
MANAGEMENT EXPENSES AS)	APPLICATION
PRUDENTLY INCURRED.)	
_____)	

In accordance with RP 052 and RP 201, *et. seq.*, Idaho Power Company ("Idaho Power" or "Company") submits its *Demand-Side Management 2021 Annual Report* ("DSM 2021 Annual Report") and makes Application to the Idaho Public Utilities Commission ("Commission") for an order designating Idaho Power's expenditures of \$27,922,340 in Idaho Energy Efficiency Rider ("Rider") funds and \$7,132,978 of demand response program incentives funded through base rates and tracked annually through the Power Cost Adjustment ("PCA") mechanism, for a total of \$35,055,318, as prudently incurred demand-side management ("DSM") expenses.

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

I. INTRODUCTION

1. “The Commission has consistently stated that cost-effective DSM programs are in the public interest and has admonished electric utilities operating in the state of Idaho to develop and implement DSM programs in order to promote energy efficiency.” Case No. IPC-E-10-09, Order No. 32113 at 8, *citing* Order Nos. 29784 and 29952. To further the Commission’s objective, Idaho Power informs its customers of a wide range of opportunities to participate in DSM activities and provides information that allows them to use electricity wisely. Through DSM programs, Idaho Power seeks to provide customers with programs and knowledge to help them manage their energy use and to utilize cost-effective DSM resources to meet the Company’s electrical system’s energy and demand needs.

2. In 2021, Idaho Power achieved 16.4 average megawatt-hours (“aMW”) of incremental energy efficiency savings, including Northwest Energy Efficiency Alliance (“NEEA”) estimated energy savings, which exceeded the economic technical achievable potential included in the 2021 IRP of 15.4 aMW. DSM 2021 Annual Report at 1. The 2021 savings represent enough energy to power approximately 12,600 average homes in Idaho Power’s service area for one year.

3. However, it was a challenging year due to residual impacts of COVID-19, the resulting supply chain issues, higher labor and material costs, and the maturity of the residential lighting market. The C&I Custom Projects option, which provides approximately 40 percent of the portfolio savings, returned savings comparable to 2017 and 2018 as opposed to the record setting years of 2019 and 2020. Direct Testimony of Robert Z. Thompson (“Thompson Testimony”) at 9-11. Consequently, the 2021 savings

of 143,971 megawatt-hours ("MWh"), which includes the estimated savings from the NEEA, decreased by 54,461 MWh compared to the 2020 savings of 198,433 MWh—a 27 percent year-over-year decrease. The savings from Idaho Power's energy efficiency programs alone, excluding NEEA savings, was 126,102 MWh in 2021 and 180,818 MWh in 2020—a 30 percent year-over-year decrease. DSM 2021 Annual Report at 1.

4. Idaho Power saved an estimated 17,870 MWh¹ of energy efficiency market transformation savings through NEEA initiatives. Thompson Testimony at 6-7. From its demand response programs, Idaho Power achieved a total demand reduction of 313 megawatts ("MW") from an available capacity of 384 MW during the 2021 program season. Thompson Testimony at 12-13.

II. CONTENTS OF THE DSM 2021 ANNUAL REPORT

5. Idaho Power's DSM 2021 Annual Report is included as Attachment 1 to this Application. The DSM 2021 Annual Report satisfies the DSM reporting obligation set forth in Commission Order No. 29419 in Case No. IPC-E-03-19. The Company's actions, as detailed in the DSM 2021 Annual Report, demonstrate the conscientious work Idaho Power undertook to expend funds wisely to further DSM activities.

6. The DSM 2021 Annual Report consists of the main document (with appendices) and two supplements. The main report provides information on DSM program descriptions, program performance, expenditures, and marketing efforts. *Supplement 1: Cost-Effectiveness* ("Supplement 1") to the DSM 2021 Annual Report shows the results of the cost-effectiveness tests that Idaho Power has calculated for each program and includes a table that reports expenses by funding source and cost category.

¹ Because Idaho Power will not receive a final 2021 savings report from NEEA until second quarter 2022, the NEEA-attributable savings is an estimate provided to the Company from NEEA.

Supplement 2: Evaluation ("Supplement 2") to the DSM 2021 Annual Report contains copies of Idaho Power's 2021 program evaluations, customer surveys and reports, evaluations conducted by the Company's third-party contractors, Idaho Power's evaluation plans, general energy efficiency research, and demand response research. Each of these evaluations reflects Idaho Power's continued commitment to its review and independent third-party program evaluation. Finally, the DSM 2021 Annual Report contains a description of the Company's DSM strategies for 2022.

III. 2021 DSM PROGRAM PERFORMANCE

7. In 2021, Idaho Power offered its customers a broad portfolio of energy efficiency programs and demand response programs, participated in market transformation efforts through NEEA, and offered several educational initiatives and other activities. DSM 2021 Annual Report at 5, Table 1. As explained in more detail in the Thompson Testimony filed contemporaneously with this Application, Idaho Power's annual energy savings combined with NEEA estimated annual energy savings resulted in an incremental energy efficiency savings of 16.4 average megawatt-hours ("aMW"), exceeding the economic technical achievable potential included in Idaho Power's 2021 Integrated Resource Plan ("IRP"). Thompson Testimony at 7-8.

8. The 2021 savings results on a system-wide basis consisted of 21,217 MWh from the residential sector, 95,184 MWh from the commercial/industrial sector, and 9,700 MWh from the irrigation sector. DSM 2021 Annual Report at 10, Table 4. The C&I programs contributed 75 percent of the direct program savings. In the residential sector, Home Energy Reports contributed the largest savings at 75 percent and Educational Distributions contributed the second largest savings at 14 percent, for a combined total savings of 89 percent. DSM 2021 Annual Report at 8. Appendix 3 of the DSM 2021

Annual Report contains a complete list of programs and sector-level savings.

9. Idaho Power successfully operated all three of its demand response programs in 2021. These programs have a capacity of over 10 percent of its all-time system peak load available to respond to a system peak load event during the summer. Idaho Power achieved a total demand reduction of 313 MW from an available capacity of 384 MW during the 2021 program season. DSM 2021 Annual Report at 9. This value represents the maximum realized, non-coincident load reduction from all three programs. Because the Company's Load Serving Operations Group utilized the flexibility of the four irrigation participant groups individually in 2021 based on system need while taking into consideration customer impacts, the 313 MW of reduction was lower compared to previous years because the irrigation program was not fully utilized for any single demand response event. Thompson Testimony at 12-13.

10. Table 1 on page 5 of the DSM 2021 Annual Report contains a list of Idaho Power's DSM programs by sector, operational type, and location. The table illustrates the broad suite of programs that Idaho Power offers to its customers in energy efficiency, demand response, and education. Idaho Power's energy efficiency portfolio was also cost-effective, resulting in a 2.17 benefit/cost ratio when evaluated from a Utility Cost Test ("UCT") perspective, a 2.18 benefit/cost ratio when evaluated from a Total Resource Cost ("TRC") test perspective, and 2.73 benefit/cost ratio when evaluated from a Participant Cost Test ("PCT") perspective. Thompson Testimony at 6.

11. COVID-19 continued to impact the Company's DSM activity in 2021, as some activity was still suspended through large portions of the year that included person-to-person interactions such as installers in customer homes, in-person trade shows, in-person vendor trainings, and contractors working at business sites. These actions were

necessary, prudent, and continued to be in the best interest of customers, employees, and contractors' safety. The Company also made operational adjustments to several programs to provide program offerings while maintaining appropriate safety protocols. The Tables on Page 6 of the DSM 2021 Annual Report summarize the status of the individual programs and how they were affected by COVID-19 during 2021.

12. The pandemic's impact on the nation's supply chain also slowed work in the Company's C&I and Irrigation programs. Customers experienced labor and material constraints, as well as overall increases in costs, making it more difficult and expensive to complete projects timely. Therefore, even if the pandemic did not directly affect the Company's ability to perform on-site work in a given program during 2021, it continued to have an impact on each of the Company's DSM programs in some way. Thompson Testimony at 11-12.

IV. 2021 DSM EXPENSES AND ADJUSTMENTS

13. Funding for the Idaho DSM programs in 2021 came from several sources. The Idaho Rider funds are collected directly from customers on their monthly bills at 3.10 percent of their base rate revenues. Additionally, the Idaho demand response program incentives are included in base rates and tracked annually through the PCA. Energy efficiency and demand response-related expenses not funded through the Rider are included in Idaho Power's ongoing operations and maintenance ("O&M") costs.

14. In 2021, the Company's total system-wide expenditures on DSM-related activities totaled \$38,353,506. DSM 2021 Annual Report at 10, Table 4. This figure includes expenditures for Oregon and other O&M expenses that are not before the Commission as part of this prudence request. In this filing, Idaho Power seeks a determination that a total of \$35,055,318 were prudently incurred in 2021 (\$27,922,340

in Rider expenses and \$7,132,978 in demand response program incentives). This is a decrease of \$12,554,703, or 31 percent, in Rider-funded expenses compared to the DSM expenses reviewed in last year's prudence case, and this is primarily due to the decrease in large projects participating in the C&I Program Custom Projections option. Thompson Testimony at 15. A summary of the 2021 program expenditures by program, customer sector, and funding source for which the Company is seeking a prudence determination is provided as Exhibit No. 1 to the Thompson Testimony.

15. Idaho Power made three prior-year and three current-year accounting adjustments that were necessary to accurately account for the total 2021 DSM expenses for purposes of the prudence determination in this case. Thompson Testimony at 15-18. Idaho Power has included each of these adjustments in Exhibit No. 1 to the Thompson Testimony. The first prior-year adjustment of \$2,159 was completed in 2020 to appropriately allocate an invoice to the Idaho jurisdiction at 95 percent rather than 100 percent; this amount must be added back to avoid understating the 2021 prudence request. The second prior-year adjustment reversed a credit of \$57 that was incorrectly applied to the Idaho Rider during 2020 instead of the Company's Green Power program, which is a non-Rider funded program; this amount must be removed from the 2021 balance because it was already deemed prudent by the Commission in the 2020 prudence filing. The third prior-year adjustment was a reversing entry of \$15,910 for the Small Business Direct Install ("SBDI") program that is excluded from the 2021 DSM expenses as it was already deemed prudent by the Commission in the 2020 prudence filing.

16. The first current-year adjustment adds \$1,356 of expenses associated with Idaho activity for the Residential New Construction Program that were incorrectly charged to the Oregon Energy Efficiency Rider in 2021. The second current-year adjustment reduces \$1,044 of expenses associated with the Commercial & Industrial program that should have been charged to the Oregon Rider instead of the Idaho Rider. The final current-year adjustment of \$7,260 (2021 SBDI) corrects a duplicate transaction to remove it from the 2021 prudence request.

17. When issuing its determination on the appropriate level of DSM-labor funded through the Rider in the 2019 DSM prudence evaluation, the Commission stated that Idaho Power “shall apply the 2% cap to actual average wages per [full-time employee] going forward. The baseline for the 2% cap shall be the prior year’s actual average wages per [full-time employee].” Case No. IPC-E-20-15, Order No. 34874 at 5. Idaho Power’s Rider-funded DSM employee labor expense in 2021 totaled \$3,205,211. Thompson Testimony at 18-19. This amount is appropriately recovered through the Rider as it is lower than the Commission’s authorized labor cost cap detailed in Order Nos. 34874 and 35270. The 2021 DSM labor expense was \$28,722 under the cap as detailed in Table 2 of the Thompson Testimony.

V. DSM PROGRAM COST-EFFECTIVENESS AND EVALUATIONS

18. The DSM 2021 Annual Report and accompanying Thompson Testimony provides a sufficient basis for the Commission to determine whether Idaho Power’s DSM expenses were prudently incurred.

19. To calculate cost-effectiveness, the DSM 2021 Annual Report uses benefit/cost methodologies used in previous DSM annual reports, including the UCT, the

TRC test, and the PCT. A review of each test allows for an economic assessment of the lifecycle costs and benefits of a DSM investment from the perspective of Idaho Power, DSM program participants, and non-participating customers. Idaho Power calculates cost-effectiveness from the TRC test, UCT, and PCT perspectives at the program level except for those programs with no customer costs, in which case the PCT is not applicable. If a program is not cost-effective under any one of these tests, Idaho Power seeks EEAG input before making a determination to modify, continue, or discontinue the program. Thompson Testimony at 20-21. Cost-effective test methodologies are described in more detail in Supplement 1 to the DSM 2021 Annual Report.

20. While the Commission continues to assess the prudence of DSM investments under “the totality of the circumstances,” the Commission also believes that public utilities may “emphasize the UCT—and that test’s focus on Company-controlled benefits and costs—to argue whether programs were cost-effective.” Case No. IPC-E-15-06, Order No. 33365 at 9–10. Thus, the Company continues to conduct all three benefit/cost methodologies while using the UCT perspective as its primary test for evaluating program cost-effectiveness in Idaho and energy efficiency resources in the IRP planning cycle.² Thompson Testimony at 21-22. Idaho Power continues to engage EEAG in reviewing benefit/cost analyses for current and potential programs, and the Company has incorporated EEAG’s feedback to develop its ongoing DSM programs.

21. Supplement 1 to the DSM 2021 Annual Report includes detailed results of the cost-effectiveness tests by program and by measure. As shown in Supplement 1, the overall DSM portfolio achieved benefit/cost ratios greater than 1.0 from the perspective

² In final Order No. 34469, the Commission directed Idaho Power to use the UCT perspective for DSM programs in the IRP context. Case No. IPC-E-19-11, Order Nos. 34469 at 9 and 34503 at 4.

of all three cost-effectiveness tests. Idaho Power's cost-effectiveness test results for 2021 energy efficiency programs are summarized as follows:

Portfolio Basis. On a portfolio basis, Idaho Power's energy efficiency programs are cost-effective, passing the UCT, TRC test, and PCT with ratios of 2.17, 2.18, and 2.73, respectively. The Company's energy efficiency programs' customer sector-level portfolios were also cost-effective from a UCT and PCT perspective with the Residential Sector having a TRC less than 1.0. Thompson Testimony at 23, Table 4.

Program Basis. On an individual program basis, 10 of the 16 energy efficiency programs offered in Idaho for which the Company calculates cost-effectiveness had benefit/cost ratios greater than 1.0 under the UCT. Thompson Testimony at 25. The following programs were not cost-effective under the UCT in 2021:

- *WAQC and Solutions:* Two programs that scored less than 1.0 under the UCT were the Company's Weatherization Assistance for Qualified Customers ("WAQC") and Weatherization Solutions for Eligible Customers ("Solutions"). While these programs are not cost-effective under the UCT, Idaho Power will continue to offer these programs to its limited-income customers unless the Commission directs otherwise. Thompson Testimony at 26-28. Idaho Power will also continue to work with EEAG and weatherization managers to identify opportunities that might improve the cost-effectiveness of these programs.
- *Energy House Calls:* The Energy House Calls program experienced reductions in participation due to the COVID-19 pandemic because these programs require contractors to enter customers' homes. The likelihood of the Energy House Calls program becoming cost-effective is low because the savings are expected to

decline as savings assumptions and avoided costs are updated. After consultation with EEAG, Idaho Power decided to end the Energy House Calls program and incorporate the cost-effective duct sealing measure for manufactured homes into the Heating & Cooling Efficiency program. The Company intends to make this change by the end of June 2022 but will work through the remaining customers on the waitlist before ending the program. Thompson Testimony at 28-29.

- *Multifamily Energy Savings*: The Multifamily Energy Savings program also experienced significant reductions in participation due to the COVID-19 pandemic because these programs require contractors to enter customers' homes and did not see any participation once in-home work resumed in December 2021. Additionally, the program is facing an expected decline in Regional Technical Forum ("RTF") savings, which coupled with lower DSM avoided costs, means the program may not achieve cost-effectiveness going forward. After consultation with EEAG, the Company intends to convene a group of external and internal subject matter experts to discuss the issues facing the program, which will include seeking to identify whether cost-effectiveness can be improved, or in the alternative, if the Company should consider ending the program. The Company expects to decide on the continuation of the program by August 2022. Thompson Testimony at 29.
- *Home Energy Reports*: The Home Energy Report program achieved a UCT of 0.57 and a TRC of 0.62 largely due to the relatively short measure life of the reports and the realized savings coming in lower than what was initially expected/contracted. The Company plans to conduct an impact evaluation in 2022, and the evaluation may help inform the Company about any needed

changes to the program in the future. Additionally, the Company intends to discuss the program with EEAG, incorporate any updates in RTF behavioral program cost-effectiveness calculations, and potentially decide on the program's future by the end of 2022. Thompson Testimony at 30-31.

- *SBDI*: The SBDI program achieved a UCT of 0.99 and a TRC of 1.54, which was primarily driven by the evaluation costs the program absorbed this year associated with the 2020 process evaluation completed in 2021. If the evaluation costs are removed, the UCT and TRC ratios for the program would be 1.00 and 1.55 respectively. The Company plans to expand the offering to the Capital and Canyon regions of its service area in 2022, which may improve cost-effectiveness. Idaho Power will continue to monitor the SBDI program's cost-effectiveness and will consult with EEAG prior to making any future program decisions. Thompson Testimony at 31.

Measures Basis. In 2021, Idaho Power evaluated the benefits and costs of 272 measures. Thompson Testimony at 25. The results of these calculations, along with measure assumption details and source determination, can be found in Supplement 1 to the DSM 2021 Annual Report.

22. For 2021, Idaho Power determined the cost-effectiveness of its demand response programs based on the levelized annual cost of a 170 MW deferred resource over a 20-year lifespan that was established in the settlement reached in Case No. IPC-E-13-14 and subsequently approved in Commission Order No. 32923. The system-wide cost of operating the three demand response programs was approximately \$8.3 million (\$7.5 million of incentives and \$0.8 million of other costs) in 2021. The amounts

attributable to the Idaho-only jurisdiction were \$7.9 million (\$7.1 million of incentives and \$0.8 million of other costs). Idaho Power estimated that if the three programs were dispatched for the full 60 hours allowed, the total costs would have been approximately \$11.1 million on a system-wide basis. The 2021 total program costs are less than the value of demand from the most recently acknowledged IRP, the Second Amended 2019 IRP, of \$19.6 million. Thompson Testimony at 31-32.

23. Program Evaluations. In addition to the annual cost-effectiveness analysis the Company conducts for each program, the results of which are included in Supplement 1 to the DSM 2021 Annual Report, Idaho Power solicits and contracts with independent third-party consultants to provide program evaluations. Idaho Power uses the results of these evaluations to improve its DSM programs, compare Company processes to industry best practices, and benchmark reported program savings. In 2021, these independent, third-party consultants conducted five program impact evaluations and four program process evaluations. Idaho Power also completed internal analyses of the three demand response programs. Thompson Testimony at 34. The Commission can find copies of these reports and the Company's program evaluation plan for 2022-23 in Supplement 2.

24. As the Commission directed on page 9 of Order No. 35720, the Company is currently working with Avista Corporation on a Request for Proposal to hire a third-party that will conduct the Evaluation, Measurement, and Verification of NEEA savings and cost-effectiveness. The Company expects the evaluation to be completed by the end of 2022. Results will be reported in the 2022 DSM Annual Report or sooner if the Company determines its participation in NEEA may no longer be cost-effective. Thompson Testimony at 36-37.

VI. DSM STRATEGIES FOR 2022

25. “DSM benefits depend on constantly evaluating opportunities and identifying ways to improve available programs.” Order No. 35270 at 8. As described on pages 16-18 of the DSM 2021 Annual Report, Idaho Power is actively working to improve the cost effectiveness of existing DSM programs and to explore the addition of new DSM offerings for customers in 2022 and beyond. Some of these activities in 2022 include:

- Launch of a new Lighting Buy-Down program;
- A Find and Fix offering within the C&I Custom Projects program;
- A Compressed Air Leaks offering within the C&I Custom Projects program;
- New C&I Retrofits and New Construction measures with expanded eligibility;
- Implementation of a new Industrial Wastewater Cohort;
- Measurement and Verification for participating Custom Projects Energy Management customers via the U.S. Department of Energy-sponsored Technical Assistance Program; and
- Integrated Design Lab assessment of energy savings potential for Power-Over-Ethernet lighting, Luminaire Level Lighting Controls demonstration workshops, and update of digital design tools for use by architects and engineers.

VII. STAKEHOLDER INPUT

26. Idaho Power relies on input from EEAG to provide a customer and public interest review of energy efficiency and demand response programs and expenses. EEAG provides input on enhancing existing DSM programs and on implementing new

DSM programs. Currently, EEAG consists of members representing a cross-section of customers from the residential, industrial, commercial, and irrigation sectors, as well as representatives for low-income individuals, environmental organizations, state agencies, public utility commissions, and Idaho Power.

27. Normally, EEAG holds quarterly in-person meetings at Idaho Power's corporate offices and through webinars as needed. Due to COVID-19 safety protocols, all EEAG meetings were held virtually in 2021, and the Company believes the member participation and input remains strong in the virtual format. Specifically, Idaho Power worked with EEAG on developing, designing, and promoting several projects related to COVID-19, use of WAQC carryover funds, Welcome Kit configuration, and solicited feedback on demand response program modifications prior to filing the Company's proposal in Case No. IPC-E-21-32.

VIII. MODIFIED PROCEDURE

28. Idaho Power believes that a technical 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.* Idaho Power has, however, contemporaneously filed the Thompson Testimony in support of this Application. The Company stands ready to present the testimony supporting this Application in a technical hearing if the Commission determines such a hearing is required.

IX. COMMUNICATIONS AND SERVICE OF PLEADINGS

29. Communications and service of pleadings with reference to this Application should be sent to the following:

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X. REQUEST FOR RELIEF

30. As described in greater detail above, Idaho Power respectfully requests that the Commission issue an order designating Idaho Power's 2021 DSM expenses of \$35,055,318 as prudently incurred.

Respectfully submitted this 15th day of March 2022.



LISA D. NORDSTROM
Attorney for Idaho Power Company