

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION)
OF IDAHO POWER COMPANY FOR A)
DETERMINATION OF 2023 DEMAND-) CASE NO. IPC-E-24-11
SIDE MANAGEMENT EXPENSES AS)
PRUDENTLY INCURRED.)
_____)

IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

ROBERT Z. THOMPSON

1 Q. Please state your name and business address.

2 A. My name is Robert Z. Thompson. I go by my
3 middle name, and therefore, Zack Thompson is my preferred
4 name. My business address is 1221 West Idaho Street, Boise,
5 Idaho 83702.

6 Q. By whom are you employed, and in what
7 capacity?

8 A. I am employed by Idaho Power Company ("Idaho
9 Power" or "Company") as a Regulatory Analyst in the
10 Regulatory Affairs Department.

11 Q. Please describe your educational background.

12 A. In May of 2008, I received a Bachelor of Arts
13 degree in Business, Organizations, and Society with a minor
14 in Economics from Franklin & Marshall College in Lancaster,
15 Pennsylvania. In May of 2014, I received a Master of
16 Business Administration degree with a specialization in
17 Finance from Louisiana State University in Baton Rouge,
18 Louisiana. I have also attended "The Basics: Practical
19 Regulatory Training for the Electric Industry," an electric
20 utility ratemaking course offered through the New Mexico
21 State University's Center for Public Utilities, "Electric
22 Utility Fundamentals and Insights," an electric utility
23 course offered by Western Energy Institute, and "Electric
24 Rates Advanced Course," an electric utility ratemaking
25 course offered through Edison Electric Institute.

1 Q. Please describe your work experience with
2 Idaho Power.

3 A. In 2020, I was hired as a Regulatory Analyst
4 in the Company's Regulatory Affairs Department. My primary
5 responsibilities include supporting activities associated
6 with demand-side management ("DSM") as well as rate design
7 for the small general service, large general secondary
8 service, lighting, and irrigation customer classes.

9 Q. What is the purpose of your testimony in this
10 case?

11 A. The purpose of my testimony is to present the
12 Company's request for a determination that \$38,778,378 of
13 DSM expenses for the acquisition of demand-side resources
14 in 2023 was prudently incurred. This amount includes
15 \$30,323,272 funded in 2023 by the Idaho Energy Efficiency
16 Rider ("Rider") and \$8,455,107 of demand response program
17 incentive payments funded through base rates and tracked
18 annually through the Power Cost Adjustment ("PCA").

19 My testimony will: (1) provide a review of 2023 DSM
20 program performance, (2) discuss 2023 DSM expenses and
21 adjustments, (3) provide an overview of the cost-
22 effectiveness results for 2023, (4) review program
23 evaluation efforts, and (5) describe the input stakeholders
24 provided during the year.

25 //

1 Q. Are you sponsoring any exhibits?

2 A. Yes. I am sponsoring the following exhibits:

<u>Exhibit</u>	<u>Description</u>
Exhibit No. 1	2023 Idaho DSM Expenses and Adjustments for Prudence Filing
Exhibit No. 2	2023 Cost-Effectiveness Summary by Program Sector and Portfolio
Exhibit No. 3	2023 DSM Evaluation Plan

3 **I. 2023 DSM PROGRAM PERFORMANCE**

4 Q. What is Idaho Power's focus when evaluating
5 program performance?

6 A. Idaho Power takes its responsibility of
7 prudently managing customer-funded DSM activities
8 seriously, and the Company believes it is important to
9 provide its customers with the maximum value from these
10 activities. The Company's actions in 2023, and the content
11 of the *Demand-Side Management 2023 Annual Report* ("DSM 2023
12 Annual Report"), Attachment 1 to the Application filed in
13 this proceeding, provides evidence supporting the
14 conscientious work Idaho Power employees made toward using
15 customers' funds wisely to support DSM activities.

16 Q. Please provide an overview of Idaho Power's
17 DSM activities in 2023.

18 A. On a system-wide basis, Idaho Power offered a
19 broad portfolio of energy efficiency and demand response
20 programs available to all customer segments, and the

1 Company also participated in market transformation efforts
2 through the Northwest Energy Efficiency Alliance ("NEEA").
3 Idaho Power also finished up its ductless heat pump market
4 transformation pilot program offered in conjunction with
5 Avista Utilities. Finally, the Company offered several
6 educational and behavioral initiatives including the
7 Residential Energy Efficiency Education Initiative,
8 seasonal contests, the School and Campus Cohorts, and the
9 Industrial Energy Efficiency Cohort.

10 The Company leveraged its Energy Efficiency Advisory
11 Group ("EEAG") to solicit input and feedback on ways to
12 identify opportunities to increase program effectiveness,
13 delivery, and marketing. A summary of Idaho Power's 2023
14 DSM programs is provided in Table 1 below.

15 //
16 //
17 //
18 //
19 //
20 //
21 //
22 //
23 //
24 //
25 //

1 **Table 1. 2023 DSM Programs by Sector, Operational Type,**
 2 **and Location**

Program by Sector	Operational Type	State
Residential		
A/C Cool Credit.....	Demand Response	ID/OR
Easy Savings: Low-Income Energy Efficiency Education	Energy Efficiency	ID
Educational Distributions.....	Energy Efficiency	ID/OR
Energy Efficient Lighting	Energy Efficiency	ID/OR
Heating & Cooling Efficiency Program	Energy Efficiency	ID/OR
Home Energy Audit.....	Energy Efficiency	ID
Home Energy Report Program.....	Energy Efficiency	ID
Multifamily Energy Efficiency Program.....	Energy Efficiency	ID/OR
Oregon Residential Weatherization.....	Energy Efficiency	OR
Rebate Advantage	Energy Efficiency	ID/OR
Residential New Construction Program	Energy Efficiency	ID
Shade Tree Project	Energy Efficiency	ID
Weatherization Assistance for Qualified Customers	Energy Efficiency	ID/OR
Weatherization Solutions for Eligible Customers.....	Energy Efficiency	ID
Commercial/Industrial		
Commercial and Industrial Energy Efficiency Program		
Custom Projects.....	Energy Efficiency	ID/OR
Green Motors—Industrial.....	Energy Efficiency	ID/OR
New Construction	Energy Efficiency	ID/OR
Retrofits.....	Energy Efficiency	ID/OR
Commercial Energy-Saving Kits.....	Energy Efficiency	ID/OR
Flex Peak Program	Demand Response	ID/OR
Oregon Commercial Audits	Energy Efficiency	OR
Small Business Direct Install.....	Energy Efficiency	ID/OR
Irrigation		
Irrigation Efficiency Rewards.....	Energy Efficiency	ID/OR
Green Motors—Irrigation.....	Energy Efficiency	ID/OR
Irrigation Peak Rewards.....	Demand Response	ID/OR
All Sectors		
Northwest Energy Efficiency Alliance.....	Market Transformation	ID/OR

3
 4 Table 1 illustrates the broad availability of
 5 programs offered by Idaho Power to its customers in energy
 6 efficiency, demand response, and education. Idaho Power’s
 7 energy efficiency portfolio was cost-effective, resulting
 8 in a 2.06 benefit/cost ratio when evaluated from a Utility

1 Cost Test ("UCT") perspective, a 1.51 benefit/cost ratio
2 when evaluated from a Total Resource Cost ("TRC") test
3 perspective, and a 1.89 benefit/cost ratio when evaluated
4 from a Participant Cost Test ("PCT") perspective.

5 Attachment 1 to the Application, the DSM 2023 Annual
6 Report, provides details for each program, which include: a
7 program description, 2023 performance results, program
8 activities, cost-effectiveness ratios, marketing
9 activities, customer satisfaction, upcoming 2024 plans, and
10 evaluation results when applicable. Also included in
11 Attachment 1 are: *Supplement 1: Cost Effectiveness*
12 ("Supplement 1"), which provides detailed cost-
13 effectiveness data by program and measure, and *Supplement*
14 *2: Evaluation* ("Supplement 2"), which provides copies of
15 the Company's evaluation, reports, and research conducted
16 in 2023.

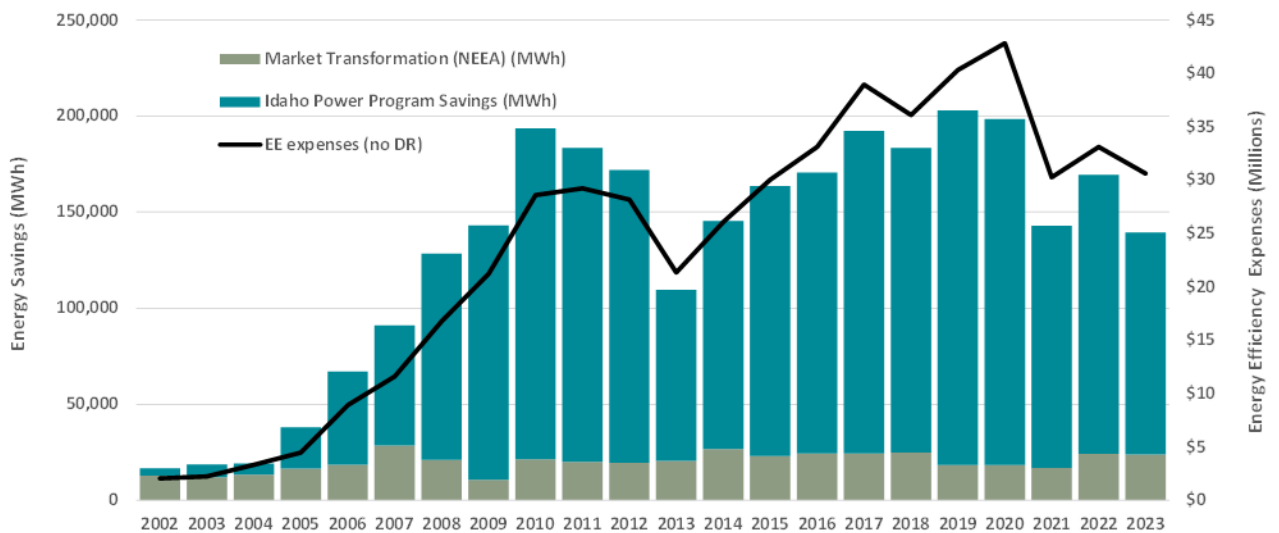
17 ***Energy Efficiency***

18 Q. What level of incremental annual energy
19 efficiency savings was achieved in 2023?

20 A. On a system-wide basis, Idaho Power achieved
21 139,683 megawatt-hours ("MWh") of incremental annual energy
22 efficiency savings in 2023. This value includes 115,769 MWh
23 from Idaho Power's energy efficiency programs and an

1 estimated 23,914 MWh¹ of energy efficiency market
 2 transformation savings through NEEA initiatives. Chart 1
 3 below shows the incremental annual energy efficiency
 4 savings in MWh from 2002 to the current year. Also shown in
 5 this chart are the total energy efficiency expenses for
 6 each year in millions of dollars.

7 **Chart 1. Incremental Annual Energy Efficiency Savings**
 8 **(MWh) and Energy Efficiency Expenses (\$ millions) 2002-2023**



9

10 Note: 2023 NEEA market-transformation savings are estimated.

11 Q. Did Idaho Power meet the energy efficiency
 12 targets included in its most recently filed 2023 Integrated
 13 Resource Plan ("IRP")?

14 A. Yes. In 2023, Idaho Power achieved 15.9
 15 average megawatts ("aMW") of incremental energy efficiency
 16 savings, including NEEA estimated energy savings, which

¹ Because Idaho Power will not receive final 2023 savings from NEEA until the second quarter 2024, the NEEA-attributable savings is an estimate provided to Idaho Power by NEEA.

1 exceeded the economic technical achievable potential
2 included in the 2023 IRP of 12.2 aMW. The 2023 savings
3 represent enough energy to power approximately 12,253
4 average homes in Idaho Power's service area for one year.

5 Q. How did 2023 DSM program year compare to 2022?

6 A. In the 2023 program year, several of the
7 Company's DSM programs outperformed their savings and
8 participation as compared to the 2022 program year. These
9 programs include Educational Distributions, Commercial &
10 Industrial ("C&I") Energy Efficiency Program Custom
11 Projects, C&I Flex Peak Program, and Irrigation Peak
12 Rewards. The Educational Distributions and C&I Energy
13 Efficiency Custom Projects increased their combined total
14 energy savings by over 4,700 MWh. The C&I Flex Peak and the
15 Irrigation Peak Rewards demand response programs increased
16 their combined total of participating sites by 409 with the
17 C&I Flex Peak program increasing its demand response
18 capacity by over 8 megawatts ("MW"). The Company was also
19 able to launch a brand-new Multifamily Energy Efficiency
20 Program that customers can leverage along with the other
21 C&I Energy Efficiency Program offerings such as New
22 Construction, Retrofits, and Custom Projects.

23 Overall portfolio savings decreased by 29,883 MWh
24 year-over-year compared to 2022 with the main drivers being
25 the C&I Energy Efficiency Program New Construction and

1 Retrofits options as well as the Home Energy Reports
2 ("HER") program. The projects within C&I Energy Efficiency
3 Program can vary greatly in size, scale, and the timeframes
4 it takes to complete them, which can cause changes in
5 overall portfolio savings performance annually. The New
6 Construction and Retrofits options combined drove about 83
7 percent of the decrease in annual incremental savings
8 compared to 2022. The HER program experienced a decrease in
9 savings as well due to the anticipated program attrition
10 associated with the conclusion of the first 3-year
11 treatment period. The Company has entered into an agreement
12 with a new HER program implementer for another 3-year
13 treatment period from 2024 through 2026. The Company is
14 exploring the potential to add a new wave of residential
15 customers to the program, and if successful in that, the
16 Company anticipates savings to increase for 2024 as
17 compared to the 2023 program year.

18 Q. Does the Company engage in customer education
19 and outreach activities for which it cannot quantify or
20 report savings?

21 A. Yes. The Company engages in significant
22 educational awareness activities and marketing efforts that
23 are likely to result in energy savings experienced by
24 customers but are not quantified or claimed as part of
25 Idaho Power's annual savings. These efforts are designed to

1 reach all customer segments and are more fully explained
2 throughout the DSM 2023 Annual Report. In 2023, this
3 included activities such as: holding virtual and in-person
4 technical trainings and workshops with customers, producing
5 the *Energy@Work* and Irrigation newsletters, participating
6 in several different types of agricultural shows, hosting
7 or participating in vendor workshops promoting irrigation
8 system efficiency, publishing residential energy efficiency
9 guides that showcased behavioral changes to save energy,
10 attending other outreach activities such as home shows to
11 discuss energy efficiency with customers one-on-one, and
12 supporting the Integrated Design Lab.

13 ***Demand Response***

14 Q. What level of capacity was available from
15 Idaho Power's demand response programs in 2023?

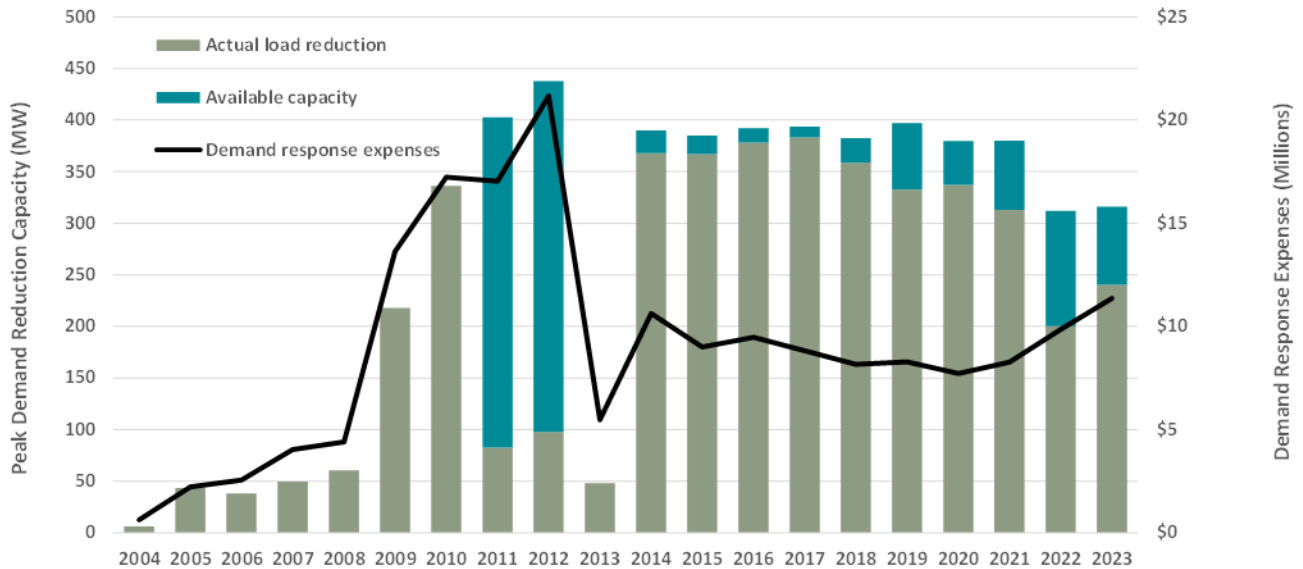
16 A. The total available capacity of Idaho Power's
17 three demand response programs (A/C Cool Credit, Flex Peak
18 Program, and Irrigation Peak Rewards) was approximately 316
19 MW. This value represents the total enrolled MW from
20 participants adjusted for an expected maximum realization
21 rate.

22 Q. What level of non-coincident demand reduction
23 was provided?

24 A. The Company's demand response programs
25 provided actual non-coincident demand reduction of 240 MW

1 during the 2023 program season. The 240 MW maximum load
 2 reduction is less than 316 MW of total demand response
 3 program capacity for a variety of reasons including, but
 4 not limited to, the three demand response programs are not
 5 always dispatched together during a single event day, the
 6 four irrigation groups are also not always dispatched
 7 coincidentally, and events are not always called during the
 8 demand response season when the total program capacity is
 9 available. Chart 2 below reflects the annual available peak
 10 demand reduction capacity and actual load reduction in MW
 11 since 2004 and the associated annual expenses in millions
 12 of dollars.

13 **Chart 2. Peak Demand Reduction Capacity (MW) and Demand**
 14 **Response Expenses (\$ millions) 2004-2023**



15
 16 //
 17 //
 18 //

1 **II. 2023 DSM EXPENSES AND ADJUSTMENTS**

2 Q. What amount of DSM expenses is the Company
3 requesting the Commission find were prudently incurred?

4 A. In the delivery of energy efficiency, demand
5 response, and market transformation programs, Idaho Power
6 expended \$30,323,272 of Rider funds and paid \$8,455,107 in
7 demand response program incentives, for a total of
8 \$38,778,378 spent on demand-side resource acquisition in
9 2023. Idaho Power requests that the 2023 Rider-funded DSM
10 expenses, and the 2023 demand response program incentives
11 recovered through base rates and tracked through the PCA,
12 be reviewed together for a prudence determination. Exhibit
13 No. 1 to my testimony, *2023 Idaho DSM Expenses and*
14 *Adjustments for Prudence Filing*, shows a breakout of these
15 expenses by program, customer sector, and funding source.

16 Q. Please compare the dollar amounts in Exhibit
17 No. 1 to your testimony with Appendix 2, *2023 DSM expenses*
18 *by funding source (dollars)*, of the DSM 2023 Annual Report.

19 A. For clarity and ease of understanding, Exhibit
20 No. 1 ties to Appendix 2, which is found on page 184 of the
21 DSM 2023 Annual Report. The first column of Appendix 2
22 labeled "Idaho Rider" and the first column of Exhibit No. 1
23 labeled "Rider Expenses" match at the row labeled "Total
24 Expenses" in Exhibit No. 1 and "Grand Total" in Appendix 2
25 in the amount of \$30,229,460. All values in Exhibit No. 1

1 represent DSM expenses for the Idaho service area only.
2 Three prior year-end accounting adjustments and two current
3 year-end accounting adjustments were necessary to
4 accurately arrive at the total 2023 expenses for purposes
5 of the prudence determination. These five adjustments are
6 listed in Exhibit No. 1 under the Adjustments section as
7 2022 Commercial & Industrial Overhead, 2022 Residential
8 Energy Efficiency Education Initiative, 2022 Residential
9 Energy Efficiency Overhead, 2023 Irrigation Peak Rewards,
10 and 2023 Residential New Construction.

11 Q. Please describe the prior year-end accounting
12 adjustments included in Exhibit No. 1.

13 A. The first adjustment of \$6,998 was associated
14 with the C&I Energy Efficiency program where the expense
15 should have been charged to O&M instead of the Idaho Rider
16 in 2022. The correction to reduce Idaho Rider expenses was
17 made in 2023, and therefore \$6,998 needs to be added back
18 to avoid understating the 2023 prudence request.

19 The second adjustment of \$1,289 is associated with
20 Idaho activity for the Residential Energy Efficiency
21 Education Initiative that was incorrectly charged to O&M in
22 2022 instead of the Idaho Energy Efficiency rider. The
23 correction adding the expense to the Idaho Rider was made
24 in 2023, and therefore \$1,289 needs to be subtracted from

1 the 2023 prudence request because it was already deemed
2 prudent by the Commission in the 2022 request.

3 The final adjustment of \$89,680 was associated with
4 a program administration fee the Company paid in 2022 that
5 was refunded in 2023 due to services not being rendered.
6 The correction to reduce Idaho Rider expenses was made in
7 2023, and therefore, \$89,680 needs to be added back to
8 avoid understating the 2023 prudence request.

9 Q. Please describe the current year-end
10 accounting adjustments included in Exhibit No. 1.

11 A. Two accounting adjustments to the Rider for
12 2023 were identified through Idaho Power's year-end review
13 of expenses and the corrections were made after the 2023
14 year-end financial books were closed.

15 The first adjustment results in a reduction of
16 \$1,771 which was related to expenses associated with the
17 Irrigation Peak Rewards program that should have been
18 charged to O&M, rather than the Idaho Rider.

19 The second adjustment results in an addition of \$194
20 associated with the Residential New Construction program
21 where the expense was initially charged to the Oregon Rider
22 instead of the Idaho Rider.

23 Q. What amount of Rider-funded employee DSM-
24 related labor expense did the Company incur in 2023?

1 A. The 2023 total Rider-funded DSM employee labor
2 expense incurred by the Company was \$3,625,290.

3 Q. What amount of 2023 DSM-related labor is the
4 Company requesting be funded through the Rider?

5 A. The Company is requesting \$3,449,976 in 2023
6 DSM labor expense be collected through the Rider. This
7 amount is appropriately recovered through the Rider as it
8 is equal to the Commission's authorized labor cost cap
9 detailed in Order Nos. 34874² and 35270.³ The actual 2023
10 DSM labor expense was \$175,313 over the cap as detailed in
11 Table 2 below.

Table 2. Labor Expense Calculation

2022 Total Actual Labor Expense		\$	3,392,286
2022 FTEs*	÷		24.14
2022 Actual Average Wage per FTE		\$	140,545
2% Cap	x		1.02
2023 Maximum Average Wage per FTE		\$	143,356
2023 FTEs*	x		24.07
2023 Maximum Allowed Labor Expense		\$	3,449,976
2023 Total Actual Labor Expense	-	\$	3,625,290
Amount Under/(Over) Maximum Allowed Labor Expense		\$	(175,313)

12 *24.14 and 24.07 are rounded values.

13 //

14 //

15 //

² *In the Matter of Idaho Power Company's Application for a Determination of 2019 Demand-Side Management Expenses as Prudently Incurred*, Case No. IPC-E-20-15, Order No. 34874, p. 5 (Dec. 18, 2020).

³ *In the Matter of Idaho Power Company's Application for a Determination of 2020 Demand-Side Management Expenses as Prudently Incurred*, Case No. IPC-E-21-04, Order No. 35270, p. 9 (Dec. 27, 2021).

1 Q. What was the year-end 2023 balance of the
2 Rider?

3 A. The Rider account balance on December 31,
4 2023, had a positive, or over-collected, balance of
5 \$700,361 compared to an under-collected balance of
6 \$3,767,319 on December 31, 2022. Table 3 below shows the
7 January 2023 beginning balance, funding plus accrued
8 interest, expenses, and the ending balance as of December
9 31, 2023.

10 **Table 3. Idaho Energy Efficiency Rider (January-December**
11 **2023)**

Idaho Energy Efficiency Rider	
2023 Beginning Balance	\$ (3,767,319)
2023 Funding plus Accrued Interest as of 12/31/23	<u>34,697,140</u>
Total 2023 Funds	30,929,821
2023 Expenses as of 12/31/23	<u>(30,229,460)</u>
Ending Balance as of 12/31/23	\$ <u>700,361</u>

12

13 **III. 2023 COST-EFFECTIVENESS OVERVIEW**

14 Q. What is Idaho Power's overall goal when it
15 comes to DSM cost-effectiveness tests?

16 A. Idaho Power strives to ensure that DSM funds
17 collected from customers are utilized to support the
18 pursuit of cost-effective energy efficiency and demand
19 response programs, with the limited exception of certain
20 policy considerations. This goal is achieved by applying a
21 multi-step process. Prior to the actual implementation of
22 energy efficiency or demand response programs, Idaho Power

1 performs a preliminary cost-effectiveness analysis to
2 assess whether a potential program design or measure will
3 be cost-effective from the perspective of customers as well
4 as the Company. Idaho Power measures cost-effectiveness
5 under three tests: the UCT, the TRC test, and the PCT. A
6 review of each test allows for an economic assessment of
7 the life-cycle costs and benefits of a DSM investment from
8 the perspective of DSM program participants, Idaho Power,
9 and non-participating customers.

10 Idaho Power also reviews the cost-effectiveness
11 results for each program and measure on an annual basis to
12 determine whether a program should continue or be modified
13 so it remains cost-effective on an ongoing basis. If a
14 measure or program is identified as non-cost-effective,
15 Idaho Power seeks EEAG input before making its
16 determination on modifying, continuing, or discontinuing an
17 offering.

18 The cost-effectiveness test methodologies and
19 assumptions are described in more detail in the first pages
20 of Supplement 1, included in Attachment 1 to the
21 Application in this proceeding.

22 Q. Does Idaho Power believe its application of
23 the standard economic tests is consistent with Commission
24 directives?

1 A. Yes. Idaho Power believes its application of
2 the three economic tests is consistent with prior
3 Commission directives, as described in Order No. 33365:⁴

4 We thus find it reasonable for the Company to
5 continue screening potential programs using
6 each test as a guideline, and to advise us on
7 how the Company's programs fare under each
8 test. When the Company ultimately seeks to
9 recover its prudent investment in such
10 programs, however, we believe the Company may
11 (but need not exclusively) emphasize the UCT-
12 and that test's focus on Company-controlled
13 benefits and costs-to argue whether the
14 programs were cost-effective. As always, the
15 Company ultimately must persuade us that its
16 program investments were prudent under the
17 totality of the circumstances.

18
19 Because Idaho Power must ultimately demonstrate to
20 the Commission that its program investments were prudent
21 under "the totality of the circumstances", the Company
22 continues to evaluate performance from the three
23 perspectives.

24 **A. 2023 Cost-Effectiveness Results**

25 Q. What were the results of the 2023 cost-
26 effectiveness analyses?

27 A. Exhibit No. 2 to my testimony, *2023 Cost-*
28 *Effectiveness Summary by Program, Sector, and Portfolio,*
29 shows the results of the UCT, TRC test, and PCT for every

⁴ *In the Matter of the Application of Idaho Power Company for a Determination of 2014 Demand-Side Management Expenditures as Prudently Incurred*, Case No. IPC-E-15-06, Order No. 33365, p. 9-10 (Aug. 28, 2015).

1 energy efficiency program aggregated by sector and for the
 2 overall portfolio. As shown in Table 4 below, the overall
 3 DSM Portfolio achieved benefit/cost ratios greater than 1.0
 4 for each of the three cost-effectiveness tests. All three
 5 of the program sectors achieved benefit/cost ratios greater
 6 than or equal to 1.0 from the UCT and PCT perspectives with
 7 the Residential Sector having a TRC less than 1.0.

8 **Table 4. 2023 Benefit/Cost by Sector & Portfolio**

Sector	Utility Cost Test (UCT)	Total Resource Cost (TRC) Test	Participant Cost Test (PCT)
Residential*	1.12	0.95	3.38
Commercial/Industrial	2.74	1.48	1.63
Irrigation	2.06	2.22	2.29
Portfolio*	2.06	1.51	1.89

*Does not include Weatherization Assistance for Qualified Customers Program

9

10 Q. Did the Company quantify the Residential
 11 Sector and DSM Portfolio cost-effectiveness, including the
 12 costs and benefits of the Weatherization Assistance for
 13 Qualified Customers ("WAQC") program?

14 A. Yes. Table 5 below shows the cost-
 15 effectiveness of the Residential Sector and the Overall DSM
 16 Portfolio with and without the WAQC program included.

17 **Table 5. Residential and Portfolio Cost-Effectiveness with
 18 and without WAQC**

Sector	WAQC Not Included			WAQC Included		
	UCT	TRC	PCT	UCT	TRC	PCT
Residential	1.12	0.95	3.38	0.87	0.74	2.73
Portfolio	2.06	1.51	1.89	1.97	1.47	1.88

19

1 While the WAQC program remains non-cost-effective
2 from an economic perspective, it provides real savings to
3 customers that would otherwise likely be unable to afford
4 to weatherize their homes and offers health and safety
5 benefits to customers in need that are not quantified
6 through the economic tests.

7 Q. What assumptions were utilized to calculate
8 the sector and portfolio cost-effectiveness for 2023?

9 A. Idaho Power relies on research conducted by
10 third parties to obtain savings and cost assumptions for
11 various measures. The Company fixes savings assumptions
12 when budgets and goals are established for the next
13 calendar year unless codes and standards change, or program
14 updates necessitate a need to use updated savings. The
15 remaining inputs are obtained from the Company's IRP
16 planning process. Because the 2021 IRP was the most
17 recently acknowledged IRP at the time 2023 DSM program
18 planning occurred, Idaho Power used the avoided costs from
19 the 2021 IRP in its cost-effectiveness analysis.

20 To calculate the sector cost-effectiveness, Idaho
21 Power includes the benefits and costs associated with
22 programs that produce quantifiable energy savings. The
23 portfolio cost-effectiveness is the sum of all energy
24 efficiency activities, including those that do not have
25 savings associated with them, such as overhead expenses.

1 Q. What are the cost-effectiveness results for
2 each of the Company's DSM programs?

3 A. As reflected in Exhibit No. 2 to my testimony,
4 *2023 Cost-Effectiveness Summary by Program, Sector, and*
5 *Portfolio*, on an individual program basis, 9 of the 15
6 energy efficiency programs offered in Idaho for which the
7 Company calculates cost-effectiveness had benefit/cost
8 ratios greater than 1.0 under the UCT.

9 It should be noted that the PCT ratios cannot be
10 calculated for programs that do not have a direct customer
11 cost, and the PCT is shown as "N/A" in Exhibit No. 2 for
12 those programs. Additionally, the new Multifamily Energy
13 Efficiency Program has "N/A" for all benefit/costs ratios
14 due to the fact the program launched on November 1, 2023
15 and did not realize any savings/benefits during the
16 remainder of the year. The details of the other
17 calculations are found in Supplement 1 of the DSM 2023
18 Annual Report.

19 Q. Did Idaho Power calculate cost-effectiveness
20 for each measure within each energy efficiency program it
21 offers?

22 A. Yes. In 2023, Idaho Power evaluated the
23 benefits and costs of 295 measures. The results of these
24 calculations, along with measure assumption details and

1 source documentation, can be found in Supplement 1 to the
2 DSM 2023 Annual Report.

3 Q. How did Idaho Power address any individual
4 measures that are not cost-effective based on one or more
5 tests?

6 A. The cost and benefit values used in the
7 various analyses are based on markets, technologies,
8 economic inputs, savings estimates, and cost estimates,
9 which can change over time. When a measure is identified as
10 non-cost-effective at a specific point in time, Idaho Power
11 first evaluates whether the inputs used in the calculations
12 are still applicable. Then the Company determines if the
13 measure parameters should be modified or if the measure
14 should be eliminated altogether. For additional detail on
15 measure analysis, please refer to Supplement 1 to the DSM
16 2023 Annual Report.

17 **B. Non-Cost-Effective Programs**

18 **1. Income Qualified Weatherization**

19 Q. Please explain what drivers influence the
20 cost-effectiveness results for the WAQC and Weatherization
21 Solutions for Eligible Customers ("Solutions") programs?

22 A. The WAQC and Solutions programs provide real
23 and substantial per home savings, but due to the costs of
24 comprehensive whole-house weatherization, it is difficult
25 for the value of the savings to outweigh the costs. The

1 weatherization services provided through the WAQC program
2 are consistent with the Idaho State Weatherization
3 Assistance Program guidelines, and both the WAQC and
4 Solutions programs are offered at no charge to the
5 participant. Please refer to pages 88 and 98 in the DSM
6 2023 Annual Report for the savings, costs, and the number
7 of homes weatherized in 2023.

8 Q. Does Idaho Power plan to continue offering the
9 WAQC and Solutions programs in the future?

10 A. Yes. While the Company has identified that the
11 programs are not cost-effective under the UCT, unless the
12 Commission directs otherwise, Idaho Power will continue to
13 offer them to the Company's limited-income customers on an
14 ongoing basis. The Company will also continue to consult
15 the EEAG and weatherization managers who oversee the
16 weatherization work to look for ways to improve outreach
17 and the cost-effectiveness of these programs as
18 opportunities are available.

19 **2. Rebate Advantage**

20 Q. What were the cost-effectiveness results for
21 the Rebate Advantage program?

22 A. As shown in Exhibit No. 2, the Rebate
23 Advantage Program achieved a UCT ratio of 0.98 and a TRC
24 ratio of 0.93. The program was just slightly under 1.0 from
25 the UCT prospective, which was primarily driven by the

1 updated avoided costs from the 2021 IRP used to evaluate
2 the cost-effectiveness for the 2023 program year. The
3 Rebate Advantage program was found to be cost effective in
4 2022, with a UCT ratio of 1.18, based on the avoided costs
5 from the then-most recently acknowledged IRP, which was the
6 2019 Second Amended IRP at the time 2022 DSM program
7 planning occurred.

8 Notably, the savings assumptions between the 2022
9 and 2023 program years remained the same for the Rebate
10 Advantage program. However, because the life cycle of
11 program measures range between 43 and 45 years, the
12 decrease in the avoided costs in later years in the 2021
13 IRP, as compared to the 2019 Second Amended IRP,
14 contributed to the decline of the program's cost-
15 effectiveness from 2022 to 2023. For 2024, the Company
16 anticipates the Rebate Advantage program will be cost-
17 effective because the 2023 IRP avoided costs were used for
18 2024 program planning and will therefore be used to
19 evaluate 2024 program cost-effectiveness. The 2023 IRP
20 avoided costs are greater than the 2021 IRP avoided costs
21 through 2034 along with an increased capacity benefit,
22 which is why the Company is optimistic the Rebate Advantage
23 program will be cost-effective going forward.

24 //

25 //

1 **3. Shade Tree Project**

2 Q. What were the cost-effectiveness results for
3 the Shade Tree Project?

4 A. As shown in Exhibit No. 2 the Shade Tree
5 Project achieved a UCT ratio of 0.31 and a TRC ratio of
6 0.42 for the 2023 program year as compared to UCT and TRC
7 ratio of 1.02 and 1.21 for 2022, respectively. This was
8 driven by the results of the impact evaluation conducted in
9 2023 that significantly reduced the savings from how the
10 Company had previously calculated them. The 2023 cost-
11 effectiveness ratios also include the expenses associated
12 with the program's evaluation conducted in 2023. If the
13 evaluation expenses were removed from the program's cost-
14 effectiveness calculations, the UCT and TRC would be 0.33
15 and 0.45 respectively.

16 Q. Please explain the drivers contributing to the
17 decrease in overall savings.

18 A. The third-party evaluator identified two main
19 drivers contributing to a decrease in overall savings: (1)
20 an increased tree mortality rate, and (2) the introduction
21 of a heating penalty as described below.

22 The mortality rate of trees in certain parts of the
23 state turned out to be higher than previously expected,
24 where trees did not survive after being planted at a
25 customer's residence or were not planted at all.

1 The evaluator also recommended applying a heating
2 penalty for electrically heated homes to account for the
3 additional heating that would be needed in the cooler
4 months due to the shade provided by the tree. Savings were
5 reduced by subtracting the additional energy needed to heat
6 the home in the cooler months from the energy benefits of
7 the tree's shade in the warmer months. Adding this penalty
8 greatly reduced total savings on electrically heated homes.

9 Q. Has the Company discussed the status of the
10 program with EEAG?

11 A. The Company received the preliminary Shade
12 Tree Project evaluation report on January 12, 2024 and
13 briefly discussed the preliminary evaluation results with
14 its EEAG at the February 8, 2024, EEAG meeting. The Company
15 has engaged in discussions with the third-party evaluator
16 that conducted the 2023 impact evaluation to assess
17 possible cost-effectiveness improvement recommendations.

18 Q. Does the Company anticipate continuing the
19 program through 2024?

20 A. Yes. Prior to receiving the evaluation results
21 and based on the information available to the Company at
22 that time, Idaho Power contractually committed to the 2024
23 Shade Tree Project events. The vendor requires a commitment
24 at least a year in advance in order to plant and grow the
25 trees to the preferred size for the events. However, the

1 recently obtained information will better inform decisions
2 about the future of the program. The Company plans to share
3 this information at the May EEAG meeting and consult with
4 EEAG on potential next steps.

5 **4. Heating and Cooling Efficiency Program**

6 Q. What were the cost-effectiveness results for
7 the Heating and Cooling Efficiency program?

8 A. As shown in Exhibit No. 2, the Heating and
9 Cooling Efficiency Program achieved a UCT of 0.94 and a TRC
10 of 0.40 as compared to UCT and TRC ratio of 0.98 and 0.30
11 for 2022, respectively.

12 Q. What was the primary contributor to the
13 program not being cost-effective?

14 A. The main driver of the difference was the
15 decrease in overall savings, which was largely due to
16 updates in savings assumptions by the Regional Technical
17 Forum ("RTF"). The RTF is the source of most measure
18 savings assumptions within the program and many of those
19 assumptions changed between 2022 and 2023. The savings
20 decrease was primarily driven by two measures within the
21 program: smart thermostats and air-source heat pumps.

22 Smart thermostats made up 45 percent of the total
23 program participation and 14 percent of the total savings.
24 With the new RTF assumptions, the per unit savings declined

1 by between 24 percent and 65 percent compared to the
2 savings in 2022.

3 Air-source heat pumps made up 17 percent of the
4 total program participation and 44 percent of the total
5 savings. On average, the per unit savings for air-source
6 heat pump measures declined by nearly 12 percent as
7 compared to 2022.

8 Additionally, ductless heat pumps made up 16 percent
9 of the program participation and 19 percent of the total
10 savings. While the savings assumptions did not change year
11 over year, the average savings per unit declined by nearly
12 16 percent due to the heating zone locations of the
13 participants in 2023 versus 2022. Savings vary by heating
14 zones and the participants in 2023 were in heating zones
15 with lower savings.

16 Q. Does Idaho Power expect the program to be
17 cost-effective going forward?

18 A. Yes. In November 2023, Idaho Power modified
19 the Heating & Cooling Efficiency program based on the
20 updated RTF savings and analyzed the program with the new
21 DSM avoided costs from the most recently filed 2023 IRP.
22 With these changes, the program is expected to be cost-
23 effective in 2024 and beyond.

24 //

25 //

1 **5. Small Business Direct Install ("SBDI") Program**

2 Q. What were the cost-effectiveness results for
3 the SBDI Program?

4 A. As shown in Exhibit No. 2, the SBDI Program
5 achieved a UCT of 0.97 and a TRC of 1.48 as compared to UCT
6 and TRC ratio of 0.95 and 1.50 for 2022, respectively. The
7 2023 cost-effectiveness ratios also include the expenses
8 associated with the program's evaluation conducted in 2023.
9 If the evaluation expenses were removed from the program's
10 cost-effectiveness calculations, the UCT and TRC would be
11 1.08 and 1.64, respectively.

12 Q. What was the primary contributor to the
13 program not being cost-effective?

14 A. The short three-month operation of the program
15 before it was discontinued on March 31, 2023, along with
16 the costs associated with evaluation, were the primary
17 reasons the SBDI program was not cost-effective in the 2023
18 program year.

19 Q. Why did the Company complete an evaluation in
20 2023 if it already planned to end the program?

21 A. Because all program savings came from lighting
22 measures, the Company had previously decided not to
23 continue the program past the contract end-date with the
24 vendor as it had determined that it would not be cost-
25 effective in the longer term. However, after consultation

1 with its EEAG during 2022 and into 2023, the Company
2 decided to conduct an impact evaluation on the program in
3 2023 to potentially inform a new small business targeted
4 energy efficiency program in the future. The Company is
5 exploring the potential to launch an updated and cost-
6 effective small business lighting energy efficiency program
7 in the near future based on the 2023 SBDI evaluation
8 findings and further discussions and feedback from the EEAG
9 in 2024.

10 **C. Demand Response Cost-Effectiveness**

11 Q. Does Idaho Power evaluate cost-effectiveness
12 for its three demand response programs?

13 A. Yes. The methodology approved in Order No.
14 35336⁵ is used to determine the cost-effectiveness of the
15 demand response ("DR") programs and sets the maximum
16 avoided cost value. In accordance with the approved
17 methodology, the 2023 cost-effectiveness threshold for
18 demand response is \$84.57 per kW year.

19 Q. How was the \$84.57 determined?

20 A. Using the approved method, the avoided cost
21 calculation for the demand response programs is as follows:

22 //

⁵ *In the Matter of Idaho Power Company's Application for Approval to Modify its Demand Response Programs, Case No. IPC-E-21-32, Order No. 35336, p. 9-10 (Mar. 4, 2022).*

1 *(Levelized Fixed Costs - Additional Benefits)*
2 *x Effective Load Carrying Capacity ("ELCC") of Annual*
3 *Demand Response Capacity Compared to Proxy Resource*
4 *= \$ per kW year Demand Response Avoided Costs*

5 Each of the three components have been updated and
6 are:

7 1. From the 2021 IRP, the 2023 levelized fixed
8 cost value of a Simple-Cycle Combustion Turbine ("SCCT")
9 was determined to be \$134.63 per kW per year.

10 2. From the 2021 IRP, to determine the
11 additional ancillary benefits provided by the SCCT compared
12 to DR, an analysis was performed where DR was replaced with
13 an equivalent SCCT and the fixed costs of the SCCT were
14 removed from the model. The result of this analysis showed
15 there were no additional benefits associated with the SCCT
16 because the cost of the fuel and SCCT plant Operations and
17 Maintenance ("O&M") required to meet the demand response
18 demand.

19 3. The updated ELCC of approximately 316 MW of DR
20 capacity compared to a SCCT utilizing 2021 IRP assumptions
21 is 62.82 percent.

22 *(\$134.63 - \$0.00) * 62.82% =*
23 *\$84.57 per kW year Demand Response Avoided Cost*

24 Additional details of the methodology are included
25 in Supplement 1.

1 Q. What were the total and per kW costs of the
2 Company's demand response programs?

3 A. In 2023, the system-wide cost of operating the
4 three demand response programs was approximately \$11.3
5 million (\$8.9 million of incentives and \$2.4 million of
6 other costs). The amounts attributable to the Idaho-only
7 jurisdiction were \$10.7 million (\$8.4 million of incentives
8 and \$2.3 million of other costs). Table 6 below shows the
9 2023 dollar per kW year costs for each program and the
10 overall demand response portfolio assuming the programs
11 were dispatched for the maximum 60 hours. Idaho Power
12 estimates that if the three programs were dispatched for
13 the full 60 hours allowed, the total costs would have been
14 approximately \$12.9 million on a system-wide basis.

15 **Table 6. Demand Response Program 2023 \$ per kW year**

Program	\$ per kW year
Residential A/C Cool Credit	\$29.93
C&I Flex Peak	\$36.40
Irrigation Peak Rewards	\$42.57
Total Demand Response Portfolio	\$40.80

16

17 Q. Were the demand response programs cost-
18 effective?

19 A. Yes. All three of the Company's demand
20 response programs, as well as the demand response
21 portfolio, had a cost per kW less than the 2023 threshold
22 of \$84.57, meaning the programs and the portfolio were
23 cost-effective.

1 Q. Does Idaho Power have a plan to evaluate the
2 avoided cost equation used to determine the cost-
3 effectiveness of the Company's demand response programs?

4 A. Yes. The Company believes there should be
5 further discussions regarding the best method(s) for
6 evaluating the Company's DR programs and commits to working
7 with Staff and stakeholders to this end. Through the
8 Company's ongoing evaluation conducted to date utilizing
9 the cost-effectiveness methodology that was approved by the
10 Commission in Order No. 35336 in Case No. IPC-E-21-32,
11 Idaho Power has identified several different methods that
12 could potentially be used to evaluate DR cost-effectiveness
13 moving forward. Idaho Power anticipates engaging with Staff
14 and potentially other stakeholders on this topic in the
15 coming months as it explores the potential expansion of
16 other DR opportunities.

17 In the event the Company determines that changes to
18 the DR programs are needed, having an avoided cost
19 calculation recommendation that was collaboratively
20 developed would help ensure a proposal that balances the
21 costs and benefits of DR is brought before the Commission
22 for its review.

23 //

24 //

25 //

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

IV. EVALUATION ACTIVITY OVERVIEW

Q. What is the Company's approach to DSM program evaluation?

A. To ensure the ongoing cost-effectiveness of programs through validation of energy savings and demand reduction, and to guide the efficient management of its programs, the Company utilizes evaluations conducted by third-party contractors chosen through a competitive bidding process. Idaho Power uses industry-standard protocols, internal analyses, and regional and national studies to inform its internal and external evaluation efforts. The Company has generally conducted impact evaluations every three years, and process evaluations for relatively new programs, or when a program has significant changes. Supplement 2 to the DSM 2023 Annual Report provides additional information regarding how Idaho Power evaluates its programs.

Q. How does Idaho Power utilize the evaluations described above?

A. Idaho Power uses the results of its evaluations to inform decisions related to program improvement, to compare processes to industry best practices, and to benchmark and validate reported program savings.

//

1 Q. What evaluation activities took place in 2023?

2 A. In addition to the annual cost-effectiveness
3 analyses that the Company conducts for each program, Idaho
4 Power contracted with several third-party evaluators to
5 conduct impact and process evaluations in 2023. Evaluations
6 conducted by these evaluators were on the following
7 programs:

- 8 • Impact and process evaluation on the Home Energy
9 Audit Program.
- 10 • Impact evaluations on Residential New
11 Construction Program, Shade Tree Project, Small
12 Business Direct Install, and the Irrigation
13 Efficiency Rewards Program.

14 In addition to these third-party evaluations, Idaho
15 Power completed internal analyses of the Irrigation Peak
16 Rewards, C&I Flex Peak, and A/C Cool Credit demand response
17 programs.

18 The impact evaluations that were conducted in 2023
19 analyzed reported savings from the 2022 program year.
20 Realization rates were as follows:

- 21 • Home Energy Audit: 102 percent.
- 22 • Residential New Construction Program: 100
23 percent.
- 24 • Shade Tree Project: 70 percent.
- 25 • Small Business Direct Install: 100 percent.

1 • Irrigation Efficiency Rewards: 97.4 percent.

2 The final reports for these evaluations, and the
3 market effects evaluations conducted by NEEA, are included
4 in Supplement 2 to the DSM 2023 Annual Report.

5 Q. Does Idaho Power have a DSM program evaluation
6 plan for 2024-2025?

7 A. Yes. The evaluation plan is included as
8 Exhibit No. 3 to my testimony and is also included in
9 Supplement 2 to the DSM 2023 Annual Report. In 2024, Idaho
10 Power's evaluation plan includes the following third-party
11 evaluations:

12 • Impact and process evaluations for Rebate
13 Advantage and C&I Energy Efficiency Program
14 Custom Projects.

15 • Impact evaluation for Educational Distributions.

16 **V. STAKEHOLDER INPUT**

17 Q. What is the EEAG?

18 A. In 2002, Idaho Power formed the EEAG to
19 provide input on enhancing existing DSM programs,
20 recommending new energy efficiency measures, and
21 implementing energy efficiency programs. Members include
22 customer representatives from residential, irrigation,
23 commercial, and industrial sectors as well as technical
24 experts, representatives for limited-income individuals,
25 environmental organizations, state agencies, county and

1 city governments, the Commission, the Public Utility
2 Commission of Oregon, and Idaho Power.

3 Q. What is the structure of EEAG meetings?

4 A. The EEAG generally meets quarterly in-person
5 at Idaho Power's corporate offices and through webinars as
6 needed. Three EEAG meetings were held in person with a
7 virtual option and one EEAG meeting was held virtually in
8 2023. The Company believes that member participation and
9 input remained strong during the 2023 EEAG meetings.

10 The agenda during EEAG meetings is varied, but
11 typically includes program and project updates, new energy
12 efficiency program or measure proposals, marketing methods,
13 specific measure details including cost-effectiveness, the
14 status of energy efficiency expenses, and general
15 information on DSM issues. When appropriate, the Company
16 invites experts to speak on evaluations, research, and
17 other topics of interest to enhance EEAG's understanding.

18 Q. How did Idaho Power solicit guidance from the
19 EEAG during the 2023 program year?

20 A. In 2023, the Company held four EEAG meetings,
21 and during these meetings, Idaho Power discussed and
22 requested recommendations on a broad range of DSM issues.
23 As explained in greater detail in the DSM 2023 Annual
24 Report, the list below includes some of the topics Idaho

1 Power worked with the EEAG on for development, design,
2 promotion, or input:

- 3 • Multifamily Energy Efficiency Program: With the
4 sunset of the previous direct install Multifamily
5 Energy Savings program on December 31, 2022, the
6 Company consulted with the EEAG to develop a new
7 cost-effective Multifamily Energy Efficiency
8 program that has a robust list of measures but
9 now requires customers to bear some of the cost.
10 The Company was able to successfully launch the
11 new program on November 1, 2023 and received
12 eight preliminary applications.
- 13 • C&I Flex Peak Incentive Structure: After
14 receiving feedback from customers in the C&I Flex
15 Peak demand response program and conducting its
16 own internal analysis, the Company requested
17 feedback from the EEAG on a new incentive
18 structure for the program that would reduce the
19 severity of the performance penalty, which in
20 turn, will incentivize increased participation in
21 the C&I Flex Peak demand response program. The
22 Company filed its request to update the incentive
23 structure based on EEAG's input on October 2,
24 2023, in Case No. IPC-E-23-24.

1 • Avoided Costs Used in DSM Program Planning and
2 Cost-Effectiveness: At the EEAG meeting on August
3 17, 2023, the Company presented its proposal to
4 use the avoided costs from the most recently
5 "filed" IRP rather than use the most recently
6 "acknowledged" IRP for DSM program planning. The
7 EEAG supported the proposal and agreed with the
8 premise that this would reduce the lag time
9 between when the avoided costs are updated and
10 used for program planning and cost-effectiveness
11 evaluations. As a result, beginning with the 2024
12 program year, the Company will now be using the
13 most current IRP information available for its
14 DSM planning, evaluations, and analyses.

15 **VI. CONCLUSION**

16 Q. Do you believe that the information contained
17 in this testimony and attached exhibits supports a prudence
18 determination for 2023 DSM expenses?

19 A. Yes. Based on the DSM 2023 Annual Report, the
20 testimony set forth above, and the attached exhibits, Idaho
21 Power respectfully requests the Commission determine that
22 \$38,778,378 was prudently incurred for the acquisition of
23 demand-side resources in 2023.

24 //

25 //

1 Q. Does this conclude your testimony?

2 A. Yes, it does.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

ATTESTATION OF TESTIMONY

STATE OF IDAHO)
) ss.
County of Ada)

I, Robert Z. Thompson, having been duly sworn to testify truthfully, and based upon my personal knowledge, state the following:

I am employed by Idaho Power Company as a Regulatory Analyst in the Regulatory Affairs Department and am competent to be a witness in this proceeding.

I declare under penalty of perjury of the laws of the state of Idaho that the foregoing pre-filed testimony and exhibits are true and correct to the best of my information and belief.

DATED this 15th day of March 2024.

Robert Z. Thompson

SUBSCRIBED AND SWORN to before me this 15th day of March 2024.

Notary Public for Idaho
Residing at Ada County Idaho
My commission expires: 11/02/2024



**BEFORE THE
IDAHO PUBLIC UTILITIES COMMISSION
CASE NO. IPC-E-24-11**

IDAHO POWER COMPANY

THOMPSON, DI

TESTIMONY

EXHIBIT NO. 1

Idaho Power Company
2023 Idaho DSM Expenses and Adjustments for Prudence Filing

Expenses	Rider Expenses	Demand Response Program Incentives Recorded in PCA	Total Expenses
Energy Efficiency/Demand Response			
Residential			
A/C Cool Credit	\$ 1,536,873	\$ 365,690	\$ 1,902,563
Educational Distributions	880,568	-	880,568
Energy Efficient Lighting	278,610	-	278,610
Heating & Cooling Efficiency Program	593,407	-	593,407
Home Energy Audit	230,011	-	230,011
Home Energy Report Program	883,505	-	883,505
Multifamily Energy Efficiency	22,758	-	22,758
Rebate Advantage	130,233	-	130,233
Residential New Construction Program	195,102	-	195,102
Shade Tree Project	262,344	-	262,344
Weatherization Solutions for Eligible Customers	84,428	-	84,428
Commercial/Industrial			
Custom Projects	11,221,008	-	11,221,008
New Construction	2,139,603	-	2,139,603
Retrofits	3,002,681	-	3,002,681
Commercial Energy-Saving Kits	53,167	-	53,167
Flex Peak Program	135,731	694,935	830,665
Small Business Direct Install	357,404	-	357,404
Irrigation			
Irrigation Efficiency	1,474,741	-	1,474,741
Irrigation Peak Rewards	616,755	7,394,482	8,011,237
Energy Efficiency/Demand Response Total	\$ 24,098,928	\$ 8,455,107	\$ 32,554,034
Market Transformation			
NEEA	2,589,987	-	2,589,987
Market Transformation Total	\$ 2,589,987	\$ -	\$ 2,589,987
Other Programs and Activities			
Commercial/Industrial Energy Efficiency Overhead	890,300	-	890,300
Energy Efficiency Direct Program Overhead	290,729	-	290,729
Residential Energy Efficiency Education Initiative	359,242	-	359,242
Residential Energy Efficiency Overhead	1,204,872	-	1,204,872
Other Programs and Activities Total	\$ 2,745,144	\$ -	\$ 2,745,144
Indirect Program Expenses			
Energy Efficiency Accounting & Analysis	952,424	-	952,424
Energy Efficiency Advisory Group	14,422	-	14,422
Special Accounting Entries			
Special Accounting Entries	(171,445)	-	(171,445)
Indirect Program Expenses Total	\$ 795,401	\$ -	\$ 795,401
Total Expenses	\$ 30,229,460	\$ 8,455,107	\$ 38,684,566
Adjustments			
Prior year-end accounting adjustments:			
2022 Commercial & Industrial Overhead (a)	6,998		6,998
2022 Residential Energy Efficiency Education Initiative (b)	(1,289)		(1,289)
2022 Residential Energy Efficiency Overhead (c)	89,680		89,680
Current year-end accounting adjustments:			
2023 Irrigation Peak Rewards (d)	(1,771)		(1,771)
2023 Residential New Construction (e)	194		194
2023 Prudence Filing Total	\$ 30,323,272	\$ 8,455,107	\$ 38,778,378

(a) 2022 O&M expense initially charged to the Idaho Rider. The correction was made in 2023.

(b) 2022 Idaho Rider expense initially charged to O&M. The correction was made in 2023.

(c) Program administration fee charged to the Idaho Rider in 2022 and refunded in 2023.

(d) 2023 O&M expense initially charged to the Idaho Rider. The correction was made in 2024.

(e) 2023 Idaho Rider expense initially charged to the Oregon Rider. The correction was made in 2024.

**BEFORE THE
IDAHO PUBLIC UTILITIES COMMISSION
CASE NO. IPC-E-24-11**

IDAHO POWER COMPANY

THOMPSON, DI

TESTIMONY

EXHIBIT NO. 2

2023 Cost-Effectiveness Summary by Program, Sector, and Portfolio

Program/Sector	2023 Benefit/Cost Tests		
	Utility Cost Test (UCT)	Total Resource Cost (TRC)	Participant Cost (PCT)
Educational Distributions	1.76	2.07	N/A
Energy Efficient Lighting ¹	1.69	1.51	4.07
Heating & Cooling Efficiency Program	0.94	0.40	0.88
Home Energy Reports	1.32	1.45	N/A
Multifamily Energy Efficiency Program ²	N/A	N/A	N/A
Rebate Advantage	0.98	0.93	4.23
Residential New Construction	1.05	1.25	3.85
Shade Tree Project	0.31	0.42	N/A
Weatherization Assistance for Qualified Customers	0.14	0.23	N/A
Weatherization Solutions for Eligible Customers	0.13	0.19	N/A
Residential Energy Efficiency Sector³	1.12	0.95	3.38
Commercial and Industrial Energy Efficiency Program			
Custom Projects	2.91	1.44	1.41
New Construction	2.78	2.74	3.81
Retrofits	2.35	1.17	1.53
Commercial Energy-Savings Kits ¹	1.02	1.17	N/A
Small Business Direct Install ⁴	0.97	1.48	N/A
Commercial/Industrial Energy Efficiency Sector⁵	2.74	1.48	1.63
Irrigation Efficiency	2.05	2.22	2.29
Irrigation Energy Efficiency Sector⁶	2.06	2.22	2.29
Energy Efficiency Portfolio⁷	2.06	1.51	1.89

1 Program closed June 30, 2023.

2 Program launched on November 1, 2023 and incurred costs, but no savings were realized in 2023.

3 Residential sector cost-effectiveness excludes WAQC benefits and costs. If included, the UCT, TRC, and PCT would be 0.87, 0.74, and 2.73 respectively.

4 Program closed March 31, 2023.

5 Commercial/Industrial Energy Efficiency Sector cost-effectiveness ratios include savings and participant costs from Green Motors Rewinds.

6 Irrigation Energy Efficiency Sector cost-effectiveness ratios include savings and participant costs from Green Motors Rewinds.

7 Portfolio cost-effectiveness excludes WAQC benefits and costs. If included, the UCT, TRC, and PCT would be 1.97, 1.47, and 1.88 respectively.

**BEFORE THE
IDAHO PUBLIC UTILITIES COMMISSION
CASE NO. IPC-E-24-11**

IDAHO POWER COMPANY

THOMPSON, DI

TESTIMONY

EXHIBIT NO. 3

Customer Relations and Energy Efficiency 2024-2025 Program Evaluation Plan

	2025	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015 ¹	2014	2013	2012	2011	2010	
Residential Energy Efficiency Programs																	
Educational Distributions		I				I/P											
Energy House Calls							I/P								I	P	
Heating & Cooling Efficiency Program	I/P				I/P				I/P				P	I			P
Home Energy Audit			I/P						I			P					
Home Energy Reports				I		P											
Multifamily Energy Savings Program								I/P									
Rebate Advantage		I/P				I				I/P						I	
Residential New Construction Program			I				I/P										
Shade Tree Project			I				O					P					
Weatherization Assistance for Qualified Customers		O				O						O	P	I			
Weatherization Solutions for Eligible Customers		O				O						O	P	I			
Commercial/Industrial Energy Efficiency Programs																	
Commercial Energy-Saving Kits				I/P													
Custom Projects		I/P			I/P			I	P			I/P			I	P	
New Construction	I/P			I/P			I		P	I				I			P
Retrofits	I/P			I/P			I		P	I			P	I			P
Small Business Direct-Install			I			P											
Irrigation Energy Efficiency Programs																	
Irrigation Efficiency Rewards			I			I/P				I/P		P/O	I/P				P
Demand-Response Programs																	
A/C Cool Credit	I/P	O	O	O	I	O	I	O	O	I	I	I	O	P	O		
Flex Peak Program	I/P	O	O	O	I/O	O	O	O	O	I/O	I/O		P/O		O		
Irrigation Peak Rewards	I/P	O	O	O	I/O	O	O	O	O	O	I/O	O	O		O		

¹ Energy efficiency programs evaluated in 2015 have since been eliminated or combined into another program.

Evaluation Type: I = Impact, P = Process, O = Other		
Program not yet in existence		