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DEMAND-SIDE MANAGEMENT

# 2023 ANNUAL REPORT

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## SAFE HARBOR STATEMENT

This document may contain forward-looking statements, and it is important to note that the future results could differ materially from those discussed. A full discussion of the factors that could cause future results to differ materially can be found in Idaho Power's filings with the Securities and Exchange Commission.

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# EXECUTIVE SUMMARY

Idaho Power, through its energy efficiency programs, its customer education programs, and its focus on the customer experience, fully supports energy efficiency and demand response and encourages its customers to use energy wisely.

In 2023, Idaho Power achieved 139,683 megawatt-hours (MWh) or 15.9 average megawatts (aMW) of incremental energy efficiency savings, including Northwest Energy Efficiency Alliance (NEEA) estimated energy savings, which is greater than the economic technical achievable potential included in the *2023 Integrated Resource Plan* of 106,953 MWh or 12.2 aMW. The 2023 savings represent enough energy to power approximately 12,253 average homes in Idaho Power's service area for one year.

The 2023 savings of 139,683 MWh, including the estimated savings from NEEA, decreased by 29,883 MWh—an 18% year-over-year decrease. The savings from Idaho Power's energy efficiency programs alone, excluding NEEA savings, were 115,769 MWh in 2023 and 145,440 MWh in 2022—a 20% year-over-year decrease. The decrease in savings can be attributed almost entirely to three programs.

- The Commercial & Industrial (C&I) New Construction program option contributed over half of the decline. While new construction activity in Idaho Power's service area was up in 2023 and the overall number of completed New Construction projects increased by 16%, the average savings per project decreased by 67%. This reduction was the result of smaller projects with less savings achieved per project.
- C&I Retrofits savings also decreased, contributing over a quarter of the total portfolio savings decline. While the number of projects was not lower in 2023, like New Construction, project size was smaller and average savings per lighting project decreased by 56%.
- Home Energy Reports contributed nearly 10% of the decline, due, in part, to naturally occurring attrition of the treatment group, but also due to a milder weather year that provided less savings potential per home.

In 2023, the company's energy efficiency portfolio was cost-effective from both the utility cost test (UCT) and the total resource cost (TRC) test perspectives with ratios of 2.06 and 1.51, respectively. The portfolio was also cost-effective from the participant cost test (PCT) ratio, which was 1.89.

Energy efficiency and demand response are important aspects of Idaho Power's resources to meet system energy needs and are reviewed with each IRP. Idaho Power successfully operated all three of its demand response programs in 2023. The total demand response capacity from

the company's programs was calculated to be approximately 316 megawatts (MW) with an actual max load reduction of 240 MW.

Total expenditures from all funding sources of demand-side management (DSM) activities were $42 million in 2023—$30.2 million from the Idaho Rider, $10.3 million from Idaho Power base rates, and $1.5 million from the Oregon Rider. DSM program funding comes from the Idaho and Oregon Riders, Idaho Power base rates, and the annual power cost adjustment (PCA).

In addition to the education customers get through participation in specific incentive programs for energy efficiency, Idaho Power educates customers on energy efficiency in many other ways. One of these methods is the *Energy Efficiency Guide,* providing information on energy efficiency equipment and ways to use energy wisely. Beginning in 2023, Idaho Power decided to produce a new guide every nine months and changed the format to seasonal 'themed' guides. The first fall-themed guide was published in October 2023.

Idaho Power participated in 144 events highlighting energy efficiency in 2023. Program specialists and energy advisors shared information about programs and other energy-saving ideas in an additional 709 presentations and trainings for audiences of all ages.

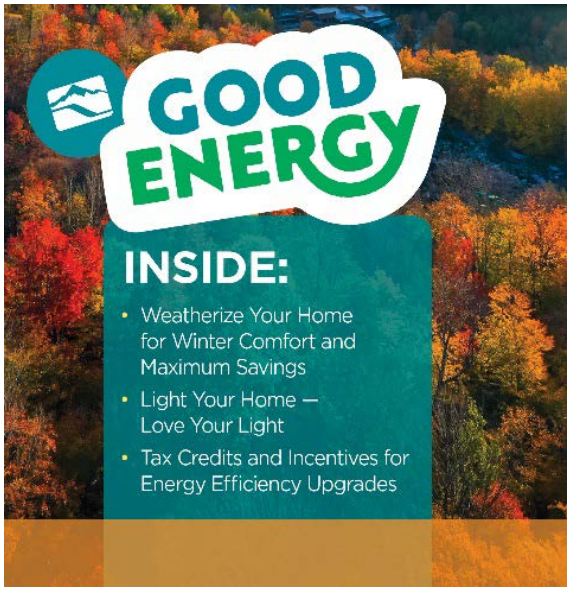


**Figure 1. Example graphic from the *2023 Energy Efficiency Guide***

In 2023, the Integrated Design Lab (IDL) conducted 20 technical training lunches. A total of 172 architects, engineers, designers, project managers, and others attended.

Idaho Power continued to provide training to its commercial and industrial customers in 2023, delivering five technical training sessions to 159 individuals. An additional six live, online technical training sessions were provided to industrial wastewater customers, attended by 74 participants.

Idaho Power provided seven in-person irrigation workshops and one conference seminar for the Irrigation Efficiency Rewards and Irrigation Peak Rewards programs; a total of 369 customers attended.

The company sponsors significant customer educational outreach and awareness activities promoting energy efficiency, and focuses marketing efforts on saving energy—none of which are quantified or claimed as part of Idaho Power's annual DSM savings, but are likely to result in energy savings that accrue to Idaho Power's electrical system over time.

This *Demand-Side Management 2023 Annual Report* provides a review of the company's DSM activities and finances throughout 2023 and satisfies the reporting requirements set out in Idaho Public Utilities Commission's (IPUC) Order Nos. 29026 and 29419. Idaho Power will provide a copy of the report to the Public Utility Commission of Oregon (OPUC) under Oregon Docket UM 1710.

# INTRODUCTION

Idaho Power has been locally operated since 1916 and serves more than 630,000 customers throughout a 24,000-square-mile area in southern Idaho and eastern Oregon. The company achieves energy and demand savings objectives in both its Idaho and Oregon service areas through the careful management of current programs, the offering of new cost-effective programs, and through customer outreach and education; collectively, the implementation, operation, tracking, and evaluation of these programs and offerings is called demand-side management (DSM).


**Figure 2. Idaho Power service area map**

## Programs and Offerings

Idaho Power's main objectives for DSM programs are to achieve prudent cost-effective energy efficiency savings and to provide useful and cost-effective demand response programs as determined by the Integrated Resource Plan (IRP) planning process. Idaho Power strives to offer customers valuable programs and information to help them wisely manage their energy usage. DSM programs and offerings by customer sector (residential, commercial/industrial [C&I], and irrigation) are shown in Table 1.

**Table 1. DSM programs by sector, operational type, and location, 2023**

| 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 |

## Funding Sources

Energy efficiency and demand response funding comes from multiple sources: Idaho Power base rates, the Idaho and Oregon Energy Efficiency Riders (Riders), and the annual power cost adjustment (PCA) in Idaho. Idaho incentives for the company's demand response programs are recovered through base rates and tracked through the annual PCA, while Oregon demand

response incentives are funded through the Oregon Rider. Total expenditures on DSM-related activities from all funding sources were $42 million in 2023, as shown in Figure 3.

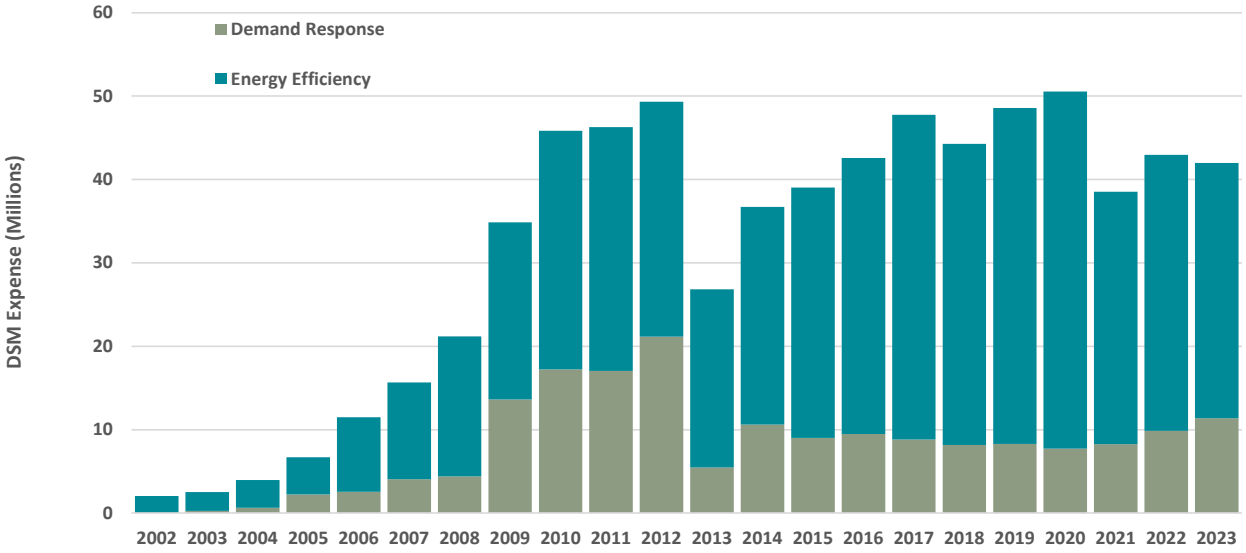


**Figure 3. DSM expense history by program type, 2002–2023 (millions [$])**

## Cost-Effectiveness Goals

Idaho Power considers cost-effectiveness of primary importance in the design, implementation, and tracking of the energy efficiency and demand response programs. Prior to the actual implementation, Idaho Power performs a cost-effectiveness analysis to assess whether a potential program design or measure will be cost-effective. Incorporated in these models are inputs from various sources that use the most current and reliable information available.

Idaho Power strives for all programs to have benefit/cost (B/C) ratios greater than one for the utility cost test (UCT), total resource cost (TRC) test, and participant cost test (PCT) at the program and measure levels, where appropriate. Each cost-effectiveness test provides a different perspective, and Idaho Power believes each test adds value when evaluating overall program performance. In 2020, Idaho Power transitioned to using the UCT as the primary cost-effectiveness test for energy efficiency resource planning in Idaho as directed by the Idaho Public Utilities Commission (IPUC) in Order No. 34503. The company also calculates the TRC and PCT because each perspective can help inform the company and stakeholders about the effectiveness of a particular program or measure. Additionally, programs and measures offered in Oregon must use the TRC as the primary cost-effectiveness test as directed by the Public Utility Commission of Oregon's (OPUC) Order No. 94-590.

There are many assumptions when calculating the cost-effectiveness of a given program or measure. Savings can vary based on several factors, such as participation levels or the participants' locations. For instance, heat pumps installed in the Boise area will have lower

savings than those installed in the McCall area. If program participation and savings increase, fixed costs—such as labor and marketing—are distributed more broadly, and the program cost-effectiveness increases.

When an existing program or measure is not cost-effective, Idaho Power strives to work with its Energy Efficiency Advisory Group (EEAG) to obtain input before making its determination on continuing, discontinuing, or modifying an offering. The company must demonstrate why a non-cost-effective measure or program continues to be offered and communicate the steps the company plans to take to improve cost-effectiveness. The company believes this aligns with the expectations of the IPUC and the OPUC.

As a result of IPUC Order No. 35336 (IPC-E-21-32) and the OPUC's approval on February 8, 2022, of ADV 1355, Idaho Power determines cost-effectiveness for its demand response programs using financial and alternate resource cost assumptions from each IRP. Details on the cost-effectiveness assumptions and data are included in *Supplement 1: Cost-Effectiveness*.

## DSM Annual Report Structure

The *Demand-Side Management 2023 Annual Report* consists of this main document and two supplements. The main document contains the following sections related to 2023 DSM activities:

- **Program Performance** is a summary of total energy savings and program expenses, funding, expenditures, and the overall approach to marketing, evaluations, and cost-effectiveness.
- **Program Activity—Residential, C&I, and Irrigation** provides sector summaries and individual program details, including marketing efforts, cost-effectiveness analyses, customer satisfaction survey results, and evaluation recommendations and responses.
- **Other Programs and Activities** is an overview of DSM-related programs and activities that can span multiple sectors, including market transformation.
- **Conclusions** is a brief recap of the major outcomes from the report.
- **Appendices 1 through 4** present data related to payments, funding, and program-level costs and savings.

*Supplement 1: Cost-Effectiveness* describes the standard cost-effectiveness tests for Idaho Power programs and reports current-year program-level and summary cost-effectiveness and expenses by funding source and cost category.

*Supplement 2: Evaluation* includes an evaluation and research summary, the evaluation plan, EEAG meeting notes, links to Northwest Energy Efficiency Alliance (NEEA) evaluations, copies of Integrated Design Lab (IDL) reports, research and survey reports, evaluation reports, and other reports related to DSM activities.

# 2023 DSM PROGRAM PERFORMANCE

A summary of the energy efficiency and demand response program performance metrics is presented in this section and in individual program sections later in this report. Appendices 1 through 4 provide additional details on the funding, expenditures, and savings at the program and sector levels.

## Energy Savings and Program Expenses

### *Energy Efficiency*

Energy efficiency programs are available to all customer segments in Idaho Power's service area and focus on reducing energy use by targeting homes, buildings, equipment, or components for which an energy-efficient design, replacement, or repair can achieve energy savings. Some energy efficiency programs include behavioral components. For example, the Residential Energy Efficiency Education Initiative (REEEI), the seasonal energy efficiency contests, the campus cohort, industrial energy efficiency cohort, and the Home Energy Report (HER) Program primarily focus on behavioral energy savings.

Savings from energy efficiency programs are measured on a kilowatt-hour (kWh) or megawatt-hour (MWh) basis. Programs can supply energy savings throughout the year or at different times, depending on the energy efficiency measure. Idaho Power shapes the energy-savings profile based on how end-use equipment uses energy to estimate energy reduction at specific times of the day and year. The company's energy efficiency offerings include programs for residential, commercial, industrial and irrigation new construction (lost-opportunity savings), and retrofit applications. Idaho Power's incentives and services are offered to its residential, irrigation, industrial, large-commercial, small business, government, and school customers to promote a wide range of energy-saving projects and activities.

Idaho Power devotes significant resources to maintain and improve its energy efficiency and demand response programs. The 2023 total savings, including savings from the Northwest Energy Efficiency Alliance (NEEA), were 139,683 MWh. 2023 savings decreased by 29,883 MWh compared to the 2022 savings of 169,566 MWh—an 18% year-over-year decrease—and represent enough energy to power approximately 12,253 average homes in Idaho Power's service area for one year. The savings from Idaho Power's energy efficiency programs alone, excluding NEEA savings, were 115,769 MWh in 2023 compared to 145,440 MWh in 2022—an 18% year-over-year decrease. Savings and expenses are shown in Figure 4.

The 2023 savings results consisted of 24,394 MWh from the residential sector, 86,813 MWh from the C&I sector, and 4,563 MWh from the irrigation sector. The C&I programs contributed

75% of the direct program savings. See Appendix 3 for a complete list of programs and sector-level savings.

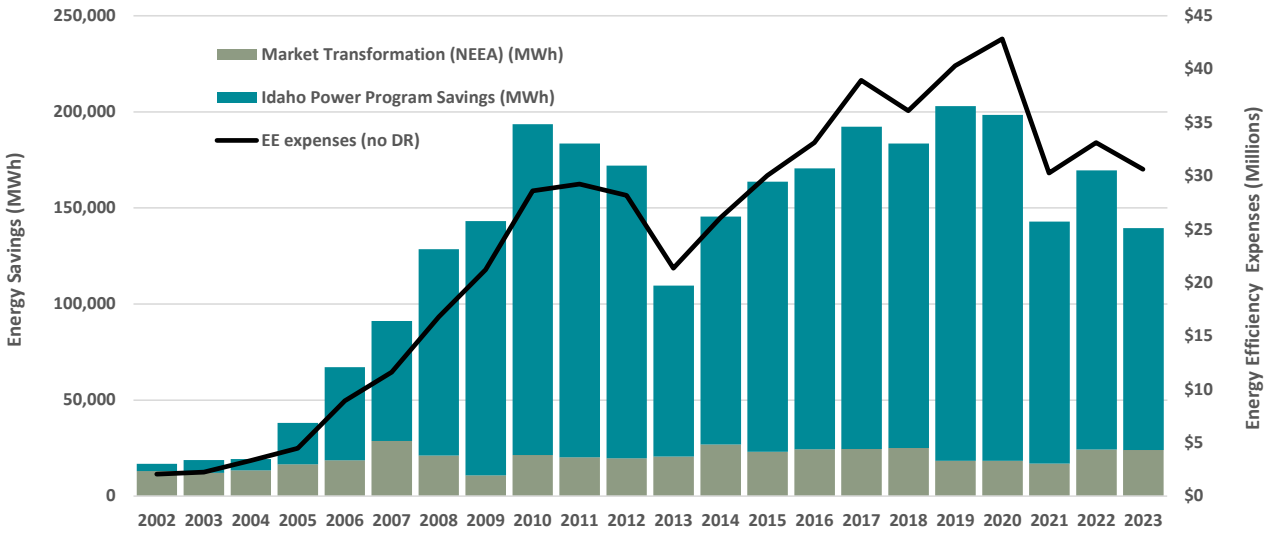


**Figure 4. Annual energy savings and energy efficiency program expenses, 2002–2023 (MWh and millions [$])**

## *Demand Response*

The company estimates future capacity needs through the IRP planning process and plans resources to mitigate predicted system deficits. The company strives to maintain capacity from its demand response programs (A/C Cool Credit, Flex Peak Program, and Irrigation Peak Rewards) consistent with needs identified through that planning process. The goal of demand response at Idaho Power is to avoid or delay the need for new resources.

Idaho Power started its modern demand response programs in 2002 and as of 2023 had a capacity of more than 8% of its all-time system peak load available to respond to a system peak load event during the summer. Demand response is measured both by the actual demand reduction in megawatts (MW) achieved during events, as well as the potential demand reduction if all programs were used at full capacity.

In summer 2023, Idaho Power used all or portions of the programs on eight different days between June 15 and September 15. The 2023 actual maximum non-coincidental load reduction from all three programs was 240 MW (Figure 5). The total capacity for all three programs was approximately 316 MW at the generation level. The amount of capacity available for demand response varies based on weather, time of year, and how programs are used and managed. The actual non-coincidental load reduction (240 MW) is calculated using interval meter data from participants. The maximum capacity (316 MW) is calculated using the total enrolled MW from participants with an expected maximum realization rate for those participants. The maximum capacity for the Irrigation Peak Rewards program is based on the

maximum reduction possible within the program season. For the Flex Peak Program, the maximum capacity is the maximum nominated amount of load reduction. For the A/C Cool Credit program, the capacity is calculated based on the number of active participants multiplied by the maximum per-unit reduction ever achieved.

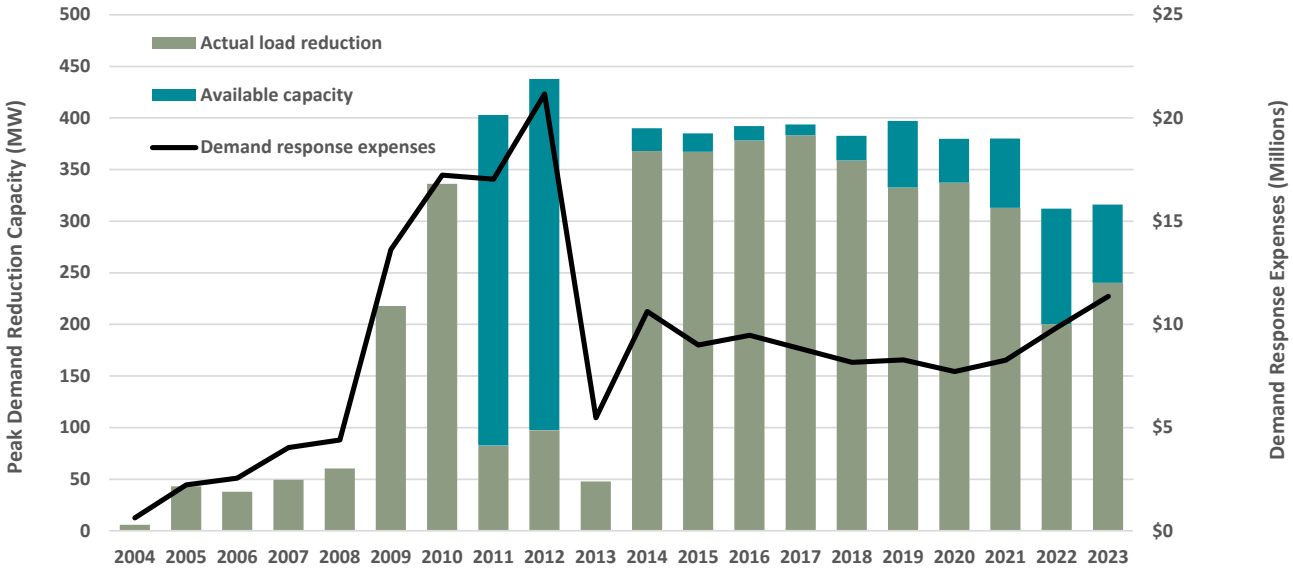


**Figure 5. Peak demand reduction capacity and demand response expenses, 2004–2023 (MW and millions [$])**

**Table 2. DSM programs by sector summary and energy usage/savings/demand reduction, 2023**

| | Program Impacts [a] | | | Idaho Power System Sales | | |
|---|---|---|---|---|---|---|
| | Program Expenses | Energy Savings (MWh) | Peak-Load Reduction (MW)[b] | Sector Total (GWh)[c] | Percentage of Energy Usage | Year-End Number of Customers |
| Residential | $ 5,111,613 | 24,394 | | 5,949 | 38% | 531,885 |
| Commercial/Industrial | 17,135,013 | 86,813 | | 7,825 | 50% | 78,719 |
| Irrigation | 1,708,967 | 4,563 | | 1,806 | 12% | 22,333 |
| Market Transformation | 2,726,302 | 23,914 | | | | |
| Demand Response | 11,363,602 | n/a | 240/316 | | | |
| Direct Overhead/Other Programs | 2,889,547 | n/a | | | | |
| Indirect Program Expenses | 1,044,428 | | | | | |
| **Total** | **$ 41,979,473** | **139,683** | **240/316** | **15,580** | **100%** | **632,937** |

[a.] Energy, average energy, and expense data have been rounded to the nearest whole unit, which may result in minor rounding differences.

[b.] Maximum actual reduction/maximum potential reduction. Includes 7.6% peak line loss assumptions.

[c] GWh=Gigawatt-hour

## DSM Funding and Expenditures

Funding for DSM programs comes from several sources. The Idaho and Oregon Rider funds are collected directly from customers on their monthly bills. The 2023 Idaho Rider was 3.1% of base rate revenues, pursuant to IPUC Order No. 34871. The 2023 Oregon Rider was 4% of base rate revenues. Additionally, Idaho demand response program incentives were funded through base rates and are tracked through the annual PCA mechanism. DSM expenses not funded through the riders are included in Idaho Power's ongoing operation and maintenance (O&M) costs.

Table 3 shows the total expenditures funded by the Idaho and Oregon Riders and Idaho Power base rates resulting in total DSM expenditures of $41,979,473. The non-rider funding category includes the company's demand response incentives in Idaho, Easy Savings: Low-Income Energy Efficiency Education expenses in Idaho, Weatherization Assistance for Qualified Customers (WAQC) expenses, and O&M costs.

**Table 3. 2023 funding source and energy savings**

| Funding Source | Expenses [a] | MWh Savings |
|---|---|---|
| Idaho Rider | $ 30,229,460 | 136,769 |
| Oregon Rider | 1,489,400 | 2,553 |
| Idaho Power Base Rates | 10,260,613 | 360 |
| **Total** | **$ 41,979,473** | **139,683** |

[a] Dollars are rounded to the nearest whole unit, which may result in minor rounding differences.

Table 4 and Figure 6 present 2023 DSM program expenditures by category. While the Incentive Expense category illustrates the amount paid directly to customers for their participation in an energy efficiency or demand response program, other categories include items or services that directly benefited customers. The expenses in the Materials & Equipment category primarily consisted of demand response units (DRU) ($1,005,063) and various kit programs ($788,368). Most expenses in the Other Expense category were for marketing ($1,405,883), Custom Projects energy audits ($309,261), program evaluations ($211,796), program trainings ($33,793), and program expenses ($10,264). The Purchased Services category includes payments to NEEA ($2,726,302), Easy Savings and WAQC Community Action Partnership (CAP) Agencies ($1,366,416), and third-party contractors assisting in the implementation of Idaho Power's programs.

**Table 4. 2023 DSM program expenditures by category**

| Program Expenditure Category | | Total [a] | % of Total |
|---|---|---|---|
| Incentive Expense | $ | 24,564,517 | 58.5% |
| Labor/Administrative Expense | | $4,193,880 | 10.0% |
| Materials & Equipment | | $1,819,284 | 4.3% |
| Other Expense | | $2,000,243 | 4.8% |
| Purchased Services | | $9,401,549 | 22.4% |
| **Total** | **$** | **41,979,473** | **100%** |

[a] Dollars are rounded to the nearest whole unit, which may result in minor rounding differences.

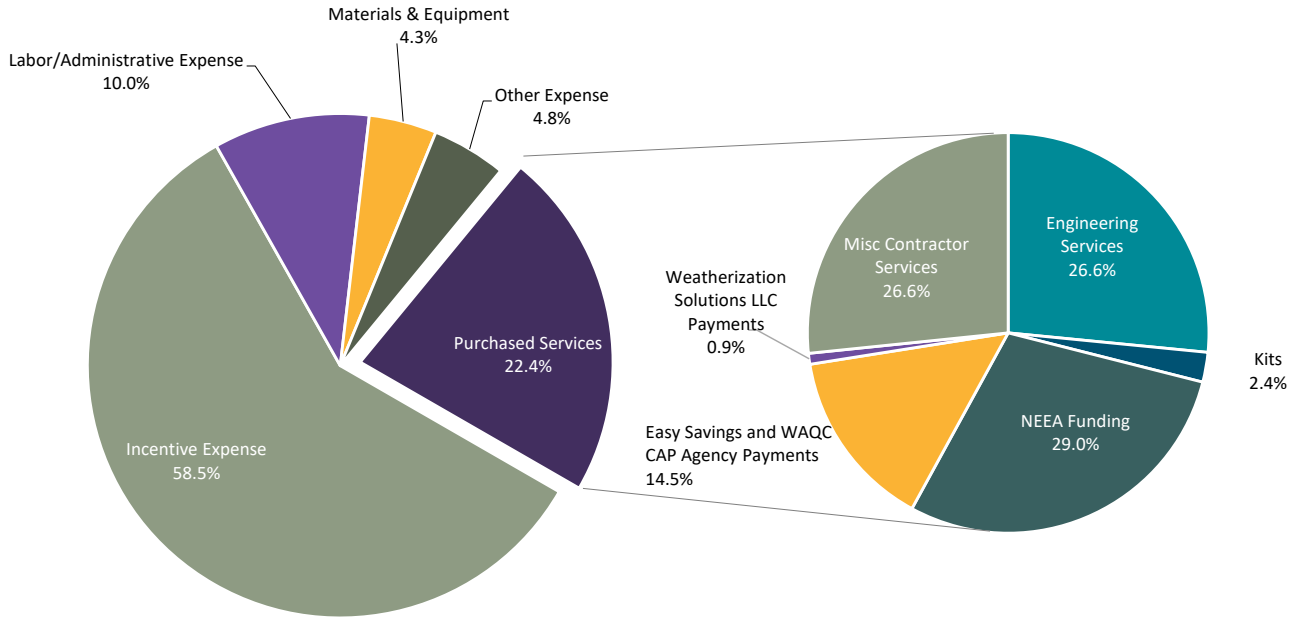


**Figure 6. 2023 DSM program expenditures by category**

**Table 5. 2023 DSM program incentive totals by program type and sector**

| Program Type—Sector [a, b] | Total [c] | % of Total |
|---|---|---|
| DR—Residential | $ 369,805 | 1.5% |
| DR—Commercial/Industrial | $931,819 | 3.8% |
| DR—Irrigation | $7,626,008 | 31.0% |
| EE—Residential | $1,518,290 | 6.2% |
| EE—Commercial/Industrial | $12,906,852 | 52.5% |
| EE—Irrigation | $1,211,742 | 4.9% |
| **Total** | **$ 24,564,517** | **100%** |

[a] DR = demand response
[b] EE = energy efficiency
[c] Dollars are rounded to the nearest whole unit, which may result in minor rounding differences.

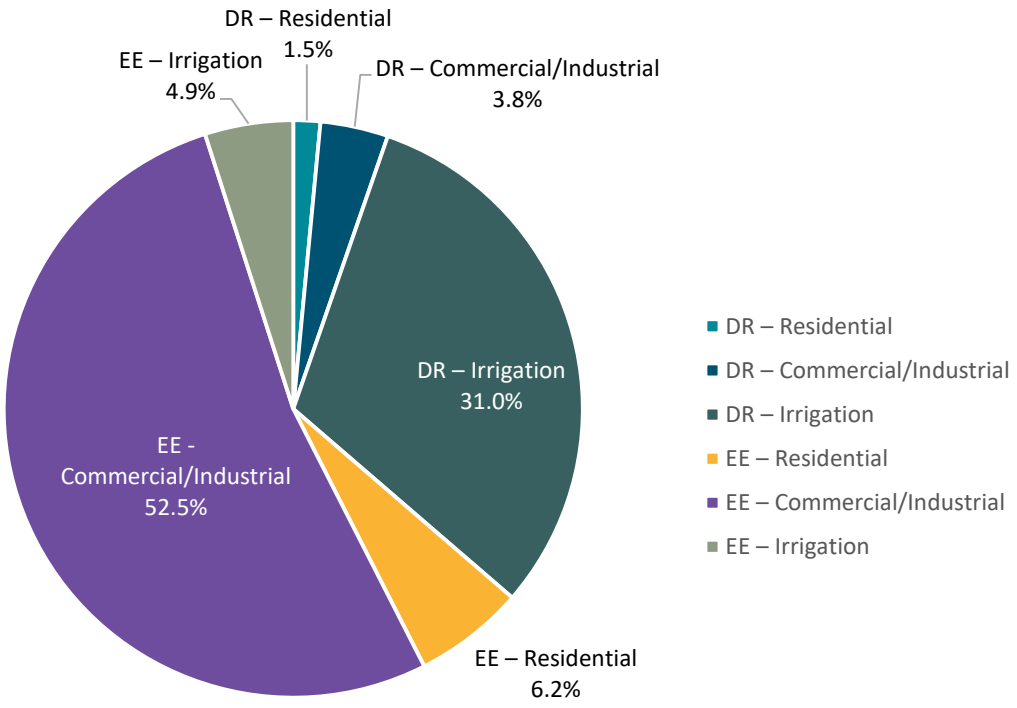


**Figure 7. Percent of DSM program incentive expenses by program type and sector, 2023**

## Customer Education

Idaho Power produced a new *Energy Efficiency Guide* in October of 2023. It was distributed primarily as an online publication and emailed to all residential customers for which Idaho Power has email addresses. It was also promoted in the October bill insert alongside seasonal energy efficiency tips. In 2023, Idaho Power engaged with customers in person to discuss energy efficiency at 144 community events. Idaho Power's program specialists and education and outreach energy advisors also delivered an additional 709 presentations and trainings with

energy savings messages to audiences of all ages. At those in person events, Idaho Power distributed copies of the *30 Simple Things You Can Do to Save Energy* booklet directly to customers. Efforts to enhance digital communication continued—with the goal of bringing a variety of energy and money-saving tips to a broad range of customers.

Idaho Power supports the Integrated Design Lab (IDL), which conducted Lunch & Learn sessions to educate architects, engineers, and other design and construction professionals about various energy efficiency topics. In 2023, the IDL conducted 20 in-person technical training sessions with 172 architects, engineers, designers, project managers, and other interested parties. Also, IDL hosted six virtual Building Simulation Users Group (BSUG) sessions with 155 professionals attending.

The IDL also maintains an Energy Resource Library (ERL) with tools for measuring and monitoring energy use and provides training on how to use them. The ERL includes over 900 individual pieces of equipment and 16 new tools were added in 2023. The ERL web page recorded 5,220 visits in 2023 compared to 2,768 visits in 2022.

Idaho Power delivered five technical training sessions in 2023. The level of participation in 2023 remained high, with 185 individuals signing up for the sessions and 159 attending.

Additionally, Idaho Power offered six live, online, technical training sessions to industrial wastewater customers that were attended by 74 participants.

Idaho Power also partnered with the Northwest Energy Efficiency Council (NEEC) to administer Building Operator Certification (BOC) Level I and II courses. Idaho Power sponsored 15 customers who signed up for the training by paying $900 of the $2,095 tuition cost. Additionally, Idaho Power sponsored two customers to attend BOC continuing education webinars for which Idaho Power paid 50% of the tuition.

Idaho Power provided seven in-person irrigation workshops and one conference seminar for the Irrigation Efficiency Rewards and Irrigation Peak Rewards programs; a total of 369 customers attended.

## Marketing

Idaho Power used multi-channel marketing and public relations (PR) strategies in 2023 to continually improve communication and increase energy efficiency program awareness among its customers. The company employs a wide variety of media and marketing, including owned media (social, website, and newsletters) and paid media (advertising and sponsorships), which allow Idaho Power to control content and messaging. Earned unpaid media (news coverage, Idaho Power's *News Briefs* sent to reporters, third-party publications, and television news appearances) gives Idaho Power access to a broader audience through channels that help establish credibility and brand trust. Though the company has less

messaging control with earned unpaid media, the value is established through the third-party endorsement.

Idaho Power's marketing staff networks with organizations across the region and industry to track current and future marketing trends and successes. Idaho Power continued to work with NEEA to coordinate, collaborate, and facilitate marketing for all sectors. To build marketing networks and learn what works in other regions, Idaho Power staff virtually attended several conferences and webinars in 2023, such as the quarterly E Source Marketing and Communications Club.

The following describes a selection of the methods, approaches, and strategies used by Idaho Power to engage customers regarding energy efficiency, along with their results. See the respective sector overviews and programs sections later in this report for the company's marketing efforts specific to those areas.

### *Social Media*

Approximately 25% of the company's social media content promoted energy efficiency in 2023. Idaho Power regularly posted content encouraging energy efficiency behaviors, program enrollment, and customer engagement on Facebook, X (formerly known as Twitter), YouTube, Instagram, and LinkedIn. Social media content also showcased local businesses and organizations that have benefitted from Idaho Power energy efficiency efforts. Idaho Power used Facebook and X to help promote two energy efficiency customer sweepstakes giveaways, encouraging customers to enter by leaving a comment about how they save energy in the summer or winter.

Facebook, X, Instagram, and LinkedIn all remain as priority channels for engaging and communicating directly with customers on energy efficiency tips and program offerings.

At the end of 2023, Idaho Power had approximately 28,000 followers on Facebook; 7,120 on X; 15,897 on LinkedIn; and 3,328 on Instagram.

### *Website*

Idaho Power tracked the number of page views to the main energy efficiency pages—also known as landing pages—from external users on the company's website. In 2023, the company's energy efficiency homepage received 3,651 page views, the residential landing page received 113,950 views, and the business and irrigation landing pages received 10,572 views. Idaho Power uses Google Analytics to analyze web activity. Google's definition of page views is the total number of pages viewed, with repeated views of a single page by one user counted as a new view.

### *Public Relations*

Idaho Power's PR staff supported energy efficiency programs and activities through: *Connections*, a customer newsletter distributed in monthly bills and available online; *News Briefs*, a weekly email of interesting news items sent to all media in the company's service area; pitching and participating in news stories; energy efficiency TV segments; and public events, such as incentive check presentations.

In 2023, the January and June issues of *Connections* were devoted to energy efficiency. The January issue focused on education around demand response for residential, commercial and industrial, and irrigation. The June edition featured summer energy-saving tips, along with getting your home EE ready before going on vacation, and how much it costs to power items in your home.

With another hot summer throughout the company's service area, energy efficiency information for staying cool during high temperatures was once again shared across the company's owned media channels and with regional media outlets. Social media messaging included tips about how to save energy during high-use hours, which assists in reducing strain on the company's system.

Media outreach efforts resulted in a variety of earned media coverage focused on energy efficiency. Energy efficiency topics were pitched in *News Briefs* throughout the year, and the company earned media coverage in multiple markets spanning print, TV, and radio.

## Customer Relationship Survey

A relationship survey measures the satisfaction of several aspects of a customer's relationship with Idaho Power, including energy efficiency, at a very high level. As such, the survey is not intended to measure all aspects of the energy efficiency programs.

The *2023 Burke Customer Relationship Survey* asked two questions related specifically to satisfaction with Idaho Power's energy efficiency programs: 1) Have you participated in an Idaho Power energy efficiency program? 2) Overall, how satisfied are you with the energy efficiency program? In 2023, 21.4% of the survey respondents across all sectors indicated they participated in an Idaho Power energy efficiency program, and 93.8% were "very" or "somewhat" satisfied with the program they participated in.

The sector-level results of the annual 2023 survey are discussed in the Residential, C&I, and Irrigation Sector Overview sections of this report.

## Evaluations

Idaho Power considers program evaluation an essential component of its DSM operational activities. The company uses third-party contractors to conduct impact, process, and other evaluations on a scheduled and as-required basis. Third-party contracts are generally awarded using a competitive bidding process managed by Idaho Power's Corporate Services department. In some cases, research and analyses are conducted internally and managed by Idaho Power's Research and Analysis team within the Customer Relations and Energy Efficiency (CR&EE) department.

Idaho Power uses industry-standard protocols for its internal and external evaluation efforts, including the National Action Plan for Energy Efficiency—Model Energy Efficiency Program Impact Evaluation Guide, the California Evaluation Framework, the International Performance Measurement and Verification Protocol (IPMVP), the Database for Energy Efficiency Resources, and the Regional Technical Forum's (RTF) evaluation protocols.

The company also supports regional and national studies to promote the ongoing cost-effectiveness of programs, the validation of energy savings and demand reduction, and the efficient management of its programs. Idaho Power considers primary and secondary research, cost-effectiveness analyses, potential assessments, and impact and process evaluations to be important resources in providing accurate and transparent program savings estimates. Idaho Power uses recommendations and findings from the evaluations and research to continuously refine its DSM programs.

In 2023, Idaho Power contracted third-party evaluators to conduct program evaluations for the following programs: Home Energy Audit program (impact and process evaluation), Residential New Construction Program (impact evaluation), Shade Tree Project (impact evaluation), Small Business Direct Install (impact evaluation), and Irrigation Efficiency Rewards program (impact evaluation). A summary of the results of these evaluations is available in the respective program sections.

External program administrators compiled program summary reports for the Student Energy Efficiency Kits (SEEK) program and the HER program, and the company conducted internal analyses for the A/C Cool Credit, Flex Peak, and Irrigation Peak Rewards programs.

An evaluation schedule and the final reports from evaluations, studies, and research completed in 2023 are provided in *Supplement 2: Evaluation*.

## Cost-Effectiveness Results

A summary of the cost-effectiveness metrics calculated for the energy efficiency programs in 2023 is provided in Table 6. Details on the cost-effectiveness assumptions and data are included in *Supplement 1: Cost-Effectiveness*.

**Table 6. Cost-effectiveness summary by energy efficiency program**

| Program/Sector | UCT | TRC | Ratepayer Impact Measure (RIM) | PCT |
|---|---|---|---|---|
| Educational Distributions | 1.76 | 2.07 | 0.50 | N/A |
| Energy Efficient Lighting[1] | 1.69 | 1.51 | 0.44 | 4.07 |
| Heating & Cooling Efficiency Program | 0.94 | 0.40 | 0.36 | 0.88 |
| Home Energy Report Program | 1.32 | 1.45 | 0.49 | n/a |
| Multifamily Energy Efficiency Program[2] | n/a | n/a | n/a | n/a |
| Rebate Advantage | 0.98 | 0.93 | 0.28 | 4.23 |
| Residential New Construction Program | 1.05 | 1.25 | 0.34 | 3.85 |
| Shade Tree Project | 0.31 | 0.42 | 0.27 | n/a |
| Weatherization Assistance for Qualified Customers | 0.14 | 0.23 | 0.11 | n/a |
| Weatherization Solutions for Eligible Customers | 0.13 | 0.19 | 0.10 | n/a |
| **Residential Energy Efficiency Sector[3]** | **1.12** | **0.95** | **0.41** | **3.38** |
| Commercial and Industrial Energy Efficiency Program | | | | |
| Custom Projects | 2.91 | 1.44 | 0.95 | 1.41 |
| New Construction | 2.78 | 2.74 | 0.70 | 3.81 |
| Retrofits | 2.35 | 1.17 | 0.68 | 1.53 |
| Commercial Energy-Saving Kits[1] | 1.02 | 1.17 | 0.50 | n/a |
| Small Business Direct Install[4] | 0.97 | 1.48 | 0.47 | n/a |
| **Commercial/Industrial Energy Efficiency Sector[5]** | **2.74** | **1.48** | **0.85** | **1.63** |
| Irrigation Efficiency Rewards | 2.05 | 2.22 | 0.84 | 2.29 |
| **Irrigation Energy Efficiency Sector[6]** | **2.06** | **2.22** | **0.84** | **2.29** |
| **Energy Efficiency Portfolio[7]** | **2.06** | **1.51** | **0.75** | **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, RIM, and PCT would be 0.87, 0.74, 0.37, 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, RIM, and PCT would be 1.97, 1.47, 0.73, and 1.88, respectively.

# 2023 DSM PROGRAM ACTIVITY

## Residential Sector Overview

In 2023, Idaho Power's residential sector consisted of 512,803 customers averaged throughout the year; Idaho customers averaged 511,098 and eastern Oregon averaged 14,012. The average number of residential sector customers grew by 12,307 in 2023, an increase of 2.4% from 2022. The residential sector represented 38% of Idaho Power's actual total billed electricity usage and 46.5% of overall retail revenue in 2023.

Table 7 shows a summary of 2023 participants, costs, and savings from the residential energy efficiency programs.

**Table 7. Residential sector program summary, 2023**

| Program | Participants | Total Cost | | Savings | |
|---|---|---|---|---|---|
| | | Utility | Resource | Annual Energy (kWh) | Peak Demand (MW)[1] |
| **Demand Response** | | | | | |
| A/C Cool Credit | 18,714 homes | $ 1,987,623 | 1,987,623 | | 19.6/25.3 |
| **Total** | | **$ 1,987,623** | **1,987,623** | | **19.6/25.3** |
| **Energy Efficiency** | | | | | |
| Easy Savings: Low-Income Energy Efficiency Education | 99 HVAC tune-ups | 146,232 | 146,232 | 46,109 | |
| Educational Distributions | 53,028 kits/giveaways | 902,287 | 902,287 | 3,960,690 | |
| Energy Efficient Lighting | 184,950 lightbulbs | 294,197 | 402,523 | 883,491 | |
| Heating & Cooling Efficiency Program | 1,035 projects | 624,047 | 1,987,191 | 1,040,069 | |
| Home Energy Audit | 337 audits | 230,011 | 274,124 | 11,329 | |
| Home Energy Report Program | 96,901 treatment size | 883,505 | 883,505 | 17,659,087 | |
| Multifamily Energy Efficiency Program | 0 units [buildings] | 23,974 | 23,974 | 0 | |
| Oregon Residential Weatherization | 3 audits/projects | 7,860 | 7,860 | 0 | |
| Rebate Advantage | 79 homes | 137,100 | 159,600 | 214,236 | |
| Residential New Construction Program | 64 homes | 195,296 | 241,468 | 234,945 | |
| Shade Tree Project | 2,462 trees | 262,344 | 262,344 | 11,199 | |
| Weatherization Assistance for Qualified Customers | 167 homes/non-profits | 1,317,041 | 2,115,268 | 314,260 | |
| Weatherization Solutions for Eligible Customers | 12 homes | 87,719 | 87,719 | 18,184 | |
| **Total** | | **$ 5,111,613** | **$ 7,494,096** | **24,393,598** | |

**Notes:**

See Appendix 3 for notes on methodology and column definitions.

Totals may not add up due to rounding.

[1] Demand response program reductions are reported with 7.6% peak loss assumption. Maximum actual demand reduction/maximum demand capacity.

### *Residential DSM Programs*

**A/C Cool Credit.** A demand response program that gives residential customers a credit for allowing Idaho Power to cycle their air conditioning (A/C) units during periods of high energy demand or for other system needs.

**Easy Savings: Low-Income Energy Efficiency Education.** A program that offers coupons to income qualified customers for HVAC tune-ups and one-on-one energy savings education.

**Educational Distributions.** A multifaceted approach to educating residential customers about their energy consumption, including giving away various efficient products and engaging elementary students with in-class and at-home activities.

**Energy Efficient Lighting.** A program that provides incentives directly to manufacturers or retailers, so that discounted prices are passed on to the customer at the point of purchase.

**Heating & Cooling Efficiency Program.** A program that provides incentives to customers and builders who upgrade existing homes or build new ones using energy-efficient heating and cooling equipment and services.

**Home Energy Audit.** Idaho customers living in multifamily homes with discrete meters or single-family homes pay a reduced price for an energy audit to identify energy efficiency improvement opportunities. Participants may receive energy-efficient products for no additional cost.

**Home Energy Report Program.** A program that sends select Idaho customers energy reports to help them understand their energy use and provides energy efficiency tips and incentive information.

**Multifamily Energy Efficiency Program.** A program that offers incentives to help reduce the costs of installing energy efficiency features in existing and new construction multifamily buildings with five or more units per building.

**Oregon Residential Weatherization.** A program that provides no-cost energy audits for Oregon customers who heat with electricity.

**Rebate Advantage.** A program that provides financial incentives for customers who buy Northwest Energy-Efficient Manufactured Housing Program™ (NEEM) certified, ENERGY STAR® qualified, energy-efficient manufactured homes and for the people who sell them.

**Residential New Construction Program.** A program that offers builders a cash incentive to construct energy-efficient, above code, single family, all-electric homes that use heat pump technology for its Idaho customers.

**Shade Tree Project.** A program that offers up to two free trees to Idaho customers. To maximize summer energy savings, Idaho Power provides participants with a variety of resources to encourage successful tree growth.

**Weatherization Assistance for Qualified Customers and Weatherization Solutions for Eligible Customers.** Programs that provide energy-efficient products, services, and education for customers who meet income requirements and heat with electricity.

### *Marketing*

Idaho Power ran a multi-faceted advertising campaign in the spring (May and June) and fall (October and November) to raise and maintain awareness of the company's energy efficiency programs for residential customers and to demonstrate that saving energy does not have to be challenging. The campaign used radio, television, newspaper ads, digital ads, sponsorships, Facebook ads, and boosted social posts aimed at a variety of customer demographics across the service area.

New in 2023, the company retired the animated Joulie and Wattson cartoon advertising theme and worked with a local agency to produce a campaign revolving around the theme of "Good Energy." Good Energy is centered around the idea that energy efficiency habits can help "keep good energy in the room." The new campaign helps the company creatively connect with customers and share the idea that **when you develop smart, efficient energy habits at home—it just feels good!** The company showcased this idea with a surprising cast of characters and settings.

In addition to the new creative campaign, Idaho Power ran two new seasonally relevant contests: The Flurry of Savings Winter Contest and the Sizzlin' Summer Savings Contest. The company also extended the Spring Campaign media buy into the hot summer months (late July through early September) to keep energy-saving tips and Idaho Power programs top of mind.

Described below are Idaho Power's marketing efforts to promote energy-saving tips and the company's energy efficiency programs, along with resulting data. Marketing tactics related to a specific sector or program are detailed in those respective sections later in this report.

#### Digital

During the spring campaign, web users were exposed to 2,755,031 display ads (animated GIF image ads embedded on a website) based on their demographics, related to online articles they viewed, or their use of a particular mobile web page or app. Users clicked the ads 4,611 times, resulting in a click-through rate of 0.17%. In the fall, the display ads received

3,897,704 impressions and 3,972 clicks, resulting in a click-through rate of 0.10%. Digital ads also ran on BoiseDev.com throughout the year and received 1,399,668 impressions.

Idaho Power began using Google search ads in 2018. When people search for terms related to energy efficiency, energy efficiency programs, and individual program measures, the company's ads appear and direct them to the appropriate energy efficiency web page. These ads received 365,852 impressions and 141,157 clicks throughout the year.

#### *Owned Digital*

Owned digital refers to digital assets that Idaho Power controls, including the My Account online account management tool, mobile app, website, and digital company newsletter.

Idaho Power continued its effort with email communication in 2023. The company only emails customers who have supplied their addresses for other business purposes (such as when signing up for My Account or enrolling in paperless billing). Energy efficiency promotional emails included heating and cooling tips, summer and winter contest promotion, seasonal energy efficiency tips, and various program promotions. Detailed information can be found in respective program sections.

In July, a pop-up ad ran in My Account—the online account management tool—providing a quick energy-saving tip and link to the "Ways to Save" webpage. And throughout 2023, energy-saving tips were featured in the Idaho Power mobile app, including pointers on heating and cooling, thermostat adjustments, and plugging air leaks.

### Streaming Audio: Podcasts and Music

Idaho Power continued with podcast and streaming music advertising as an awareness tactic in 2023, using 30-second audio ads, called "dynamic ads," that are inserted into listener's programming if they reside in the company's service area. The ads targeted customers by the type of listener rather than being run on a specific show or music program. Types of podcast shows that featured Idaho Power ads appealed to listeners such as green-living enthusiasts, customers interested in home improvement/home repair, and homeowners age 18 and over. The ads received 971,530 impressions in the spring with a listen through rate of 96.6% and the fall ads received 680,917 impressions with a 99.05% listen through rate.

### Television: Network and Streaming

Idaho Power used network television and Hulu advertising for the spring, summer, and fall campaigns. The company also used over-the-top (OTT) media. OTT is a type of streaming media that delivers content to customers watching a certain online show. Most OTT providers have their own app or website and are streamed through devices like Rokus, Apple TVs, or Amazon

Fire TVs. The network television campaigns focused on primetime and news programming that reaches the highest percentage of the target market, adults aged 25 to 64.

During the spring campaign, an ad ran 292 times in the Boise, Pocatello, and Twin Falls media markets on network television. The ad reached 31.9% of the Boise area target audience, 45.2% of the Twin Falls area target audience, and 29% of the Pocatello area target audience. The target audience saw the ad 5.5 times in Boise, 5.8 times in Twin Falls, and 4.0 times in Pocatello. Hulu spring ads delivered 955,502 impressions with a 97.5% completion rate. OTT ads delivered 937,837 impressions with a 96.9% video completion rate. The spring campaign also used Spanish network television ads: the Boise target audience saw 201 paid spots, and the Pocatello market saw 56 spots. Spanish OTT ads received 303,000 impressions.

Additional summer network TV ads were part of the mix and ran late July through early September. Summer ads ran 118 times in English and 43 times in Spanish. The English ad reached 61.5% of the Boise area target audience, 50.5% of the Twin Falls area target audience, and 51.5% of the Pocatello area target audience. The target audience saw the ad 2.9 times in Boise, 3.4 times in Twin Falls, and 2.8 times in Pocatello. Ad reach and frequency information are not available for Spanish network stations. OTT summer ads delivered 186,202 impressions with a 98% completion rate.

During the fall campaign, the TV spot ran 1,489 times in the Boise, Pocatello, and Twin Falls media markets. Ads ran on network TV as well as football game programming. The network TV ads reached 31.5% of the Boise target audience, 43.2% of the Twin Falls target audience, and 62.5% of the Pocatello target audience. The target audience saw the ad 8.0 times in Boise, 7.3 times in Twin Falls, and 7.5 times in Pocatello. For network football, the ads reached 33.5% of the Boise market, 45.2% of the Twin Falls market and 62.5% of the Pocatello market. Ads shown on the ESPN app garnered 838,108 impressions with a 94.35% video completion rate.

The fall campaign also used Spanish network television ads: the Boise target audience saw 135 paid spots, and the Pocatello market saw 215 spots. Ad reach and frequency information are not available for Spanish stations. Hulu fall ads delivered 815,889 impressions with a 97.07% completion rate. OTT ads delivered 937,837 impressions with a 96.9% video completion rate. Spanish OTT rads received 296,655 impressions with a 93% completion rate.

Idaho Power also sponsored commercials on Idaho Public Television in the Boise and Pocatello markets that ran a total of 61 times in the spring and 113 times in the fall.

Additionally, Idaho Power ran 15-second YouTube ads during the spring and fall campaigns. Spring ads garnered 666,741 impressions. Users clicked on the ads 1,323 times which resulted

in a 0.2% click through rate. Fall YouTube ads garnered 1,049,516 impressions with a 0.1% click through rate.

### Radio

As part of its spring, summer, and fall campaigns, Idaho Power ran 30-second radio spots on major commercial radio stations in the service area. To obtain optimal reach, the spots ran on several station formats, including classic rock, news/talk, country, adult alternative, rock, sports, and classic hits. The message was targeted toward adults ages 25 to 64 throughout Idaho Power's service area.

Results of the spots are provided for the three major markets: Boise, Pocatello, and Twin Falls areas. During the spring campaign, Idaho Power ran 1,618 English radio spots. These spots reached 24.3% of the target audience in Boise, 23.2% in Pocatello, and 31.3% in Twin Falls. The target audience was exposed to the ad 4.7 times in Boise, 5.4 times in Pocatello, and 7.4 times in Twin Falls.

The summer campaign used 281 English radio spots. These spots reached 11.6% of the target market in Boise, 11% in Twin Falls, and 13.4% in Pocatello. The target audience was exposed to the ad 3.1 times in Boise, 3 times in Twin Falls, and 2.3 times in Pocatello.

Streaming audio in the summer received 189,286 impressions and 66 clicks with a completion rate of 97.6%.

During the fall campaign, the company ran 2,143 English radio spots. These spots reached 25.9% of the target audience in Boise, 35.5% of the target audience in Pocatello, and 31.8% of the target audience in Twin Falls. The target audience was exposed to the message 5.3 times in Boise, 6.2 times in Pocatello, and 8.5 times in Twin Falls during the fall campaign.

In spring, Idaho Power also ran 595 ads on Spanish-speaking radio stations and 307 National Public Radio (NPR) ads in the service area targeting adults ages 25 to 54. The fall campaign included 462 Spanish ads and 308 NPR ads.

Idaho Power ran 30-second spots with accompanying visual banner ads on Spotify internet radio, which mobile and web-based devices access. In the spring, records show 748,010 impressions and 364 clicks to the Idaho Power residential energy efficiency web page. The fall ads yielded 526,740 impressions and 400 clicks.

### Print

As part of the campaign, print advertising ran in the major daily and select weekly newspapers throughout the service area. The company also ran ads in the Idaho Shakespeare Festival program, *Idaho Magazine*, *Boise Lifestyle* and *Meridian Lifestyle* magazines, and *IdaHome*

*Magazine.* The spring and fall ads featured the quirky but lovable character, Tina, and highlighted how she keeps "a wave of Good Energy flowing through her space by swapping lightbulbs to LEDs."

In 2023, Idaho Power updated the program information in a spiral-bound guide outlining each of the residential energy efficiency programs, tips, and resources. The updated guide will be included in the 2024 Welcome Kits. The previous edition of the guide was included in 2022 Welcome Kits, provided to WAQC customers, and shared with customers who attended events Idaho Power participated in.

### Social Media

Three Facebook ads for the 2023 energy efficiency campaign received 90,664 impressions and 909 clicks per ad.

Throughout the year, Idaho Power used Facebook and X posts and boosted Facebook posts for various programs and easy energy efficiency tips for customers to implement at home and at work.

### Out-of-Home

In 2023, Idaho Power used several marketing tactics referred to as out-of-home advertising. Out-of-home advertising attempts to reach customers when they are outside of their homes. The tactics helped maintain energy efficiency program awareness throughout the year. Tactics included a full-side bus wrap on a Pocatello Regional Transit bus in Eastern Idaho and a full-side bus wrap on a Valley Regional Transit bus in the Treasure Valley. Billboards with EE messaging were also placed around the Idaho Power service area: three in Western Idaho, two in Eastern Idaho, one in Salmon, and two in South Central Idaho.

Additionally, 2023 included sports sponsorships; attendance at most service area events has shown significant growth and is a great vehicle to share the EE message. Sports sponsorships are particularly good at reaching residential customers because they associate EE messaging with meaningful activities close to home. Idaho Power sponsored the Boise Hawks (minor league baseball team) from May through September. As part of the sponsorship package, Idaho Power received a 15-second digital ad on the four screens within the stadium where its energy efficiency ad would be displayed. The company's energy efficiency ad was shown 14,112 times during the 48-game season and the overall season attendance was 162,922. Two 15-second Idaho Power commercials were also shown during the Boise Hawks Facebook Live Broadcast for all games.

A Boise State University (BSU) sponsorship was also part of the marketing strategy in 2023. Energy efficiency messaging was featured at Albertsons Stadium during football games and

included digital concourse signage and a game co-sponsorship and table. The BSU basketball sponsorship included a 30-second digital ribbon board that rotated throughout the game and a "Good Energy Fan Cam" themed video board feature.

Sponsoring sporting events at Idaho State University (ISU) was also part of the marketing plan. The sponsorship included digital energy efficiency ads on the ISU sports webpages that garnered 105,000 impressions and 144 clicks. Idaho Power was also recognized during each home football game by being the presenting sponsor of the "Idaho Power Helmet Shuffle Game" shown on the big screen. The helmet shuffle game showcased an LED lightbulb hidden under one of three football helmets. The helmets were shuffled around, and spectators had to guess which helmet the LED was under. After the shuffle ended, a brief energy efficiency message appeared on the screen.

Signage in the College of Southern Idaho basketball gym was used for energy efficiency awareness as well as signage in the College of Idaho J.A. Albertson sports facility.

### Seasonal Sweepstakes

In 2023, Idaho Power ran two seasonally focused energy efficiency sweepstakes—the Sizzlin' Summer Savings Contest in August and the Flurry of Savings Giveaway in December. Both sweepstakes aimed to maintain awareness about energy efficiency and the impact a small change can make.

The summer sweepstakes ran August 11 through 21 and received 4,014 entries. Customers were asked to comment—through social media or on the Idaho Power website—with one way they save energy during the hot summer months. In return, participants were entered to win a bundle of energy efficient outdoor items. The sweepstakes was promoted with email messaging to 307,813 customers, and social media posts reached 24,909 customers, receiving 75 engagements (likes, comments, shares). The sweepstakes was also promoted on idahopower.com, through a pop-up ad in My Account, and featured in a *News Brief* to media outlets.

The winter sweepstakes ran December 4 through 13 and received 5,492 entries. Customers were asked to comment with one way they save energy in the cold winter months. In return, participants were entered to win one of five 50-inch ENERGY STAR TVs. The sweepstakes was promoted with email messaging to 313,256 customers and paid social media posts reached 992 customers, receiving 216 post engagements. The sweepstakes was also promoted on idahopower.com, through a pop-up ad in My Account, and featured in a *News Brief* to media outlets.

### Public Relations

Many of the company's PR activities focused on the residential sector. Energy-saving tips in *News Briefs*, TV segments, news releases, and *Connections* newsletter articles aim to promote incentive programs and/or educate customers about behavioral or product changes they can make to save energy in their homes.

See the Program Performance section and the C&I Sector Overview for more 2023 PR activities.

## *Customer Satisfaction*

Idaho Power conducts the *Burke Customer Relationship Survey* each year. In 2023, on a scale of zero to 10, residential survey respondents rated Idaho Power 7.88 regarding offering programs to help customers save energy, and 7.91 related to providing customers with information on how to save energy and money.

### Empowered Community

In 2015, Idaho Power created the Empowered Community, an online community of residential customers, to measure customer perceptions on a variety of company-related topics, including energy efficiency. The community has over 3,000 actively engaged members from across Idaho Power's service area. Idaho Power typically sends these members between six and 12 surveys per year. In 2023, Idaho Power included 13 energy efficiency messages with survey invitations resulting in almost 14,000 touchpoints.

Recruitment for the Empowered Community is conducted annually to refresh the membership. In February 2023, a direct email campaign was utilized, which resulted in 868 new members.

Almost 20% of residential respondents indicated they have participated in at least one Idaho Power energy efficiency program. Of the residential survey respondents who have participated in at least one Idaho Power energy efficiency program, 91.2% were "very" or "somewhat" satisfied with the program.

See the individual program sections for program-specific customer satisfaction survey results.

## *Field Staff Activities*

In 2023, Idaho Power's residential and commercial energy advisors continued connecting with customers through one-on-one and group meetings, presentations, and participating in events to promote energy efficiency programs and offerings. The year also saw strong company participation in the larger legacy events including regional home and garden shows, STEM events, science fairs, career fairs, and even a BSU football game where Idaho Power was able to garner hundreds of positive interactions with customers promoting energy efficiency. Energy advisors continued to dedicate a larger percentage of their time to presentations and

events at secondary schools, colleges, universities, and trade schools, as well as civic and community audiences.

Idaho Power continued to focus on the training and development of its energy advisors to expand their knowledge, skills, and abilities related to energy efficiency programs, innovative technologies, and serving customers. One of the highlights during the year was an offering of a residential building science class by an external trainer contracted with NEEA who shared insights and perspectives about windows, insulation, building envelope, appliances, HVAC, and other residential measures. Idaho Power also held specific training classes on empathy and effective communication, lighting, building envelope, HVAC, pumps, motors, and refrigeration.

## *A/C Cool Credit*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (homes) | 18,714 | 19,127 |
| | Energy Savings (kWh) | n/a | n/a |
| | Demand Reduction (MW)* | 19.6/25.3 | 20.1/26.8 |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $1,536,873 | $429,722 |
| | Oregon Energy Efficiency Rider | $85,060 | $24,491 |
| | Idaho Power Funds | $365,690 | $375,558 |
| | Total Program Costs—All Sources | $1,987,623 | $829,771 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | n/a | n/a |
| | Total Resource Levelized Cost ($/kWh) | n/a | n/a |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | n/a | n/a |
| | Total Resource Benefit/Cost Ratio | n/a | n/a |

*Maximum actual demand reduction/maximum potential demand reduction. Demand response program reductions are reported with 7.6% peak loss assumptions in 2023 and 9.7% peak loss assumptions in 2022.

### Description

Originating in 2003, A/C Cool Credit is a voluntary, dispatchable demand response program for residential customers in Idaho and Oregon. Using communication hardware and software, Idaho Power cycles participants' central A/C units or heat pumps off and on via a direct load-control device installed on the A/C unit. This program enables Idaho Power to reduce system capacity needs during periods of high energy demand or for other system needs.

Customers' A/C units are controlled using switches that communicate by powerline carrier (PLC) using the same system used by Idaho Power's advanced metering infrastructure (AMI). The switch is installed on each participating customer's A/C unit and allows Idaho Power to control the unit during a cycling event.

The cycling rate is the percentage of an hour the A/C unit is turned off by the switch. For instance, with a 50% cycling rate, the switch will cycle the A/C unit off for about 30 (nonconsecutive) minutes of each hour.

Idaho Power tracks the communication levels to validate whether the signal reaches the switches. Switch communication may be interrupted for a variety of reasons: the switch may be disconnected, an A/C unit may not be powered on, the switch may be defective, or the participant's household wiring may prevent communication.

These are the program event guidelines:

- June 15 through September 15 (excluding weekends and holidays)
- Up to four hours per day
- A maximum of 16 hours per week and 60 hours per season
- At least three events per season

At the end of the season, Idaho Power or a third party evaluates the events to determine peak demand savings.

### Program Activities

In 2023, about 18,714 customers participated in the program, with 213 in Oregon and 18,501 in Idaho. Four cycling events occurred, and all were successfully deployed. Table 8 provides event details. The cycling rate was 55% for two of the events and 50% for the other two events, and the communication level exceeded 89% for each event. Idaho Power calculated the maximum potential capacity in 2023 to be 25.3 MW at the generation level. This estimate of the program capacity is based on the maximum per-unit reduction ever achieved at the generation level of 1.37 kilowatt (kW) per participant. Customers receive a $5.00 incentive for each month of participation between June 15 and September 15, resulting in a total annual incentive potential of $20.00. The credits appear on their July through October bill statements.

**Table 8. A/C Cool Credit demand response event details**

| Event Date | Event Time | Cycling Rate | High Temperature |
|---|---|---|---|
| July 6 | 4–7 p.m. | 55% | 96°F |
| July 21 | 6–10 p.m. | 50% | 104°F |
| August 14 | 5–8 p.m. | 55% | 99°F |
| August 16 | 4–8 p.m. | 50% | 105°F |

Throughout 2023, Idaho Power representatives continued site visits to check switches and equipment to improve communication levels. The company will continue work to ensure devices associated with the program are communicating on an ongoing basis.

During the site visits, Idaho Power representatives placed informational stickers on devices that included a safety warning regarding risk of electric shock if the sealed demand response unit were opened, and a toll-free phone number customers could call with questions.

### Marketing Activities

Idaho Power actively marketed the A/C Cool Credit program in 2023.

In the spring and throughout the summer, the company used phone calls, direct-mail letters, and home visits (leaving door hangers for those not home) to recruit customers moving into

houses with existing switches and previous program participants who moved into new homes without switches. Non-participating customers in homes with existing switches also received a direct-mail letter, followed by a reminder email, offering a $25 gift card for signing up.

Radio ads were used to promote the program April through June. A 30-second ad ran on the digital music streaming service, Spotify, and received 258,442 impressions. Radio ads totaling 861 also ran on stations throughout the service area; these spots reached 28.2% of the target audience in Boise, 28.7% in Twin Falls, and 18.7% in Pocatello. The target audience was exposed to the ad 5.4 times in Boise, 7 times in Twin Falls, and 6.2 times in Pocatello.

April through June, web users were exposed to 12,392,817 promotional display ads (animated GIF image ads embedded on a website) based on their demographics, related to online articles they viewed, or their use of a particular mobile web page or app. Users clicked the ads 11,986 times, resulting in a click-through rate of 0.1%. A digital pop-up ad also ran on My Account in May where 82,987 customers saw the pop-up, resulting in 3,081 clicks.

The company also sent recruitment letters to select customers who are homeowners and have not participated previously. In total, over 45,000 direct-mail letters were sent. In addition to the letters, follow-up emails (to customers with emails on file) were sent a few weeks after the letter, reminding customers to sign up.

Participating customers received a thank you and credit reminder message on their summer bills, and Idaho Power concluded the season by sending a thank-you postcard to participants.

### Cost-Effectiveness

Idaho Power determines cost-effectiveness for its demand response programs using the approved method for valuing demand response under IPUC Order No. 35336 and approved by the OPUC on February 8, 2022, in Docket No. ADV 1355. Using financial and avoided cost assumptions from the *2021 Integrated Resource Plan*, the defined cost-effective threshold for operating Idaho Power's three demand response programs for the maximum allowable 60 hours is $84.57 per kW under the current program parameters.

The A/C Cool Credit program was dispatched for four events (totaling 14 event hours) and achieved a maximum demand reduction of 19.6 MW with a maximum potential capacity of 25.3 MW. The total expense for 2023 was $1,987,623 and would have remained the same if the program had been fully used for 60 hours because there are no additional variable incentives paid for events called beyond the three minimum required events. However, this amount includes $859,897 of switches, or demand response units (DRU), not used in 2023 that were purchased in bulk for all three demand response programs' future year needs. In 2024, this DRU cost was moved out of the A/C Cool Credit account and put into an overhead account, and the cost of the DRUs will be transferred to the appropriate program when utilized so that each

program will be expensed in the correct year. Using the total adjusted cost and the maximum potential capacity results in a program cost of $29.93 per kW. This is less than the threshold, and therefore, the program was cost-effective.

A complete description of the cost-effectiveness of Idaho Power's demand response programs is included in *Supplement 1: Cost-Effectiveness.*

### Customer Satisfaction

In 2023, Idaho Power conducted an A/C Cool Credit non-participant survey to learn more about barriers preventing people from participating in the program as well as to learn what might motivate customers to participate. In November, an online survey was sent via email to 9,815 customers, with 501 responses. Additionally, a survey was mailed to 981 customers in December, with 68 responses.

When asked why they do not participate in the program, 46% of respondents stated they weren't aware of the program, while 39% of respondents do not want their A/C interrupted, and 34% of respondents indicated that the incentive is too low/not enough to motivate them to participate.

Customers were asked how interested they are in participating in the A/C Cool Credit program. Nearly 52% of respondents indicated they were very interested (11%) or somewhat interested (40%) in participating in the program. Customers rated various components of the program and were asked which components would motivate them to participate. Almost 43% of respondents indicated that the "no cost to participate" was the most motivating factor while over 64% of respondents did not find the "$5 monthly bill credit" motivating.

When asked why non-participant customers would not be interested in participating in the A/C Cool Credit program, the respondents' top three reasons were the concern about possible changes to the indoor temperature during the event, followed by the length of the events, and the $5 incentive amount.

Idaho Power will analyze these results and incorporate learnings into future outreach efforts to increase enrollment.

### Evaluations

In 2023, Idaho Power performed an internal review to evaluate the demand reduction over the course of the four event days. The complete report on methods and results of the load reduction analysis is available in *Supplement 2: Evaluation*. This section presents a summary of the results.

The demand reduction was calculated by comparing the actual average load for participating customers on each of the four event days to a corresponding baseline. Average hourly load reduction by participant for each event and the maximum hourly load reduction achieved by all participants for each event are shown in Table 9. In addition to calculating load reduction, the number of households during each event that did not produce a statistically noticeable demand reduction was quantified and reported as non-contributing households (Table 9).

**Table 9. A/C Cool Credit event metrics**

| Event Date | Event Time | Non-Contribution Ratio | Average Hourly Load Reduction per Participant (kW) | Maximum Hourly Load Reduction All Participants (MW) |
|---|---|---|---|---|
| July 6 | 4–7 p.m. | 19.3% | 0.52 | 9.5 |
| July 21 | 6–10 p.m. | 13.1% | 0.90 | 16.6 |
| August 14 | 5–8 p.m. | 19.2% | 0.81 | 14.9 |
| August 16 | 4–8 p.m. | 20.9% | 1.07 | 19.6 |

The second event on July 21 achieved an average hourly load reduction of 0.90 kW per participant for a maximum hourly load reduction of 16.6 MW (with line losses); Figure 8 compares actual versus baseline load for this event. The complete set of graphs showing load reduction for each event is available in *Supplement 2: Evaluation*.

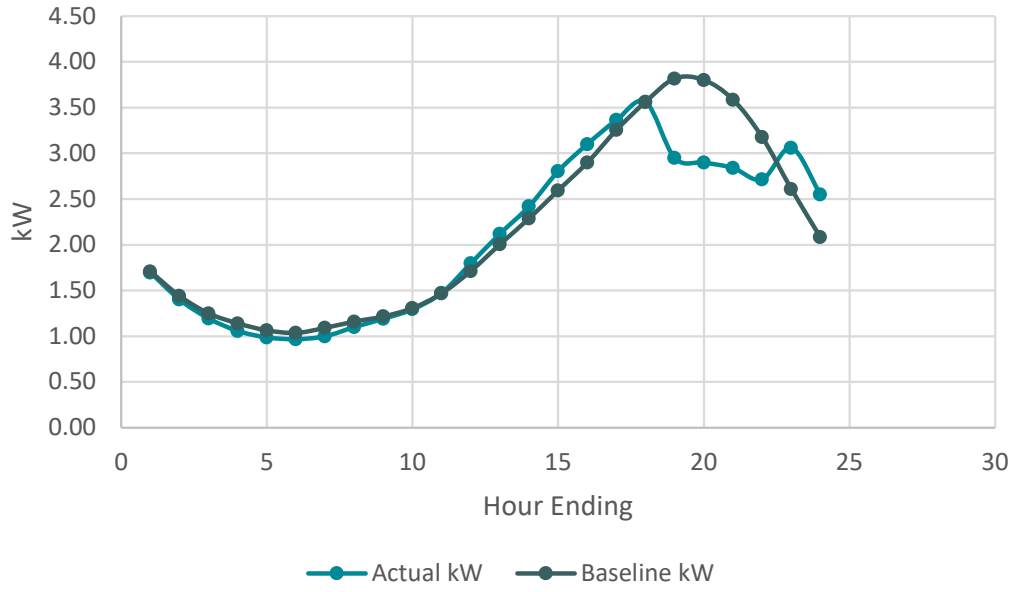


**Figure 8. A/C Cool Credit: average household results for July 21 event**

### 2024 Plans

Idaho Power will continue to actively market the A/C Cool Credit program to solicit new participants with a strong focus on recruiting customers that reside at a residence that currently has a switch that was installed for a previous occupant.

Idaho Power will create an awareness video to help educate customers about what the A/C Cool Credit program does and how it can benefit customers. The company will link the video on the Idaho Power website and include a link on digital marketing material.

The company will explore opportunities to expand its residential demand response program by evaluating the potential for a Bring-Your-Own-Thermostat program option.

## *Easy Savings: Low-Income Energy Efficiency Education*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (coupons) | 99 | 267 |
| | Energy Savings (kWh) | 46,109 | 22,755 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $0 | $0 |
| | Oregon Energy Efficiency Rider | $0 | $0 |
| | Idaho Power Funds | $146,232 | $152,718 |
| | Total Program Costs—All Sources | $146,232 | $152,718 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $1.068 | $1.448 |
| | Total Resource Levelized Cost ($/kWh) | $1.068 | $1.448 |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | n/a | n/a |
| | Total Resource Benefit/Cost Ratio | n/a | n/a |

### Description

As a result of IPUC Case No. IPC-E-08-10 and Order Nos. 30722 and 30754, Idaho Power committed to fund energy efficiency education for low-income customers and provides $125,000 to Community Action Partnership (CAP) agencies in its service area annually, on a prorated basis. These orders specified that Idaho Power provide educational information to Idaho customers who heat their homes with electricity.

From 2009 to 2017, using CAP agency personnel, the program distributed energy-saving kits (ESK) and corresponding educational materials to participants in the Low-Income Home Energy Assistance Program (LIHEAP) who heat their homes with electricity. In 2017, with input from a planning committee consisting of representatives from CAP agencies—the Idaho Department of Health and Welfare (IDHW), the IPUC, and Idaho Power—this program discontinued kit distribution and offered a pilot incentive: a coupon for a free electric HVAC tune-up and one-on-one education with the goal of helping low-income customers learn ways to reduce their energy costs and have a maintained HVAC system.

To provide services for the program, regional HVAC company owners sign HVAC contractor guidelines and acknowledge the two-fold goal of the program—customer education and equipment tune-up. During the customer visit, HVAC contractors perform the tune-up and teach residents how to change furnace filters. They also explain how regular maintenance

improves overall performance and answer questions about the specific heating equipment and ways to save energy. The contractor leaves energy efficiency information and energy-saving tips with customers.

### Program Activities

In March 2023, payments totaling $125,000 were provided to five CAP Agencies to cover the cost of HVAC tune-ups, filters, and 30% administrative cost for four of the five agencies.

Agencies qualify applicants and if eligible, provide a coupon. The regional coupons show choices for HVAC contractors who have signed guidelines with CAP Agencies for the program and customers select a contractor. HVAC contractors visit customers and provide HVAC tune-up services while educating customers about maintaining their HVAC system, how to change filters, and saving energy in their homes. HVAC contractors bill the CAP Agency for their cost with a maximum of $800 per coupon.

In 2023, 99 coupons were redeemed for HVAC tune-ups and either disposable furnace filters or single washable filters. The cost associated with tune-ups and filters was $72,956. Four CAP Agencies used 30% of their allotment for administrative services totaling $27,375. Additionally, one agency's 2023 administrative allotment of $33,750 was used to pay for work completed by HVAC contractors in 2022.

In March 2023, the company sent helpful energy efficiency education materials to CAP Agencies for regional HVAC contractors to share with customers.

### Marketing Activities

The Easy Savings program is included under Savings for Your Home on the Idaho Power website in the Income-Qualified Customers section.

Idaho Power provided HVAC tune-up coupons to CAP agencies throughout the service area, where they share them with qualified customers. The company also promoted the coupon offer on Facebook and X.

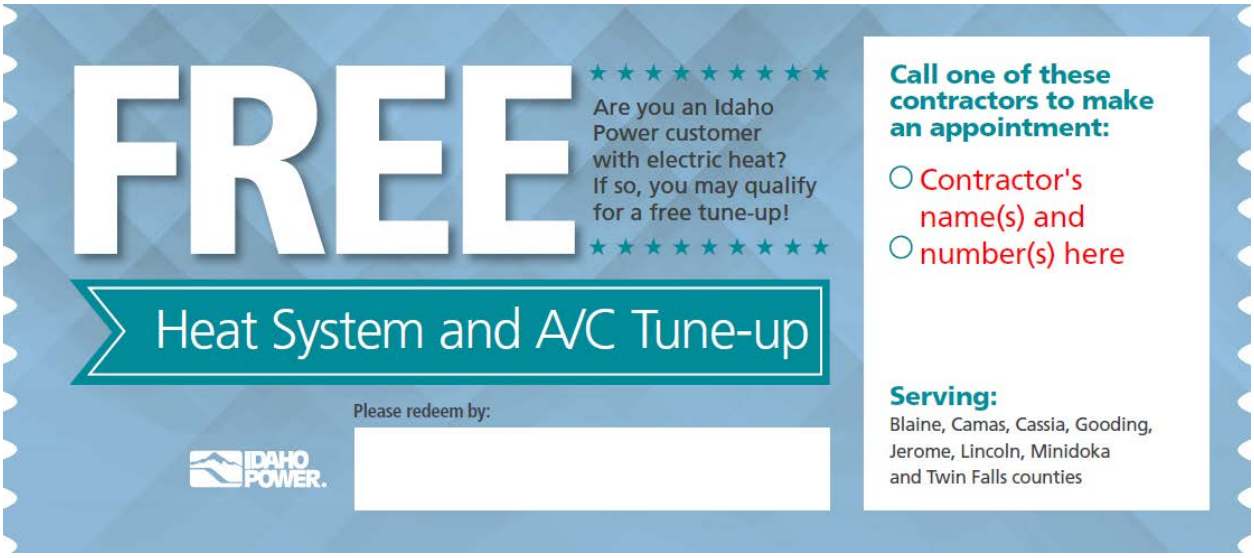


**Figure 9. Free HVAC tune-up coupon**

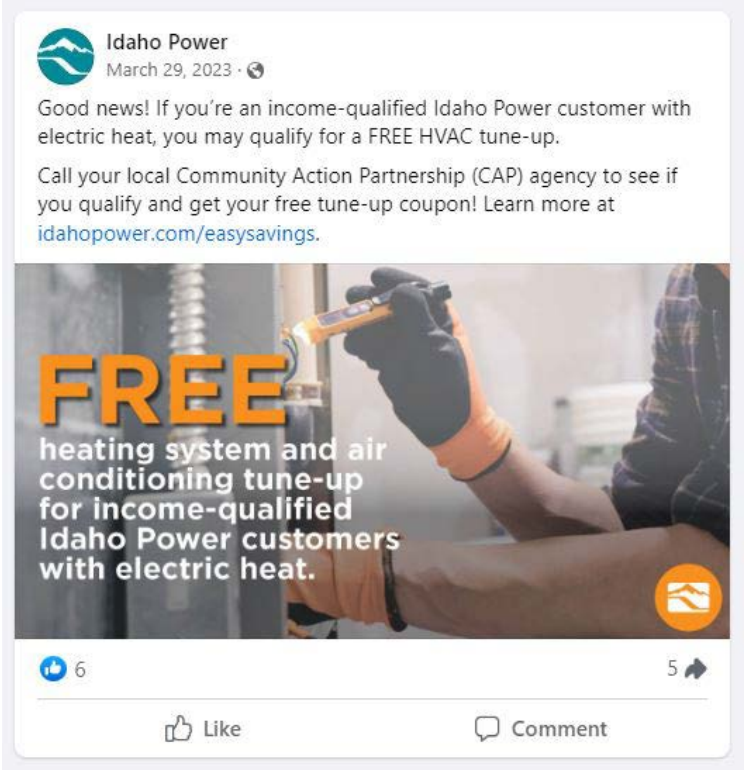


**Figure 10. Social post on free HVAC tune-up**

### Cost-Effectiveness

Because the Easy Savings program is primarily an educational and marketing program, Idaho Power does not apply traditional cost-effectiveness tests to it.

For the HVAC tune-up coupons redeemed in 2023, the program claimed approximately 109–545 kWh per home. The savings are a weighted average of single family, multifamily, and manufactured home types from the 2022 energy efficiency potential study. The weighting is derived from the 2023 housing types from both the WAQC and Weatherization Solutions for Eligible Customers programs. The savings from the 2022 potential study includes tune-up savings for cooling, space heating, and miscellaneous/ventilation. This is an increase over 2022 in which Idaho Power claimed approximately 61 kWh for the HVAC tune-ups. (The 61-kWh value was derived from the 2020 potential study.)

### 2024 Plans

Each agency's portion of the annual $125,000 payment will be made available to them in quarter 1 of 2024 once committee meetings have been completed and contractor guidelines are signed. As in previous years, agencies will begin 2024 with their portion of this payment added to any unspent portion of the previous year's payments.

Participating contractors will continue to discuss the importance of HVAC maintenance and incorporate education about saving energy with coupon recipients. They will answer questions about other ways to save energy in their homes as agreed upon for this low-income energy efficiency educational program.

## *Educational Distributions*

| | 2023 | 2022 |
|---|---|---|
| **Participation and Savings** | | |
| Participants (kits/giveaways) | 53,028 | 49,136 |
| Energy Savings (kWh) | 3,960,690 | 3,741,954 |
| Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | |
| Idaho Energy Efficiency Rider | $880,568 | $1,061,898 |
| Oregon Energy Efficiency Rider | $21,720 | $24,866 |
| Idaho Power Funds | $0 | $49 |
| Total Program Costs—All Sources | $902,287 | $1,086,813 |
| **Program Levelized Costs** | | |
| Utility Levelized Cost ($/kWh) | $0.034 | $0.037 |
| Total Resource Levelized Cost ($/kWh) | $0.034 | $0.037 |
| **Benefit/Cost Ratios** | | |
| Utility Benefit/Cost Ratio | 1.76 | 1.31 |
| Total Resource Benefit/Cost Ratio | 2.07 | 1.62 |

### Description

Designated as a specific program in 2015, the Educational Distributions effort is administered through the REEEI and seeks to use low- and no-cost channels to deliver energy efficiency items with energy savings directly to customers. The goal for these distributions is to drive behavioral change and create awareness of, and demand for, energy efficiency programs in Idaho Power's service area.

Idaho Power selects items for distribution if the initial analysis indicates the measure is either currently cost-effective or expected to be cost-effective. Typically, selected items have additional benefits beyond traditional energy savings, such as educating customers about energy efficiency, expediting the opportunity for customers to experience newer technology, or allowing Idaho Power to gather data or validate potential energy savings resulting from behavior change.

Idaho Power recognizes the need to educate and guide customers to promote behavioral change and awareness and will plan program activities accordingly. Items may be distributed at events and presentations, through direct-mail, or during home visits conducted by energy advisors.

### *Nightlights as Giveaways*

Nightlights are a popular giveaway item with Idaho Power customers and provide another opportunity to share information about energy efficient LED technology and safe, energy-efficient ways to provide nighttime lighting. Energy advisors are encouraged to use nightlights as a bridge to these discussions.

### *Student Energy Efficiency Kit Program*

The SEEK program provides fourth-grade to sixth-grade students in schools in Idaho Power's service area with quality, age-appropriate instruction regarding the wise use of electricity. Each child who participates receives an energy efficiency kit. The products in the kit are selected specifically to encourage energy savings at home and engage families in activities that support and reinforce the concepts taught at school.

Once a class enrolls in the program, teachers receive curriculum and supporting materials. Students receive classroom study materials, a workbook, and a take-home kit containing the following:

- Three LED lightbulbs (reduced to two lightbulbs as of August 2023)
- A high-efficiency showerhead
- An LED nightlight
- A furnace filter alarm
- A digital thermometer for measuring water and refrigerator/freezer temperatures
- A water flow-rate test bag
- A shower timer
- Sticker and magnet pack (containing reminders about energy efficiency)


**Figure 11. Student Energy Efficiency Kit**

At the end of the program, students and teachers return feedback to Idaho Power's vendor indicating how the program was received and which measures were installed. The vendor uses this feedback to provide a comprehensive program summary report showing program results and savings.

Unlike most residential programs offered by Idaho Power, SEEK results are reported on a school-year basis, not by calendar year.

### *Welcome Kits*

Idaho Power uses a vendor to mail Welcome Kits to brand new customers between 35 and 45 days after electric service begins at their residence. Each kit contains two LED lightbulbs, two nightlights, a greeting card, and a small flipbook containing energy-saving tips and information about Idaho Power's energy efficiency programs. The kits are intended to encourage first-time customers to adopt energy-efficient behaviors early in their new homes.


**Figure 12. Welcome Kit**

## Program Activities

### *Nightlights as Giveaways*

Idaho Power continued to distribute LED nightlights to engage customers in discussions around energy-efficient behavior changes and home upgrades.

In-person events scheduled throughout the year afforded Idaho Power staff and energy advisors the opportunity to distribute 10,990 nightlights along with an educational message. Nightlights were distributed to business and community leaders at civic events, aging customers at senior centers, secondary students at career fairs and during presentations, as well as many other groups at presentations and events throughout Idaho Power's service area.


**Figure 13. Nightlight**

### *Student Energy Efficiency Kit Program*

During the 2022–2023 school year, the vendor was responsible for SEEK recruiting activities. Idaho Power education and outreach energy advisors (EOEA) continued to promote the program during their school visits and interactions with fourth-grade to sixth-grade teachers. The curriculum, focusing on digital engagement, continues to be well received and SEEK enrollments were strong. The vendor delivered 12,546 kits to 342 classrooms in 179 schools within Idaho Power's service area. This resulted in 2,876 MWh of savings.

### *Welcome Kits*

Idaho Power continued to contract with a third-party vendor to distribute energy efficiency kits to the company's first-time customers. In 2023, with the expiration of lighting savings due to the *Energy Independence and Security Act of 2007* (EISA) standards, the kit contents were adjusted mid-year. From January through June, the kits contained four 1,100-lumen lightbulbs and two nightlights. From July through December, each welcome kit recipient received two 800-lumen lightbulbs and two nightlights.

The company shipped approximately 30,000 Welcome Kits to customers in 2023—down slightly from the quantity delivered in the previous three years. Idaho Power continues to receive positive customer feedback indicating these kits are well-received.

## Marketing Activities

### *Nightlights as Giveaways*

Nightlights are not marketed as a separate measure, but energy advisors use them to facilitate energy efficiency conversations during customer visits. Nightlights have also become an outstanding way to engage customers at events and presentations as energy advisors report they are a sought-after item.

### *Student Energy Efficiency Kit Program*

During the 2022–2023 school year, the vendor staff handled most of the marketing and recruitment of teachers via email and phone calls to the eligible schools. Idaho Power EOEAs continued to promote the program through the *Community Education Guide* and in conversations with teachers throughout the year.

### *Welcome Kits*

The Welcome Kits are not requested by customers; therefore, they are not marketed. Instead, each week Idaho Power sends a list of new customers to the vendor to fulfill the order. The kits are, however, used to cross-market other programs through the inclusion of a small flipbook containing energy-saving tips and information about Idaho Power's energy efficiency programs.

## Cost-Effectiveness

In situations where Idaho Power managed energy efficiency education and distribution through existing channels, the cost-effectiveness calculations were based on the actual cost of the items. If outside vendors were used to assist with distribution, the cost-effectiveness calculations may include vendor-related charges.

The UCT and TRC for the program are 1.76 and 2.07, respectively.

### *Nightlights as Giveaways*

Idaho Power used the third-party evaluator's calculated savings of 12 kWh per nightlight as explained in the Welcome Kit cost-effectiveness section.

### *Student Energy Efficiency Kit Program*

The cost-effectiveness analysis for the SEEK offering was based on the savings by the kit provided for the 2022–2023 school year. The kit provider calculated the annual savings based on information collected from the participants' home surveys and the installation rate of the kit items. Questions on the survey included the number of individuals in each home, water heater fuel type, flow rate of old showerheads, and the wattage of any replaced lightbulbs.
The response rate for the survey was approximately 69%. The survey gathers information on

the efficiency level of the existing measure within the home and which measure was installed. The energy savings will vary for each household based on the measures offered within the kit, the number of items installed, and the existing measure that was replaced. Based on the feedback received from the 2022–2023 school year, the savings for each kit averaged approximately 229.22 kWh annually per household, and the program saved 2,875,850 kWh annually. A copy of the report is included in *Supplement 2: Evaluation.*

#### *Welcome Kits*

With the implementation of EISA after June 30, 2023, Idaho Power claimed different savings for the kits during the first and second half of the year.

For the first half of the year, Idaho Power used the RTF's giveaway deemed savings value of 4.79 kWh for each of the four 1100-lumen LED lightbulb included in the kit. For the nightlight, Idaho Power used the third-party evaluator's calculated savings of 12 kWh per nightlight, which was identified using survey data as part of a 2020 evaluation. For kits distributed after June 30, 2023, Idaho Power did not claim savings for the LED lightbulbs; however, the company continued to claim 12 kWh per nightlight included in the kit.

In 2023, the Welcome Kits were not fully cost-effective due to the erosion of lighting savings. After consulting the EEAG in 2021, the decision was made to keep this educational offering, but to only include the cost-effective portion associated with those energy savings in the Educational Distribution program; the remainder of the kit costs are included in the REEEI budget (see Other Program and Activities section).

### 2024 Plans

#### *Nightlights as Giveaways*

Nightlights will continue to be the primary opportunity to garner savings in conjunction with educational discussions and customer conversations. Field staff will look for opportunities to discuss enhancements in LED technology (dusk-to-dawn sensors, etc.), promote the use of LED nightlights as an energy-efficient, safe nighttime lighting option, and encourage in-home adoption of other energy-saving behaviors.

#### *Student Energy Efficiency Kit Program*

Idaho Power will continue to offer the SEEK program. The company will work with the vendor to implement process and curriculum enhancements based on suggestions received from teachers, students, and parents.

The company will continue to leverage the positive relationships Idaho Power's EOEAs have within the schools to maintain program participation levels.

### *Welcome Kits*

Idaho Power will continue to offer Welcome Kits to first-time customers, working to raise awareness of energy efficiency programs and encourage adoption of energy-saving behaviors at a prime readiness moment—when moving into their new homes. The print components of the kits will be reviewed and plans will be implemented to update the imagery to leverage the company's investment in the current "Good Energy" media campaign. The Educational Distributions program will continue to count the savings and pay for the cost-effective energy-saving portion of each kit, while the remaining costs associated with the kits will be included in Idaho Power's REEEI efforts.

### *Other Educational Distributions*

Idaho Power will continue to look for opportunities to engage customers with new technologies that stress the importance of energy-efficient behaviors at home. Idaho Power intends to continue efforts to identify a cost-effective marketplace platform that will engage and educate customers as well as looking to identify other innovative solutions to promote efficient technologies that may not fold neatly into other program offerings.

## *Energy Efficient Lighting*

| | | 2022 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (lightbulbs) | 184,950 | 370,739 |
| | Energy Savings (kWh) | 883,491 | 1,728,352 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $278,610 | $505,430 |
| | Oregon Energy Efficiency Rider | $15,586 | $29,475 |
| | Idaho Power Funds | $0 | $76 |
| | Total Program Costs—All Sources | $294,197 | $534,982 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $0.032 | $0.030 |
| | Total Resource Levelized Cost ($/kWh) | $0.044 | $0.040 |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | 1.69 | 1.68 |
| | Total Resource Benefit/Cost Ratio | 1.51 | 1.52 |

### Description

The Energy Efficient Lighting program followed a markdown model that provided incentives directly to manufacturers or retailers for more efficient lighting technology, with discounted prices passed on to the customer at the point of purchase. The customer incentives helped buy down the price of the qualified products to motivate customers to purchase efficient lighting products over inefficient ones.

In 2021, the DOE announced they would be reinstating the EISA lighting standards. With input and support from EEAG, the company decided to continue offering the lighting buydown program through June 30, 2023. After that date, the DOE began enforcing federal EISA lighting standards with financial penalties to those retailers that continued to sell inefficient lightbulbs that did not meet the new 45 lumen-per-watt requirement. It was assumed that most retailers would no longer sell inefficient lightbulbs after that date, negating the need for a program to influence lighting purchasing decisions, so the program was closed on June 30, 2023.

### Program Activities

To ensure there were no retailers receiving an incentive through the program when LEDs were the only technology available, Idaho Power representatives visited participating retailers to validate whether they still offered incandescent, halogen, or CFL lightbulbs in addition to the

LED lighting products. The intent of these visits was to confirm whether customers had options when choosing their lightbulbs and whether the incentive would persuade them to purchase the LED products. It was found that Walmart was early to stop offering non-LED lightbulbs; as a result, they were removed from the program in April. The remaining retailers continued participating though June.

In 2023, LED lightbulbs comprised 77% of the program's sales for the year, a slight increase from the 74% of lightbulb sales in 2022. LED fixtures comprised approximately 23% of overall program sales.

In 2023, Idaho Power worked with 11 participating retailers, representing 85 individual store locations in its service area. Of those participating retailers, 67% of sales were from grocery, dollar, and mass-merchandise stores; 21% from do-it-yourself hardware stores; 11% from small hardware stores; and 1% from membership clubs. Many rural sales came from the smaller retailers that serve hard-to-reach customers. It was important to include several store types across Idaho Power's service area to ensure all customers have access to efficient lighting options.


**Figure 14. Lighting shelf store display**

### Marketing Activities

In 2023, the program contractor promoted discounts with special product placement and signs. Monthly visits to check stock and ensure point-of-purchase (POP) signs were placed on qualifying products were conducted.

The company continued to host an Energy Efficient Lighting program website and made available a *Change a Light* program brochure. The brochure was distributed at community

events to help discuss energy-efficient lighting with customers and to help them select the right lightbulb for their needs.

Participating retailers were notified at the beginning of the year that the program would end by July. In the months leading up to the end of the program, the program contractor visited each participating retailer to remove any program POP from the store.

### Cost-Effectiveness

The UCT and TRC ratios for the program are 1.69 and 1.51, respectively.

In 2023, Idaho Power used the same savings and assumptions source as was used in 2022. While the RTF reviewed and updated the savings assumptions for residential lighting in September 2022, the workbook accounted for the full enforcement of the EISA federal lighting standards. Based on the market data, it was determined that the baseline would be comprised almost entirely of LEDs. As a result, the RTF removed the retail and by-request delivery channels.

For detailed cost-effectiveness assumptions, metrics, and sources, see *Supplement 1: Cost-Effectiveness.*

### 2024 Plans

Although the lighting program was closed as of July 1, 2023, Idaho Power will continue to monitor lighting technologies and products for future incentive or program opportunities.

## *Heating & Cooling Efficiency Program*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (projects) | 1,035 | 1,080 |
| | Energy Savings (kWh) | 1,040,069 | 1,310,260 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | 593,407 | $636,597 |
| | Oregon Energy Efficiency Rider | 30,640 | $28,960 |
| | Idaho Power Funds | $0 | $459 |
| | Total Program Costs—All Sources | 624,047 | $666,016 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $0.056 | $0.050 |
| | Total Resource Levelized Cost ($/kWh) | $0.180 | $0.180 |
| **Benefit/Cost Ratios*** | | | |
| | Utility Benefit/Cost Ratio | 0.94 | 0.98 |
| | Total Resource Benefit/Cost Ratio | 0.40 | 0.30 |

*2022 cost-effectiveness ratios include evaluation. If evaluation expenses were removed from the program's cost-effectiveness, the 2022 UCT and TRC would be 1.00 and 0.30, respectively.

### Description

Initiated in 2007, the objective of the Heating & Cooling Efficiency (H&CE) Program is to provide customers with energy-efficient options for space heating and cooling and water heating. The program provides incentives to residential customers, builders, landlords, and installation contractors in Idaho Power's service area for the purchase and proper installation of qualified heating and cooling equipment and services. Measures, conditions, and incentives/stipends for new homes and for existing homes are summarized in tables 10 and 11, respectively. See idahopower.com/heatingcooling for a complete description of the program.

**Table 10. Measures and incentives—new homes**

| New Equipment or Services | Customer Incentive | Customer Incentive Change on November 1, 2023 | Contractor Stipend |
|---|---|---|---|
| Ducted air-source heat pump | $ 400 | $ 800 | $ 50 |
| Ducted open-loop water-source heat pump | 1,000 | | 50 |
| Ducted ground-source heat pump[1] | 3,000 | | |
| Central A/C[1] | 50 | | |
| Central A/C[1] | 150 | | |
| Heat pump water heater[2] | | 300 | |

[1]Idaho customers only through October 31, 2023; expanded to Oregon customers November 1, 2023.

[2]Added to new construction measures on November 1, 2023 for both Idaho and Oregon.

**Table 11. Measures and incentives—existing homes**

| Existing Equipment Requirement[1] | New Equipment or Services[1] | Customer Incentive | Customer Incentive Change on November 1, 2023 | Contractor Stipend |
|---|---|---|---|---|
| Ducted air-source heat pump | Ducted air-source heat pump | $ 250 | Discontinued | $ 50 |
| Oil or propane heating system | Ducted air-source heat pump | 400 | 800 | 50 |
| Electric (forced-air or zonal) heating system | Ducted air-source heat pump | 800 | | 50 |
| Ducted air-source heat pump | Ducted open-loop water-source heat pump | 500 | | 50 |
| Electric (forced-air or zonal), oil, or propane heating system | Ducted open-loop water-source heat pump | 1,000 | | 50 |
| Air-source heat pump | Ducted ground-source heat pump[2] | 1,000 | | |
| Electric zonal system, electric furnace, or an oil or propane furnace | Ducted ground-source heat pump[2] | 3,000 | | |
| n/a | Central A/C[2] | 50 | | |
| n/a | Central A/C[2] | 150 | | |
| Zonal electric heating system | Ductless air-source heat pump | 750 | 500 | |
| Electric forced-air heating system or heat pump | Duct-sealing services (single family or manufactured home[4]) | 350 | 200 | |
| Permanent split capacitor air handler motor | Electronically commutated motor | 50 | | 150[3] |
| n/a | Evaporative cooler | 150 | | |
| Electric storage water heater | Heat pump water heater | 300 | | |
| Electric heating system | Smart thermostat | 75 | 50 | |
| Zonal or central A/C or heat pump | Whole-house fan | 200 | | |

[1]See idahopower.com/heatingcooling for full requirements

[2]Idaho customers only thru October 31, 2023; expanded to Oregon customers November 1, 2023

[3]Contractor incentive

[4]Idaho customers with single family or manufactured homes, but only Oregon customers with single family homes thru 10/31/23. Expanded to Oregon customers with manufactured homes November 1, 2023.

Idaho Power requires licensed contractors to perform the installation services related to these measures, except evaporative coolers, heat pump water heaters, and smart thermostats. To qualify for the ducted air-source heat pump (ASHP), ducted open-loop water source heat pump, ductless ASHP, and duct-sealing incentives, an authorized participating contractor must perform the work. To be considered a participating contracting company, an employee from

the contracting company must first complete Idaho Power's required orientation regarding program guidelines and technical information on HVAC equipment.

A third-party contractor reviews, enters, and submits incentive applications for payment using a program database portal developed by Idaho Power. The third-party contractor also provides technical and program support to customers and their contractors and performs on- and off-site verifications.

### Program Activities

Program performance is substantially dependent on the contractors' abilities to promote and leverage the heat pump measures offered. Idaho Power developed participating contractors currently in the program while adding 29 additional contractors in 2023. The program specialist frequently engaged with contractors to discuss the program and provided technical assistance and market information.

In February, the program updated the commissioning, controls, and sizing (CCS) requirements for ducted air-source heat pump incentives as a result of updates made to this regional measure by the Bonneville Power Administration (BPA). The updates were released to the region in April 2022, and integrated into H&CE in February 2023. The changes involved adding alternate methods to verify the system was installed correctly. For example, external static pressure measurement can now be used to obtain supply airflow, and condenser temperature split can be used to verify refrigerant charge. Individual CCS requirements were created for both variable speed compressor systems and non-variable speed compressor systems.

In February, the program modified the manufacturing minimum energy efficiency rating requirements for the ducted and ductless air-source heat pump and ducted central A/C incentives to reflect the Department of Energy's (DOE) minimum efficiency standards that changed on January 1, 2023. The new standards result from changes the DOE made to the product test procedure. (The test procedure is Appendix M1 contained in the US DOE 10 CRF Part 430 Subpart B–Uniform Test Method for Measuring the Energy Consumption of Central Air Conditioners and Heat Pumps.) The Appendix M1 test procedure is intended to create a more realistic laboratory test environment to better simulate how these products would perform in a real home. As a result, the program's required minimum efficiency ratings were modified in February 2023, including the Seasonal Energy Efficiency Ratio (SEER), the Energy Efficiency Ratio (EER), and the Heating Seasonal Performance Factor (HSPF). Prior to the test procedure changes, the product published ratings were called SEER, EER, and HSPF. The new ratings are referred to as SEER2, EER2, and HSPF2. The modified test procedures are more stringent and result in the expected lower test result numbers.

In November, the company implemented nine changes to the program which involved seven measures. Four measures received modified incentive amounts in response to ongoing

cost-effectiveness management. Changes to three measures enabled them to be available in Oregon for existing homes. One measure was expanded into the new construction measures for both Idaho and Oregon. The affected measures are noted in tables 10 and 11.

The number of H&CE Program incentives paid in 2023 are listed in Table 12.

**Table 12. Quantity of H&CE Program incentives in 2023***

| Incentive Measure | Quantity* |
|---|---|
| Ducted Air-Source Heat Pump | 181 |
| Open Loop Water-Source Heat Pump | 6 |
| Ductless Heat Pump | 171 |
| Evaporative Cooler | 10 |
| Whole-House Fan | 88 |
| Electronically Commutated Motor | 12 |
| Duct-Sealing | 4 |
| Smart Thermostat | 468 |
| Heat Pump Water Heater | 35 |
| Central A/C | 63 |
| Ground-Source Heat Pump | 4 |

* Quantities do not tie to total projects due to some customers receiving incentives on more than one heat pump

### Marketing Activities

Idaho Power used multiple marketing tactics for its H&CE Program promotion in 2023.

In February, the company emailed information about the H&CE Program to approximately 298,195 residential customers. The promotion was opened by over 152,926 customers and received approximately 4,884 clicks to the H&CE Program website. Idaho Power also sent an email promotion in October to 310,753 residential customers; the email was opened by 154,593 customers and received 4,001 clicks to the web page.

Program information was included in the August edition of the company's monthly customer e-newsletter, "The Current." The e-newsletter also mentioned the smart thermostat incentive in an article about reducing energy use. The program was featured as a clickable digital ad in *The Current* in October. Customers who clicked the ad were directed to the H&CE Program website. A social media post referring to the program and federal tax credits ran in October.

Program information was also included in energy efficiency collateral mailed in the new customer Welcome Kits. Additionally, the program was featured on Idaho Power's website homepage in March.

In March and April, the program was promoted as a clickable ad on the company's e-bill—a version of the bill that is emailed to customers who prefer to receive their bill digitally. Customers who clicked on the ad were directed to the heating and cooling web page.

Two inserts were sent in bills to promote the program—once in April to 298,300 customers and once in October to 342,249 customers. The October insert also included information on applicable federal tax credits—which could help customers save more when combined with the Idaho Power incentive. The program and applicable tax credits were also promoted on social media.

Additionally, the program "tech sheets" were updated in 2023 to reflect program incentive changes. The sheets are used as a leave-behind collateral piece with customers who are interested about more program information.

### Cost-Effectiveness

In 2023, the H&CE Program had a UCT of 0.94 and TRC of 0.40.

Overall, while participation decreased slightly from 1,080 participants in 2022 to 1,035 participants in 2023, the total savings decreased by 270,191 year over year.

The decrease in overall savings is largely due to updates to various savings assumptions. The RTF is the source of most measure savings assumptions within the program and many savings assumptions changed between 2022 and 2023.

Smart thermostats make up 45% of the total program participation and 14% of the total savings. With the RTF workbook version 3.1, the per unit savings declined by between 24 to 65% compared to the workbook version 1.3 which was used in 2022. The RTF reviewed and updated the savings assumptions for smart thermostats in January 2022. The RTF reviewed recent program evaluations and NEEA research which found electric savings to be inconsistent and variable. The RTF moved forward with applying the evaluation results and updated the measure specifications and research strategy.

Air-source heat pumps made up 17% of the total program participation and 44% of the total savings. On average, the per unit savings declined by nearly 12% over 2022. This was largely due to the removal of CCS adder that had been included with the ASHP savings. The RTF deactivated the workbook in 2020. This was due to the uncertainty around the savings and the interaction between the ASHP and new thermostats. At the time, Idaho Power continued to use the savings for 2021 and 2022 as it awaited results of the program evaluation. While the evaluation found that most projects did not meet all of the performance tested comfort system (PTCS) requirements, the projects did meet most of the requirements. The evaluators believed "that these projects still display significant potential for savings toward additional control and saving activities implemented by the program." As a result, Idaho Power still requires the installers to comply with BPA's updated PTCS requirements and will continue to monitor the impacts of proper CCS on ASHP savings. Additionally, CCS savings could not be used in conjunction with smart thermostat savings and the new smart thermostat workbook version

3.1 included a heat pump optimization specification. The decision was made to remove CCS savings in 2023 since the updated thermostat savings would have accounted for the resistance heat optimization. Finally, the newest ASHP workbook version 7.3, which the program is using as of November 2023, factored in recent evaluation and research, including Idaho Power's evaluation, when updating the ASHP savings assumptions. Because the evaluations and research included programs that required CCS, some CCS savings are embedded in the ASHP numbers.

Ductless heat pumps made up 17% of the program participation and 19% of the total savings. While the savings assumptions did not change year over year, the average savings per unit declined by nearly 16%. Savings are dependent on location. Heating zone 1 and cooling zone 3 have the highest savings at 1,945 kWh per DHP. In 2023, 25% of participants lived in this heating and cooling zone compared to 43% in 2022.

Finally, in regard to the increase in TRC cost-effectiveness, the calculation includes tax credits for the participant. As part of the *Inflation Reduction Act of 2022*, tax credits are available for ASHP, open-loop heat pumps, ground-source heat pumps, ductless heat pumps, heat pump water heaters, and central A/Cs that meet certain efficiency standards. These tax credits range from $600 to $9,000. The inclusion of the tax credit offsets the participants costs used in the TRC calculation.

In November 2023, Idaho Power modified the program based on the updated savings and analyzed with the newest DSM avoided costs from the *2023 IRP*. With these changes, the program is expected to be cost-effective going forward.

For detailed information about the cost-effectiveness savings, sources, calculations, and assumptions, see *Supplement 1: Cost-Effectiveness*.

### 2024 Plans

Idaho Power's primary goal in 2024 is to develop contractors currently in the program with a focus on the 29 new contractors added in 2023. The program specialist will frequently interact with the contractors and continue to provide program guidance and full technical support to assist them in meeting program requirements and further their product knowledge.
This remains an important part of the program because it creates the opportunity to invite additional contractors into the program, is a refresher for contractors already participating in the program, and helps them increase their customers' participation while improving the contractors' work quality and program compliance.

The 2024 marketing strategy will include bill inserts, direct-mail, social media, digital and search advertising, and email marketing to promote individual measures as well as the overall program.

## *Home Energy Audit*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (homes) | 337 | 425 |
| | Energy Savings (kWh) | 11,329 | 28,350 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $230,011 | $184,650 |
| | Oregon Energy Efficiency Rider | $0 | $0 |
| | Idaho Power Funds | $0 | $208 |
| | Total Program Costs—All Sources | $230,011 | $184,858 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $2.156 | $0.771 |
| | Total Resource Levelized Cost ($/kWh) | $2.570 | $1.000 |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | n/a | n/a |
| | Total Resource Benefit/Cost Ratio | n/a | n/a |

*2023 program levelized costs include evaluation expenses. If evaluation expenses were removed from the program's costs, the 2023 utility levelized costs and total resource levelized costs would be $1.728 and $2.141, respectively.

### Description

Under the Home Energy Audit program, a certified, third-party home performance specialist conducts an in-home energy audit to identify areas of concern and provide specific recommendations to improve the efficiency, comfort, and health of the home. The audit includes a visual inspection of the crawlspace and attic, a health and safety inspection, and a blower door test to identify and locate air leaks. The home performance specialist collects information on types and quantities of appliances and lighting in each home, then determines which available energy efficiency measures are appropriate. Homeowners and/or landlords approve all direct-install measures prior to installation, which could include the following:

- Up to 20 LED lightbulbs
- One high-efficiency showerhead with thermostatic shower valve
- Pipe insulation from the water heater to the home wall (approximately 3 feet)
- Tier 2 Advanced Power Strip (once stock is depleted [anticipated by quarter 4 of 2024], power strips will no longer be a direct-install measure)

The home performance specialist collects energy-use data and records the quantity of measures installed during the audit using specialized software. After the audit, the auditor writes up the findings and recommendations, and the software creates a report for the customer.

To qualify for the Home Energy Audit program, a participant must live in Idaho and be the Idaho Power customer of record for the home. Renters must have prior written permission from the landlord. Single family site-built homes, duplexes, triplexes, and fourplexes qualify, though multifamily homes must have individual, separate heating systems and meters for each unit. Manufactured homes, new construction, or buildings with more than four units do not qualify.

Interested customers fill out an application online. If they do not have access to a computer, or prefer talking directly to a person, Idaho Power accepts applications over the phone. Participants are assigned a home performance specialist based on geographical location to save travel time and expense.

Participating customers pay $99 (all-electric homes) or $149 (other homes: gas, propane, or other fuel sources) for the audit and installation of measures, with the remaining cost covered by the Home Energy Audit program. The difference in cost covers the additional testing necessary for homes that are not all-electric. These types of energy audits normally cost $400 or more, not including the select energy-saving measures, materials, and labor. The retail cost of the materials available to install in each home is approximately $145.

### Program Activities

Four home performance specialist companies served the program in 2023 and completed 337 energy audits. The number and percentage of audited homes per heating fuel type are listed in Table 13.

**Table 13. Number and percentage of audited homes per heating fuel type**

| Fuel Type | Number of Homes | Percent |
|---|---|---|
| Electric | 122 | 36.20% |
| Natural Gas | 197 | 58.46% |
| Oil | 1 | 0.30% |
| Propane | 11 | 3.26% |
| Wood | 6 | 1.78% |

Quality assurance (QA) remained suspended during 2023 as the waitlist of projects in the pipeline remained the priority. The survey format for QA will be explored and QA will resume in 2024.

### Marketing Activities

To allow contractors to work through the waitlist of interested customers created when in-home work was suspended in 2020 and 2021, Home Energy Audit marketing was limited in 2023.

Although working through the waitlist was a top priority, an email was sent to 5,000 residential customers in December to help maintain program visibility. Those 5,000 customers were prioritized because they had residential home addresses in Ada or Canyon counties (near the auditor) and had not previously been enrolled for an audit. Website updates were made throughout the year to keep program details up to date. The look of the leave-behind folder was updated with the "Good Energy" theme, and new flyers—including a My Account and EE Program Summary piece—were also included. The program was mentioned in various articles in the *Fall Energy Efficiency Guide*.

Customers who enrolled in Home Energy Audit throughout the year were asked where they heard about the program. Responses included the following: information in the mail, 19.38%; family member or friend, 12.40%; Idaho Power employee, 16.02%; social media, 3.10%; other, 48.58%; did not reply, 0.52%.

### Cost-Effectiveness

One of the goals of the Home Energy Audit program is to increase participants' understanding of how their home uses energy and to encourage their participation in Idaho Power's energy efficiency programs. Because the Home Energy Audit program is primarily an educational and marketing program, the company does not use the traditional cost-effectiveness tests. However, the increase in the program's overall levelized costs from 2022 to 2023 is largely due to the inclusion of evaluation expenses and the decrease in savings potential. If evaluation expenses were removed from the program's costs, the 2023 utility levelized costs and total resource levelized costs would be $1.728 and $2.141, respectively.

With the implementation of EISA after June 30, 2023, Idaho Power claimed different savings for the LED bulbs for the first and second half of the year. For the first half of the year Idaho Power used the RTF LED workbook version 9.3 savings for direct-install lightbulbs, which range from 4.73 to 14.21 kWh per year. For installs that occurred after June 30, 2023, the RTF LED workbook version 11.1 was the source for all savings assumptions with savings that range from 1.99 to 2.74 kWh per year.

In Idaho Power's 2022 *Energy Efficiency Potential Study*, it is estimated that pipe wraps save approximately 18 kWh per foot annually. Previously, the pipe wrap savings were capped at three feet per home regardless of the number of feet installed in the home. As recommended by the evaluators, the cap was removed. Savings for pipe wrap are counted for homes with electric water heaters. Since pipe wrap is installed in three-foot increments, the savings ranged from 55 to 111 kWh per home.

The integrated 1.75 gallons per minute (gpm) high-efficiency showerheads with thermostatic shower valves were installed in four homes. The savings are approximately 50 kWh per year.

While Idaho Power does not calculate a cost-effectiveness ratio for the Home Energy Audit program, the savings benefits and costs associated with direct-install measures have been included in the sector and portfolio cost-effectiveness. Idaho Power also converted the 18 kWh per foot of pipe wrap savings to 1.89 therms and those gas savings are included in the sector and portfolio cost-effectiveness as non-energy benefits.

### Evaluations

Impact and process evaluations for the Home Energy Audit program were performed by a third-party contractor in program year 2022. The evaluators verified 28,801 kWh savings at a 102% realization rate for the program. The evaluators verified savings and assumptions using a deemed savings approach for the measures included in the program in addition to verifying in-service rates. The evaluators reviewed all tracking data as well as the project data and confirmed that project-level measure details were tracked accurately and that the RTF equations and assumptions were utilized correctly to calculate expected savings.

Listed below are the evaluators' recommendations (in italics) followed by Idaho Power's response.

***The evaluators recommend updating the unit energy savings value for this measure to correct manual entry errors.*** The savings values having been updated in calculating the program's savings for 2023. However, in mid-2023, federal lighting standards increased due to the full enforcement of the EISA, thus the savings assumptions were updated for installations that occurred after July 1.

***The evaluators recommend that Idaho Power continue to use the in-service rates assumed by the RTF for this program in future cycles.*** For the measures in which Idaho Power uses the savings assumptions from the RTF, Idaho Power will continue to use the in-service rates that are factored into the savings value.

***The evaluators recommend that Idaho Power start tracking whether HEA participants enroll in other Idaho Power offerings within one to two years of completing the energy audit.*** Idaho Power will explore reporting options to link home energy audits with participation in other programs.

***The evaluators recommend program staff consider reiterating the importance of follow-up calls to the auditors.*** Program staff will reiterate the importance of the follow-up call with program auditors.

***The evaluators recommend that IPC provide additional program information to auditors, so they better understand the program offerings available to customers. The evaluators also recommend program staff more strongly encourage auditors to share additional program offering information to customers.*** Idaho Power will continue to work with the auditors to

ensure they are familiar with Idaho Power programs and encourage them to discuss and share program information with customers.

***Although the program currently aims to remain contractor neutral, the evaluators recommend allowing the auditors to provide customers recommendations for contractors based on recommended energy efficiency upgrades. The evaluators also recommend Idaho Power provide auditors training regarding how to appropriately recommend contractors related to the suggested energy efficiency improvements made to the customer.*** Idaho Power does not maintain a qualified contractor list nor endorse specific contractors. Without the ability to monitor and rate contractors based on their skills, abilities, performance, pricing, customer service, and longevity, the company could bias customers to select a contractor that does not meet their needs or bias customers away from acceptable companies that are not known to Idaho Power. Therefore, the company has chosen not to implement this recommendation.

***The Evaluators recommend that Idaho Power incorporate house vintage to target homes for participation in the program that are more than 10 to 15 years old to target for home energy audits.*** Idaho Power will explore using house vintage as a parameter when creating targeted marketing lists.

***The evaluators recommend reassessing door sweeps for inclusion.*** Idaho Power will re-evaluate the option to add door sweeps to the program.

***The evaluators recommend that Idaho Power include Snugg Pro as part of the regular training sessions with auditors and provide additional guidance and clarification on quality control practices and outputs from the software.*** Idaho Power will work with the SNUGG Pro software developers to explore the opportunity for an in-person or online auditor training in 2024.

***The evaluators recommend that Idaho Power require each home energy auditor to be certified by the DOE certification programs for the Energy Efficient Home Improvement Credit (Section 25C) and provide the written home energy audit report to customers with the required information (qualified home energy auditor's name and EIN, an attestation that the qualified home energy auditor is certified by a qualified certification program, and the name of such qualified certification program)***. Idaho Power will verify the IRA auditor certification requirements and determine the feasibility of requiring program auditors to be certified by the Department of Energy certification programs for the Energy Efficient Home Improvement Credit (Section 25). Idaho Power will also pursue adding the EIN number to the current audit report with the auditing software developers.

### 2024 Plans

2024 plans include exploring the addition of a survey-based QA component to the program.

Idaho Power will recruit participants through small batches of targeted direct-mailings, emails, social media posts, and bill inserts. Additional digital advertising may be considered if the program needs to be strategically promoted in specific regions.

## *Home Energy Report Program*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (homes) | 96,901 | 104,826 |
| | Energy Savings (kWh)* | 17,659,087 | 20,643,379 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $883,505 | $964,709 |
| | Oregon Energy Efficiency Rider | $0 | $0 |
| | Idaho Power Funds | $0 | $82 |
| | Total Program Costs—All Sources | $883,505 | $964,791 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $0.047 | $0.044 |
| | Total Resource Levelized Cost ($/kWh) | $0.047 | $0.044 |
| **Benefit/Cost Ratios**** | | | |
| | Utility Benefit/Cost Ratio | 1.32 | 0.71 |
| | Total Resource Benefit/Cost Ratio | 1.45 | 0.79 |

*2023 third-party reported savings of 17,737,130 kWh and 2022 third party reported savings of 20,734,611 kWh discounted by 0.44% based on evaluated double-counting estimate. Idaho Power reported values shown in the table above reflect the 0.44% discount.

### Description

The objective of the HER Program is to encourage customers to engage with their home's electricity use with a goal to produce average annual behavioral savings of 1 to 3%. The program also promotes customer use of online tools and participation in other energy efficiency programs. Idaho Power works with a third-party contractor to operate the program.

There are two groups of active participants in the HER program: pilot participants and participants added to the program in 2020. All active participants receive periodic *Home Energy Reports* with information about how their homes' energy use compares with similar homes. The reports also give a breakdown of household energy use and offer suggestions to help customers change their energy-related behaviors. The program contractor estimates energy savings by completing a statistical comparison of the energy used by customers who receive the reports against the energy used by a control group. Since the savings estimates rely on the integrity of the experimental design, participants in both the treatment (those receiving reports) and the control group are selected through a random process.

### Program Activities

In 2023, all HER Program participants received quarterly reports in the months of February, May, August, and November.

In addition to showing participants how their energy compared relative to similar homes, each quarterly report delivered in 2023 addressed weather-related usage, as appropriate, along with other tips related to appliances, lighting, and always-on devices. The February reports focused on either ways to reduce electric water heating costs or appliance tips. In May, customers with significant A/C use during the previous summer received tips to reduce upcoming cooling bills while others learned how to maximize the use of day lighting in their homes. The August reports were, once again, segmented between participants with significant A/C use and those whose energy use was less affected by weather. In November, customers with electric space heating received information regarding their previous winter's use along with heating tips while the remaining customers received general tips.

Idaho Power continued to send email reports (eHERs), in addition to paper reports, to participants for whom Idaho Power had an email address on file. A total of 559,032 reports were delivered in 2023 (Table 14).

**Table 14. HERs delivered in 2023**

| Report Cycle | # of Email Only Recipients | # of Paper Only Recipients | # of Both Email & Paper Recipients | # of Unique Customers Receiving HERs | Total Reports Delivered |
|---|---|---|---|---|---|
| February | 106 | 57,741 | 39,054 | 96,901 | 135,955 |
| May | 137 | 47,285 | 47,926 | 95,348 | 143,274 |
| August | 145 | 46,490 | 47,096 | 93,731 | 140,827 |
| November | 152 | 45,134 | 46,845 | 92,131 | 138,976 |
| **2023 Report Totals** | **540** | **196,650** | **180,921** | **378,111** | **559,032** |

In 2023, as in 2022, the savings results for the pilot participants identified as electric heating customers were not statistically significant as stand-alone cohorts; however, these participants did contribute to the overall program savings. The participants added to the program in 2020 saw slight decreases in both their savings percentage and kWh savings per customer, dropping from 1.35% to 1.28% and from 206.61 kWh to 187.89 kWh, respectively. Overall, the active participants used an average of 178.92 fewer kWh per home than their control group counterparts. When viewed in aggregate, the estimated savings for all program participants was about 1.24% below their respective control groups, for a total reported savings of 17,467,444 kWh. The small group of customers who received their last report in February of 2020 continued to demonstrate persistent savings. With residual savings included, total 2023 reported program savings came to 17,737,130 kWh. With the exception of one small outlier group, program participants achieved savings between 74 and 249 kWh annually per home.

Idaho Power's customer solutions advisors responded to 385 HER Program-related phone calls during the year. Given that 559,032 reports were delivered, this represents a call rate of just under 0.06%. The participant-driven opt-out rate was up slightly from 0.08% in 2022 to 0.097%

in 2023—significantly lower than the industry average of 1%. Overall attrition in 2023 was 4.83%—down from 6.92% in 2022 (includes opt-outs, move-outs, etc.).

Since the contract with the original implementer only provided for HER delivery through November of 2023, an RFP was issued and a new contractor was selected to continue the program in 2024.

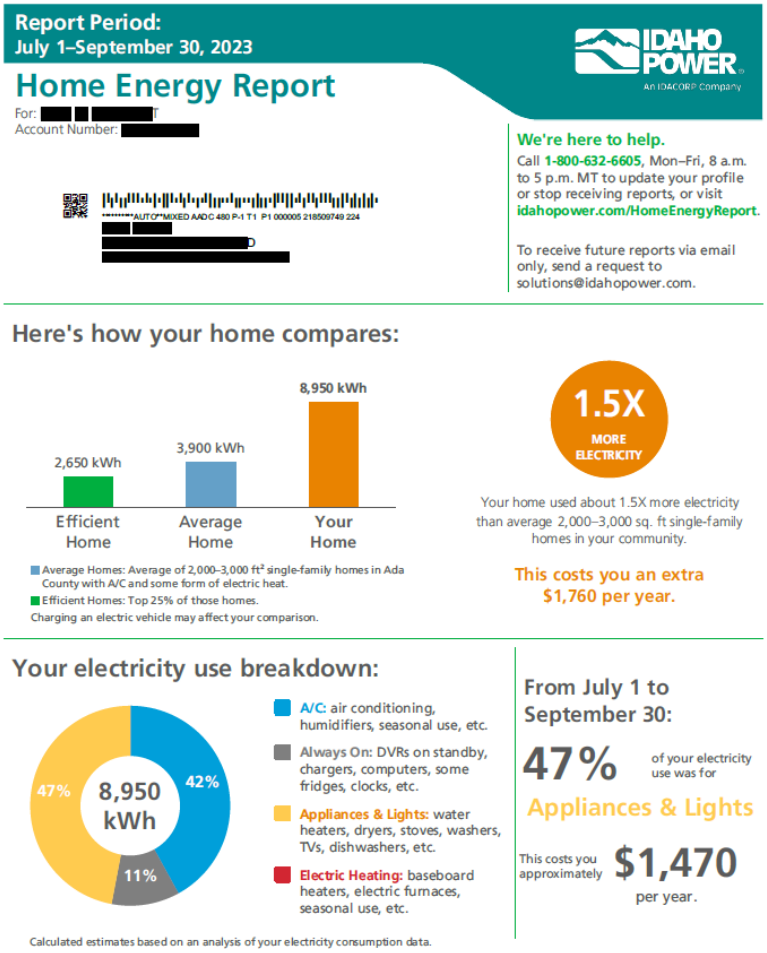


**Figure 15. Page 1 of a sample *Home Energy Report***

### Marketing Activities

Because the HER Program is based on a randomized control trial (RCT) methodology, the reports cannot be requested by customers, therefore the program is not marketed. The *Home Energy Reports* (as well as Account Alerts and My Account) were used to cross-market Idaho Power's other energy efficiency programs (i.e., Home Energy Audits, H&CE Program, and Energy Efficient Lighting).

### Cost-Effectiveness

HER Program savings are calculated each year using measured usage of the customers receiving the reports relative to a statistically similar control group that does not receive the reports. Due to the potential of double-counting savings from other programs, Idaho Power discounts the HER Program savings of 17,737,130 kWh by 0.44% to report savings of 17,659,087 kWh. This percentage was recommended by evaluators during the 2022 impact evaluation. Based on the reported savings of 17,659 MWh, the UCT and TRC for the program are 1.32 and 1.51, respectively, for 2023. The cost-effectiveness is based on the one-year life of the program. The program's one-year life cost-effectiveness improved due to the application of the DSM avoided costs from the *2021 Integrated Resource Plan.*

For more detailed information about the cost-effectiveness savings and assumptions, see *Supplement 1: Cost-Effectiveness.*

### 2024 Plans

In 2024, Idaho Power plans to work with the new contractor to maintain or enhance the HER cadence and enrich the customer experience for current participants. In addition, the pool of existing residential non-participating customers will be reviewed to see if there are enough new eligible participants to add a new wave of customers receiving reports. Idaho Power will work with the new contractor to improve the two-way flow of data between the contractor and Idaho Power in order to tighten the feedback loop and shorten the timeframe for implementing program improvements.

## *Multifamily Energy Efficiency Program*

| | 2023 | 2022 |
|---|---|---|
| **Participation and Savings** | | |
| Participants (projects) | 0 | n/a |
| Energy Savings (kWh) | 0 | n/a |
| Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | |
| Idaho Energy Efficiency Rider | $22,758 | n/a |
| Oregon Energy Efficiency Rider | $1,216 | n/a |
| Idaho Power Funds | $0 | n/a |
| Total Program Costs—All Sources | $23,974 | n/a |
| **Program Levelized Costs** | | |
| Utility Levelized Cost ($/kWh) | n/a | n/a |
| Total Resource Levelized Cost ($/kWh) | n/a | n/a |
| **Benefit/Cost Ratios** | | |
| Utility Benefit/Cost Ratio | n/a | n/a |
| Total Resource Benefit/Cost Ratio | n/a | n/a |

### Description

Idaho Power introduced a new Multifamily Energy Efficiency Program (Multifamily Program) in November 2023 for both its Idaho and Oregon service areas. This program encompasses multifamily projects with five or more dwelling units per building and common commercial areas typically seen in multifamily developments. The program includes residential and commercial space types for both new construction and retrofit projects.

The Multifamily Program offers nine energy efficiency measures specific to the dwelling units and 17 energy efficiency measures for the common commercial space areas. The prescriptive measures for the program are shown in Table 15.

**Table 15. Energy efficiency measures for Multifamily Energy Efficiency Program**

| Dwelling Unit Measures | Common Commercial Space Measures* |
|---|---|
| Ductless mini-split heat pump | Light load reduction |
| Air-source heat pumps | Efficiency exit signs |
| Packaged terminal A/C and heat pumps | Efficient air-cooled A/C and heat pump units |
| Continuous exhaust fans | Efficient chillers |
| Manual exhaust fans | Economizers |
| Reflective roof treatment | High-volume, low-speed fan |
| Smart thermostats | Reflective roof treatment |
| Efficient windows | Efficient laundry machines |
| Low-e storm windows | Indoor and outdoor pool covers |

*Separate incentives are offered for each type of project (new construction/major renovations or retrofits) depending on whether the project is in Oregon or Idaho.

In addition to the customer incentive, a Professional Assistance Incentive (PAI) is available to the architects or engineers for supporting technical aspects and documentation of a project.

### Program Activities

The program engineer and energy advisors provided outreach to customers, professionals, and professional organizations as a new program option while promoting other Idaho Power programs.

Idaho Power has received eight preliminary applications for the new program since it launched on November 1, 2023.

### Marketing Activities

The company created an application, brochure, website, and FAQs to market the Multifamily Program. An email was sent out to 264 architects, engineers, and developers announcing the program launch with a 25.75% open rate. Digital ads and search engine marketing launched in November through December. Web users were exposed to 609,242 display ads (animated GIF image ads embedded on a website) based on their demographics, related to online articles they viewed, or their use of mobile web pages or apps. Users clicked the ads 606 times. Multifamily search terms were added to the already existing commercial and industrial search engine marketing campaign.

### Cost-Effectiveness

Idaho Power contracted with a third party to create a Multifamily Technical Reference Manual for the program. The manual provides savings and costs related to measures in a New Construction and Retrofit scenario. While the program is fuel neutral, savings will vary based on the customer's fuel type. As with any new program, assumptions around participation and

measure uptake were made, and the program is expected to be cost-effective. When the program is evaluated, Idaho Power will re-evaluate the assumptions within the manual.

### 2024 Plans

Idaho Power engineers, program specialists, and energy advisors will continue to provide outreach to customers, professionals, and professional organizations to promote the new Multifamily Program. The program will also be cross marketed while promoting other Idaho Power programs.

## *Oregon Residential Weatherization*

| | 2023 | 2022 |
|---|---|---|
| **Participation and Savings** | | |
| Participants (audits/projects) | 3 | 7 |
| Energy Savings (kWh) | 0 | 0 |
| Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | |
| Idaho Energy Efficiency Rider | $0 | $0 |
| Oregon Energy Efficiency Rider | $7,860 | $8,825 |
| Idaho Power Funds | $0 | $0 |
| Total Program Costs—All Sources | $7,860 | $8,825 |
| **Program Levelized Costs** | | |
| Utility Levelized Cost ($/kWh) | n/a | n/a |
| Total Resource Levelized Cost ($/kWh) | n/a | n/a |
| **Benefit/Cost Ratios** | | |
| Utility Benefit/Cost Ratio | n/a | n/a |
| Total Resource Benefit/Cost Ratio | n/a | n/a |

### Description

Idaho Power offers free energy audits for customers with electrically heated homes within the Oregon service area. This is a program required by Oregon Revised Statute (ORS) 469.633 and has been offered under Oregon Tariff Schedule 78 since 1980. Upon request, an energy audit contractor hired by Idaho Power visits the customer's home to perform a basic energy audit and to analyze it for energy efficiency opportunities. The customer receives an estimate of costs and savings for recommended energy-efficient measures. Customers may choose either a cash incentive or a 6.5%-interest loan for a portion of the costs for weatherization measures.

### Program Activities

Three audits were completed in 2023. None of the audit customers chose to pursue energy efficiency upgrades.

### Marketing Activities

In October, Idaho Power sent 10,124 Oregon residential customers an informational brochure about energy audits and home weatherization financing.

### Cost-Effectiveness

The Oregon Residential Weatherization program is a statutory program described in Oregon Schedule 78, which includes a cost-effectiveness definition of this program. Pages three and four of Schedule 78 identify the measures determined to be cost-effective and the specified measure life cycles for each. This schedule also includes the cost-effective limit (CEL) for measure lives of 7, 15, 25, and 30 years.

### 2024 Plans

Idaho Power plans to continue marketing the program to all Oregon residential customers with a bill insert/brochure.

## *Rebate Advantage*

| | 2023 | 2022 |
|---|---|---|
| **Participation and Savings** | | |
| Participants (homes) | 79 | 97 |
| Energy Savings (kWh) | 214,236 | 255,541 |
| Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | |
| Idaho Energy Efficiency Rider | $130,233 | $157,746 |
| Oregon Energy Efficiency Rider | $6,867 | $9,762 |
| Idaho Power Funds | $0 | $115 |
| Total Program Costs—All Sources | $137,100 | $167,622 |
| **Program Levelized Costs** | | |
| Utility Levelized Cost ($/kWh) | $0.042 | $0.043 |
| Total Resource Levelized Cost ($/kWh) | $0.049 | $0.104 |
| **Benefit/Cost Ratios** | | |
| Utility Benefit/Cost Ratio | 0.98 | 1.18 |
| Total Resource Benefit/Cost Ratio | 0.93 | 0.54 |

### Description

Initiated in 2003, the Rebate Advantage program helps Idaho Power customers in Idaho and Oregon with the initial costs associated with purchasing new, energy-efficient, NEEM-certified, ENERGY STAR® qualified manufactured homes. This enables the homebuyer to enjoy the long-term benefit of lower electric bills and greater comfort. The program also provides an incentive to the sales consultants to encourage more sales of ENERGY STAR qualified homes and more discussion of energy efficiency with their customers during the sales process.

In addition to offering financial incentives, the Rebate Advantage program educates manufactured home buyers and retailers about the benefits of owning energy-efficient models. NEEM, a consortium of manufacturers and state energy offices in the Northwest, establishes quality control (QC) and energy efficiency specifications for qualified manufactured homes and tracks their production and on-site performance. NEEM adds the classification Eco-Rated™ for homes produced by factories that have demonstrated a strong commitment to minimizing environmental impacts from the construction process.

In 2019, NEEM created the most stringent manufactured home energy standard in the country, the ENERGY STAR with NEEM 2.0 specification, which was later renamed the ENERGY STAR with NEEM+ certification. NEEM+ standards are engineered to save approximately 30% more energy than ENERGY STAR standards. As a result, NEEM+ delivers the highest possible energy savings

and the highest level of overall comfort. These homes are built to specifications tailored to the Northwest climate.

### Program Activities

In 2023, for each home sold under this program, the residential customer incentive was $1,000 and the sales staff incentive was $200. Idaho Power paid 79 incentives on new manufactured homes, which accounted for 214,236 annual kWh savings. This included 75 homes sited in Idaho and four sited in Oregon. Of the 79 homes in the program, 22 were NEEM+, 56 were ENERGY STAR, and 1 was Eco-Rated.

### Marketing Activities

Idaho Power continued to support manufactured home dealerships by providing them with program marketing collateral.

In April and November, Idaho Power promoted the Rebate Advantage program with a bill insert sent to 298,300 and 298,088 customers, respectively. The insert was updated with the "Good Energy" style and had information about potential energy and cost savings and referred customers to the program website.

In November, the company sent an email promotion to 46,000 customers. The email received 17,815 opens and 148 unique clicks.

### Cost-Effectiveness

The UCT and TRC for the program are 0.98 and 0.93, respectively.

In 2023, Idaho Power used the same savings and assumptions source used in 2022. The decline in UCT cost-effectiveness between 2022 and 2023 is largely due to the application of the DSM avoided costs from the *2021 IRP*. On average, the benefit value declined 22% between the *2019 Second Amended IRP* and the *2021 IRP*. However, the program is expected to be cost-effective in 2024 with the application of the DSM avoided costs from the *2023 IRP*. All things remaining equal, the benefit value increases by approximately 12% between the *2021 IRP* and the *2023 IRP*. Regarding the increase in TRC cost-effectiveness, the calculation includes tax credits for the participant. As part of the *Inflation Reduction Act of 2022*, Section 45L Tax Credit for Energy Efficient New Homes was updated and extended. For certified manufactured homes meeting the most recent ENERGY STAR Manufactured New Home program requirements, a $2,500 tax credit is available to the homebuilder. The inclusion of the tax credit offsets the participants' costs used in the TRC calculation.

For detailed information for all measures within the Rebate Advantage program, see *Supplement 1: Cost-Effectiveness.*

### 2024 Plans

Idaho Power plans to review the cost-effectiveness and feasibility of the updated Housing and Urban Development (HUD)/ENERGY STAR v3.0 manufactured homes code that was originally planned to take effect on May 31, 2023, but was delayed due to litigation regarding the new federal standards. ENERGY STAR v3.0 will go into effect January 1, 2026.

Idaho Power will continue to support manufactured home dealers by providing them with program materials. The company will also distribute a bill insert to Idaho and Oregon customers and continue to explore and use digital advertising to promote the program to potential manufactured home buyers.

## *Residential New Construction Program*

| | 2023 | 2022 |
|---|---|---|
| **Participation and Savings** | | |
| Participants (homes) | 64 | 109 |
| Energy Savings (kWh) | 234,945 | 337,562 |
| Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | |
| Idaho Energy Efficiency Rider | $195,102 | $236,962 |
| Oregon Energy Efficiency Rider* | $194 | -$1,356 |
| Idaho Power Funds | $0 | $126 |
| Total Program Costs—All Sources | $195,296 | $235,732 |
| **Program Levelized Costs** | | |
| Utility Levelized Cost ($/kWh) | $0.053 | $0.045 |
| Total Resource Levelized Cost ($/kWh) | $0.066 | $0.110 |
| **Benefit/Cost Ratios**** | | |
| Utility Benefit/Cost Ratio | 1.05 | 1.45 |
| Total Resource Benefit/Cost Ratio | 1.25 | 0.84 |

*2021 Oregon activity of $1,356 was reversed and charged to the Idaho Rider in the first quarter of 2022. 2023 Oregon activity of $194 reversed in the first quarter 2024.

**2023 cost-effectiveness ratios include evaluation expenses. If evaluation expenses were removed from the program's cost-effectiveness, the 2023 UCT and TRC would be 1.23 and 1.42, respectively.

### Description

The Residential New Construction Program launched in March 2018 as a pilot, replacing the ENERGY STAR® Homes Northwest Program, and transitioned to a regular program in 2021. The Residential New Construction Program offers builders a cash incentive to build energy efficient, single-family, all-electric homes that use heat pump technology in Idaho Power's Idaho service area. These homes must meet strict requirements that make them 10%, 15%, or 20% more energy efficient than homes built to standard state energy code.

The RTF and NEEA have created specific modeling requirements and program guidelines to ensure the program provides reliable energy savings for utilities across the northwest. These homes feature high-performance HVAC systems, high-efficiency windows, increased insulation values, and tighter building shells to improve comfort and save energy. Idaho Power claims energy savings based on each home's individual modeled savings.

Builders must contract with a Residential Energy Services Network (RESNET)-certified rater to ensure the home design will meet program qualifications. The rater will work with the builder from the design stages through project completion; perform the required energy modeling (REM) using REM/Rate modeling software; perform site inspections and tests; and enter,

maintain, and submit all required technical documentation in the REM/Rate modeling software and the NEEA-maintained AXIS database. This data is used to calculate the energy savings and the percent above code information needed to certify the home.

### Program Activities

Participating residential builders who built homes at least 10% above the standard state energy code, as determined by the REM/Rate energy modeling software and AXIS database output, were incentivized as follows:

- 10 to 14.99% above code: $1,200 incentive
- 15 to 19.99% above code: $1,500 incentive
- 20% or more above code: $2,000 incentive

In 2023, the company paid incentives for 64 newly constructed energy-efficient homes in Idaho, accounting for 234,945 kWh of energy savings. An additional 130 homes remained in the queue for verification by the program QA provider, having been temporarily delayed as the QA provider and program rater worked through reporting requirements.

### Marketing Activities

Idaho Power participated in the Snake River Valley Building Contractors Association (SRVBCA) and the Building Contractors Association of Southwestern Idaho (BCASWI) builders' expos and sent marketing materials to the winter and fall Idaho Building Contractors Association (IBCA) Board Meetings.

Idaho Power supported 2023 Parade of Homes events with full-page ads in the *Parade of Homes* magazines of the following BCAs: The Magic Valley Builders Association (MVBA), the BCASWI, the SRVBCA, and the Building Contractors Association of Southeast Idaho (BCASEI).

The company sent a bill insert to 287,399 Idaho customers in May to promote the program.

The program brochure was left at the City of Boise permitting office as a hard-copy handout.

### Cost-Effectiveness

The savings for the 64 energy-modeled homes averaged approximately 3,671 kWh per home depending on which efficiency upgrades were included, an increase over the average energy-modeled savings of 3,097 kWh per home in 2022. The increase was largely due to two factors: a higher percentage of homes built in 2023 (61%) were built 20% or more above code, relative to homes built in 2022 (30%); and a higher percentage of homes built in 2023 were detached single-family homes (23%), relative to homes built in 2022 (8%). Single-family homes tend to have large savings when compared to attached townhomes.

While savings are custom calculated for each of the 64 modeled homes, the incremental costs over a code-built home are difficult to determine. The RTF's single-family new construction workbook was used as proxy for the incremental costs and non-energy benefits.

The UCT and TRC for the program are 1.05 and 1.25, respectively. The decline in the UCT cost-effectiveness between 2022 and 2023 is largely due to the application of the DSM avoided costs from the *2021 IRP*. On average, the benefit value declined 13% between the *2019 Second Amended IRP* and the *2021 IRP*. Regarding the increase in TRC cost-effectiveness, the calculation includes tax credits for the participant. As part of the *Inflation Reduction Act of 2022*, Section 45L Tax Credit for Energy Efficient New Homes was updated and extended. Finally, if the amount incurred for the 2023 evaluation was removed from the program's cost-effectiveness, the UCT would be 1.23 and the TRC would be 1.42.

For detailed information for all measures within the Rebate Advantage program, see *Supplement 1: Cost-Effectiveness.*

### Evaluations

The Residential New Construction Program underwent a third-party impact evaluation for program year 2023. The complete evaluation, including all evaluator recommendations can be found in *Supplement 2: Evaluation*.

Recommendations from the evaluators are listed below (in italics) followed by Idaho Power's response.

***Monitor the Primary Heating Rating (HSPF) of installed heating equipment and discuss equipment selection and modeling practices with builders and raters.*** Idaho Power understands equipment selection is a builder decision, but the company will encourage the raters to continue to educate the builders on the benefits of equipment with higher HSPF as a primary driver in energy savings for each home in the program.

***Educate raters on potential savings from water heating.*** Idaho Power plans to create an educational piece for distribution to raters and builders to educate them on the energy saving advantage of installing heat pump water heaters in single family, new construction.

***Monitor average ceiling height.*** Note: the QA provider believes this issue was due to a rater modeling input error in a four-plex layout, not ceiling height. Idaho Power plans to work with the program QA provider on ensuring the rater's entered conditioned volume is reasonable compared to the conditioned area.

### 2024 Plans

Idaho Power is pursuing a new QA provider for 2024. The company is also going to look for an additional energy rater(s) to join the program in the Treasure Valley area.

Idaho Power plans to continue to promote this program to Idaho builders and new home buyers. These marketing efforts include ads in *Parade of Homes* magazines for the BCASWI, SRVBCA, MVBA, and the BCASEI. A bill insert is planned for spring 2024. The company also plans to continue supporting the general events and activities of the IBCA and its local affiliates. Social media and other advertising will be considered based on past effectiveness.

## *Shade Tree Project*

| | 2023 | 2022 |
|---|---|---|
| **Participation and Savings** | | |
| Participants (trees) | 2,462 | 1,874 |
| Energy Savings (kWh)* | 11,199 | 39,595 |
| Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | |
| Idaho Energy Efficiency Rider | $262,344 | $128,673 |
| Oregon Energy Efficiency Rider | $0 | $0 |
| Idaho Power Funds | $0 | $183 |
| Total Program Costs—All Sources | $262,344 | $128,856 |
| **Program Levelized Costs**** | | |
| Utility Levelized Cost ($/kWh) | $1.571 | $0.218 |
| Total Resource Levelized Cost ($/kWh) | $1.571 | $0.218 |
| **Benefit/Cost Ratios***** | | |
| Utility Benefit/Cost Ratio | 0.31 | 1.02 |
| Total Resource Benefit/Cost Ratio | 0.42 | 1.21 |

* 2022 savings include incremental savings for trees planted between 2013–2018 not claimed in previous years. 2023 savings include incremental savings for 2019 trees not claimed in previous years.

** Levelized costs calculated using reported savings for the current year and current year's expenses.

*** 2023 cost-effectiveness ratios include evaluation expenses. If evaluation expenses were removed from the program's cost-effectiveness, the 2023 UCT and TRC would be 0.33 and 0.45, respectively.

### Description

Idaho Power's Shade Tree Project operates in a small geographic area each spring and fall, offering no-cost shade trees to Idaho residential customers. Participants enroll using the online Energy-Saving Trees tool and pick up their tree at specific events. Unclaimed trees are donated to cities, schools, and other non-profit organizations.

Using the online enrollment tool, participants locate their home on a map, select from a list of available trees, and evaluate the potential energy savings associated with planting in different locations. During enrollment, participants learn how trees planted to the west and east save more energy over time than trees planted to the south and north.

Ensuring the tree is planted properly helps it grow to provide maximum energy savings. At the tree pick-up events, participants receive additional education on where to plant trees for maximum energy savings and other tree care guidance from local experts. These local specialists include city arborists from participating municipalities, Idaho Power utility arborists, and county master gardeners.

According to the DOE, a well-placed shade tree can reduce energy used for summer cooling by 15% or more. Utility programs throughout the country report high customer satisfaction with shade tree programs and an enhanced public image for the utility related to sustainability and environmental stewardship. Other utilities report energy savings between 40 kWh per year (coastal climate, San Diego) and over 200 kWh per year (Phoenix) per tree planted. Of the trees planted in 2023, it is estimated each surviving tree will save approximately 11 kWh per year by 2033 and 33 kWh per year by 2043. The estimated savings for each tree is adjusted to reflect the estimated survivorship of the tree.

To be successful, trees should be planted to maximize energy savings and ensure survivability. Two technological developments in urban forestry—the state sponsored Treasure Valley Urban Tree Canopy Assessment and the Arbor Day Foundation's Energy-Saving Trees tool—provide Idaho Power with the information to facilitate a shade tree project.

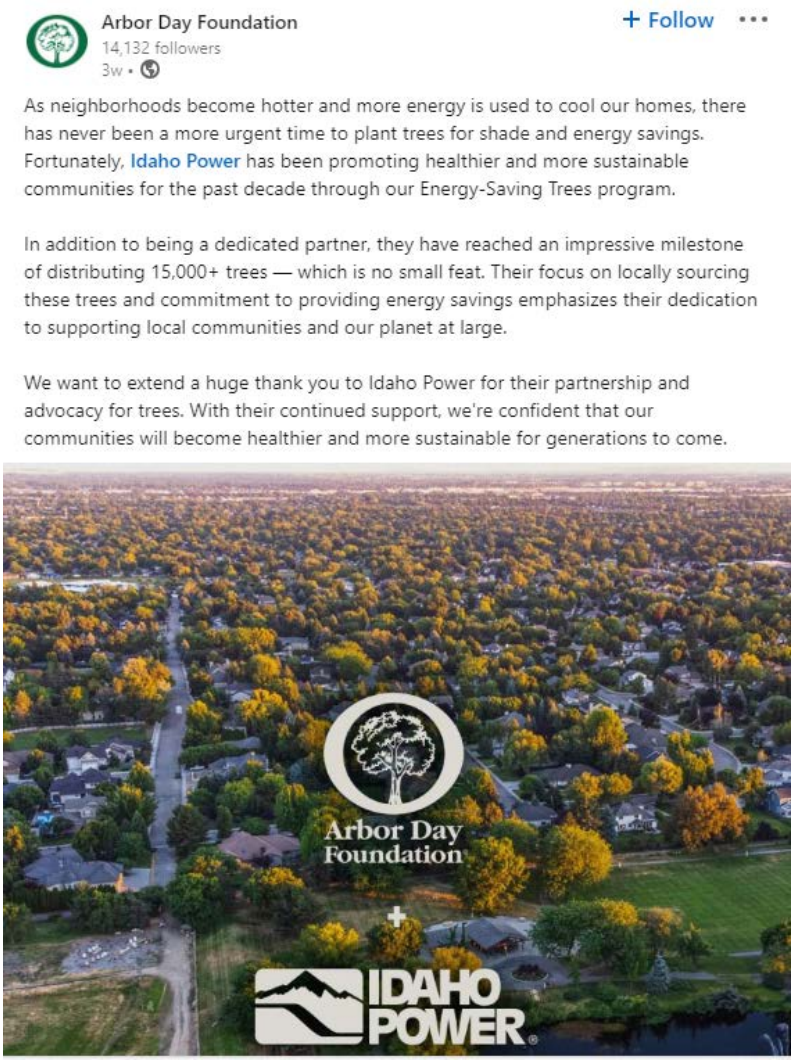


**Figure 16. Arbor Day LinkedIn post**

### Program Activities

In 2023, Idaho Power resumed holding in-person events only and did not offer any delivery trees. Idaho Power distributed 2,462 trees to residential customers through the Shade Tree Project. Because the best time to plant trees is in the spring and fall, Idaho Power held their spring offering in April for customers in the Pocatello area and the fall event in October for customers in the Treasure Valley. There were 1,273 trees distributed at two different events for the spring offering and 1,189 trees distributed over three different events for the fall offering. Idaho Power purchased the 3-gallon trees from a local wholesale nursery in advance of each event. The species offered for each event depended on the trees available at the time of purchase. Idaho Power worked with city and state arborists to select a variety of large-growing deciduous trees that traditionally grow well in the climate and soils of the two participating regions.

Idaho Power continues to track the program data in the DSM database. The database is also used to screen applicants during enrollment to determine whether participants meet the eligibility requirements for the project, such as residential status within the eligible counties. Participation eligibility in the program remains two trees per address for the life of the program.

In 2023, Idaho Power reached a huge milestone of not only giving away more than 15,000 trees, but also for celebrating a 10-year partnership with the Arbor Day Foundation for the Shade Tree Project. To celebrate this milestone, the Arbor Day Foundation made a post on their LinkedIn page congratulating Idaho Power on this achievement. Additionally, Idaho Power had a Facebook post to highlight this successful partnership.


**Figure 17. Milestone: over 15,000 trees planted**

### Marketing Activities

At the start of each spring and fall campaign, Idaho Power sent direct-mail letters and emails to select customers, explaining the benefits of shade trees and encouraging program enrollment.

In spring 2023, Idaho Power sent three emails encouraging Bannock, Bingham, Lemhi, Oneida, and Power County customers to reserve free shade trees. The company sent follow-up emails with pick-up event details and links to tree care resources to customers who registered.

The fall campaign was similar, except it was directed toward Treasure Valley customers. Due to slow enrollment, the company sent five batches of "enrollment open" emails in addition to promotion on Facebook and X. Direct-mail letters were sent to customers who signed up, outlining event details and directions on how to pick up their trees.


**Figure 18.** ***Enrollment Open*** **email for Shade Tree Project**

This year, the look and feel of the Shade Tree marketing campaign was updated to align with the new over-arching energy efficiency campaign, "Good Energy," which is reflected in the "open enrollment" email shown above.

### Cost-Effectiveness

For the Shade Tree Project, Idaho Power uses the Arbor Day Foundation's software, which calculates energy savings and other non-energy impacts based on tree species and orientation/distance from the home. This software tool, i-Tree, estimates these benefits for years 5, 10, 15, and 20 after the tree planting year. However, the savings estimates assume each tree is planted as planned and does not consider survivorship. In 2019, Idaho Power contracted with a third party to develop a model to calculate average values per tree using the

tool data and calculated a realization rate based on the survival rate. Unlike traditional energy-savings measures in which the annual savings remain flat throughout the measure life and only first-year savings are reported, the savings for trees grow as the tree grows when using the realization rate based on survival. This calculator was used to determine the reported program savings between 2019–2022.

In 2023, Idaho Power contracted with a third-party evaluator to perform an impact evaluation and audit of the past trees distributed in the Shade Tree Project. The evaluation found that while the existing calculator was acceptable for determining energy savings, the mortality rate was higher than estimated, and the savings also needed to be adjusted for the heating impact shade trees have on electrically heated homes.

Due to the size of the trees, Idaho Power does not claim savings until the fifth year after planting. In 2022, Idaho Power began claiming savings for the trees planted in 2018 as well as the additional growth savings from the growing trees planted between 2013 and 2017 that were not previously claimed. In 2022, Idaho Power claimed 39,595 kWh of incremental claimable savings for the trees planted between 2013 and 2018. However, the evaluated savings were less than calculated because of higher mortality and the application of the electric heat penalty. For simplicity and to reduce confusion, Idaho Power will report the first-year savings for trees distributed five years prior without calculating the additional savings from the growth of the older trees. For 2023, Idaho Power is reporting the first-year savings for the trees distributed in 2019. Based on the evaluation, this value is 11,199 kWh.

While the incremental savings from the growth of older trees will no longer be reported, the cost-effectiveness analysis is based on the modeled 40-year savings for the trees distributed in 2023 and costs incurred during 2023. To determine the savings for the distributed trees, Idaho Power used the savings and non-energy impact values from the i-Tree model and applied the recommended mortality rates from the evaluation as well as the electric heat adjustment. The cost-effectiveness calculations also include a NTG factor of 124%, which accounts for the spillover associated with the trees shading a neighboring home as well as various non-energy impacts related to the improved air quality, avoided stormwater runoff, and winter heating detriment. It is estimated that these trees will save approximately 24,238 kWh in 2063. Based on the model, the project has a UCT of 0.31 and a TRC ratio of 0.42. If the amount incurred for the 2023 evaluation was removed from the program's cost-effectiveness, the UCT would be 0.33 and the TRC would be 0.45.

For more detailed information about the cost-effectiveness savings and assumptions, see *Supplement 1: Cost-Effectiveness.*

### Customer Satisfaction

After each offering, Idaho Power emailed a survey to participants. The survey asked questions related to the program marketing, tree-planting education, and participants' experience with the enrollment and tree delivery processes. Results are compared, offering to offering, to look for trends to ensure the program processes are still working and to identify opportunities for improvement. Data is also collected about where and when the participant planted the tree. This data will be used by Idaho Power to refine energy-saving estimates.

In total, the survey was sent to 1,268 Shade Tree Project participants and 524 responses were received, for a response rate of 41%. Some highlights included the following:

- Approximately 39% of respondents heard about the program from an Idaho Power email, and over 28% learned of the program from a friend or relative.
- Over 84% of respondents were "very satisfied" with the information they received on the planting and care of their shade tree, while almost 15% of respondents were "somewhat satisfied."
- Participants were asked how much they would agree or disagree they would recommend the project to a friend. Nearly 96% of respondents said they "strongly agree," and almost 4% said they "somewhat agree."
- Participants were asked how much they would agree or disagree they were satisfied with the overall experience with the Shade Tree Project. Approximately 93% of respondents indicated they "strongly agree," and almost 7% "somewhat agree" they were satisfied.

View the complete survey results in *Supplement 2: Evaluation*.

### Evaluations

In 2023, Idaho Power contracted with a third-party evaluator to perform an impact evaluation on the Shade Tree Project. Through the audit, the evaluator sampled 270 households and 492 trees. Of those sampled, 182 households and 319 trees were audited. During the audit, it was found that 22% of the trees were confirmed deceased and 48% were not on the property—either given away after the customer realized they didn't have room/desire to keep the tree(s) or removed due to landscaping changes.

Listed below are the evaluators' recommendations (in italics) followed by Idaho Power's response.

***Provide participants with "browsing" control tips.*** Idaho Power will update the current Tree Planting Guide every participant receives to include tips on how to prevent the trees from being damaged or eaten by animals.

***Consider charging a small fee for each tree.*** Idaho Power will explore this option to determine if it is cost-effective and will help reduce program costs and increase energy savings.

***Consider providing a watering bag with each tree.*** Idaho Power will research the effectiveness of watering bags and determine whether it would be cost-effective to provide them with each tree at future offerings.

***Adjust planting guidance for electrically heated homes.*** Idaho Power will consider adjusting planting guidance specific to electrically heated homes.

***Partnering with residential builders for new construction projects.*** Idaho Power will investigate current landscaping practices with local builders and determine whether this option could help ensure the trees are planted in the correct location to maximize energy savings.

***Adjust the mortality rate for the first 10 growing seasons.*** Idaho Power has updated the mortality rate as recommended in calculating the future savings and cost-effectiveness for the trees distributed in 2023.

***Incorporate electric heating adjustments into calculations.*** Idaho Power has incorporated an electric heat adjustment in calculating the future savings and cost-effectiveness for the trees distributed in 2023. Because heating system or fuel type is not collected at the time of enrollment, the survey results from the 2023 survey were applied in the calculation.

***Adjust energy savings calculations.*** Idaho Power worked with the evaluators to determine how best to model the future savings for the distributed trees. The evaluators reviewed Idaho Power's savings calculations for the trees distributed in 2023 to ensure the adjustments were applied in accordance with the recommendations outlined in the evaluation.

***Continue to use the spillover and non-energy benefits calculated.*** The updated savings model the evaluators reviewed for Idaho Power also included the non-energy impacts of air pollution, carbon, and storm runoff. These non-energy impacts were calculated using the same mortality rate adjustment recommended by the evaluators. The spillover percentage is still applied in the cost-effectiveness calculation.

### 2024 Plans

In light of the 2023 evaluation results, changes will undoubtedly need to be made to the Shade Tree Project to be cost-effective going forward. Idaho Power commits to the purchase of the spring and fall trees the year prior to each event, in order for the trees to be planted and grown in a nursery to the desired size for the giveaway events. Because of this, Idaho Power plans to continue the Shade Tree Project in 2024, with the spring offering to customers in the Magic Valley and the fall event to customers in the Portneuf Valley. The program will continue to offer in-person events only. The enrollment process will remain the same, using the Arbor Day

Foundation enrollment tool. Idaho Power will work with stakeholders to develop a plan for necessary changes to the program going forward.

Idaho Power will continue to market the program through direct-mail, focusing on customers identified as living in newly constructed homes and those identified using the Urban Tree Canopy Assessment tool in the Treasure Valley. The program will explore the opportunity to be promoted in the *Home Energy Report*. In addition, Idaho Power maintains a wait list of customers who were unable to enroll because previous offerings were full. Idaho Power will reach out to these customers through email for the 2024 offerings. Idaho Power will continue to leverage allied interest groups and use social media and boosted Facebook posts if enrollment response rates decline.

## *Weatherization Assistance for Qualified Customers*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (homes/non-profits) | 167 | 147 |
| | Energy Savings (kWh) | 314,260 | 272,647 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $0 | $0 |
| | Oregon Energy Efficiency Rider | $0 | $0 |
| | Idaho Power Funds | $1,317,041 | $1,281,495 |
| | Total Program Costs—All Sources* | $1,317,041 | $1,281,495 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $0.304 | $0.338 |
| | Total Resource Levelized Cost ($/kWh) | $0.487 | $0.535 |
| **Benefit/Cost Ratios**** | | | |
| | Utility Benefit/Cost Ratio | 0.14 | 0.17 |
| | Total Resource Benefit/Cost Ratio | 0.23 | 0.32 |

*2022 and 2023 Total Program Costs include accounting accruals and reversals associated with unspent dollars carried over into the next year. These accruals and reversals have been removed from the cost-effectiveness and levelized cost calculations.

** 2023 cost-effectiveness ratios include the savings and costs associated with re-weatherization efforts. The UCT and TRC for the program alone are 0.16 and 0.25, respectively. The UCT and TRC for the re-weatherization efforts alone are 0.09 ad 0.10, respectively.

### Description

The WAQC program provides financial assistance to regional CAP agencies in Idaho Power's service area. This assistance helps fund weatherization costs of electrically heated homes occupied by qualified customers who have limited incomes. Weatherization improvements enable residents to maintain a more comfortable, safe, and energy-efficient home while reducing their monthly electricity consumption and are available at no cost to qualified customers who own or rent their homes. These customers also receive educational materials and ideas on using energy wisely in their homes. Regional CAP agencies determine participant eligibility according to federal and state guidelines. The WAQC program also provides limited funds to weatherize buildings occupied by non-profit organizations that primarily serve special-needs populations, regardless of heating source, with priority given to electrically heated buildings.

In 1989, Idaho Power began offering weatherization assistance in conjunction with the State of Idaho Weatherization Assistance Program (WAP). In Oregon, Idaho Power offers weatherization assistance in conjunction with the State of Oregon WAP. This allows CAP agencies to combine Idaho Power funds with federal weatherization funds to serve more customers with special needs in electrically heated homes.

Idaho Power has an agreement with each CAP agency in its service area for the WAQC program that specifies the funding allotment, billing requirements, and program guidelines. Currently, Idaho Power oversees the program in Idaho through five regional CAP agencies: Eastern Idaho Community Action Partnership (EICAP), El Ada Community Action Partnership (EL ADA), Metro Community Services (Metro Community), South Central Community Action Partnership (SCCAP), and Southeastern Idaho Community Action Agency (SEICAA). In Oregon, Community Connection of Northeast Oregon, Inc. (CCNO), and Community in Action (CINA) provide weatherization services for qualified customers.

The IDHW uses the DOE-approved energy audit program (Ecos) for the Idaho WAP and, therefore, the Idaho CAP agencies use Ecos.

Idaho Power reports the activities related to the WAQC program as set forth below in compliance with IPUC Order No. 29505, as updated in Case No. IPC-E-16-30, Order No. 33702 and consolidates the WAQC Annual Report with Idaho Power's *Demand-Side Management Annual Report* each year.

### Program Activities

In 2023, Idaho Power made $2,361,439 available to Idaho CAP agencies. Of the funds provided, $1,224,051 were paid to Idaho CAP agencies, while $1,137,388 were accrued for future funding. This relatively large carry over was caused by supply chain limitations and labor shortages limiting the number of homes CAP agencies weatherized.

In 2023, Idaho Power funds provided for the weatherization of 161 homes and one non-profit building in Idaho. Of the funds paid in 2023, $1,110,445 directly funded audits, energy efficiency measures, and health and safety measures for qualified customers' homes (production costs) in Idaho, and $111,045 funded administration costs to Idaho CAP agencies for those homes weatherized. The non-profit building totaled $2,329 in production costs with $233 as an administrative payment.

Table 16 shows each CAP agency, the number of homes weatherized, production costs, the average cost per home, administration payments, and total payments per county made by Idaho Power.

**Table 16. WAQC activities and Idaho Power expenditures by agency and county in 2023**

| Agency/County | Number of Homes | Production Cost | Average Cost | Administration Payment to Agency | Total Payment |
|---|---|---|---|---|---|
| **Idaho Homes** | | | | | |
| EICAP | | | | | |
| Lemhi | 1 | $ 6,015 | $ | $ 602 | $ 6,617 |
| **Agency Total** | **1** | **$ 6,015** | **6,015** | **$ 602** | **$ 6,617** |
| EL ADA | | | | | |
| Ada | 73 | 432,260 | | 43,226 | 475,486 |
| Elmore | 7 | 44,062 | | 4,406 | 48,468 |
| Owyhee | 16 | 97,287 | | 9,729 | 107,016 |
| **Agency Total** | **96** | **$ 573,609** | **$5,975** | **$ 57,361** | **$ 630,970** |
| Metro Community Services | | | | | |
| Canyon | 19 | 135,653 | | 13,565 | 149,218 |
| **Agency Total** | **19** | **$ 135,653** | **7,140** | **$ 13,565** | **$ 149,218** |
| SCCAP | | | | | |
| Blaine | 3 | 25,704 | | 2,570 | 28,274 |
| Camas | 1 | 8,998 | | 900 | 9,898 |
| Gooding | 7 | 59,219 | | 5,922 | 65,141 |
| Jerome | 4 | 50,660 | | 5,066 | 55,726 |
| Lincoln | 3 | 22,792 | | 2,279 | 25,071 |
| Twin Falls | 15 | 151,986 | | 15,199 | 167,185 |
| **Agency Total** | **33** | **$ 319,359** | **9,678** | **$ 31,936** | **$ 351,295** |
| SEICAA | | | | | |
| Bannock | 7 | 47,263 | | 4,726 | 51,989 |
| Bingham | 3 | 19,233 | | 1,923 | 21,156 |
| Power | 2 | 9,313 | | 931 | 10,244 |
| **Agency Total** | **12** | **$ 75,809** | **6,317** | **$ 7,580** | **$ 83,389** |
| **Total Idaho Homes** | **161** | **$ 1,110,445** | **6,897** | **$ 111,044** | **$ 1,221,489** |
| Non-Profit Buildings | 1 | 2,329 | | 233 | 2,562 |
| **Total Non-Profit Buildings** | **1** | **$ 2,329** | **$ 0** | **$ 233** | **$ 2,562** |
| **Oregon Homes** | | | | | |
| CCNO—Baker | 3 | 12,497 | | 1,250 | 13,747 |
| **Agency Total** | **3** | **12,497** | | **$ 1,250** | **$ 13,747** |
| CINA—Malheur | 2 | 13,759 | | 1,376 | 15,135 |
| **Agency Total** | **2** | **13,759** | | **$ 1,376** | **$ 15,135** |
| **Total Oregon Homes** | **5** | **26,256** | **5,251** | **$ 2,626** | **$ 28,882** |
| **Total Program** | **167** | **$ 1,139,030** | **6,862** | **$ 113,903** | **$ 1,252,933** |

Note: Dollars are rounded.

The base funding for Idaho CAP agencies is $1,212,534 annually, which does not include carry over from the previous year. Idaho Power's agreements with CAP agencies include a provision that identifies a maximum annual average cost per home up to a dollar amount specified in the

agreement between each CAP agency and Idaho Power. The intent of the maximum annual average cost allows the CAP agency flexibility to service some homes with greater or fewer weatherization needs. It also provides a monitoring tool for Idaho Power to forecast year-end outcomes. The average cost per home weatherized is calculated by dividing the total annual Idaho Power production cost of homes weatherized by the total number of homes weatherized that the CAP agencies billed to Idaho Power during the year. The maximum annual average cost per home in the 2023 agreement was $6,000. In 2023, Idaho CAP agencies had a combined average cost per home weatherized of $6,897. Weatherization managers report that higher costs of equipment caused higher averages in 2023.

CAP agency administration fees are equal to 10% of Idaho Power's per-job production costs. The average administration cost paid to agencies per Idaho home weatherized in 2023 was $690. Not included in this report's tables are additional Idaho Power staff labor, marketing, and support costs for the WAQC program totaling $75,626 for 2023. These expenses were in addition to the WAQC program funding requirements in Idaho specified in IPUC Order No. 29505.

In compliance with IPUC Order No. 29505, WAQC program funds are tracked separately, with unspent funds carried over and made available to Idaho CAP agencies in the following year. In 2023, $1,148,905 of unspent funds from 2022 were made available for expenditures in Idaho. Table 17 details the 2023 base funding, available funds from 2022, and the total amount of 2023 spending.

**Table 17. WAQC base funding and funds made available in 2023**

| Agency | 2023 Base | Available Funds from 2022 | Total 2023 Allotment | 2023 Spending |
|---|---|---|---|---|
| **Idaho** | | | | |
| EICAP | $ 12,788.00 | $ 0.00 | $ 12,788.00 | $ 6,616.50 |
| EL ADA | 568,479.00 | 62,490.86 | 630,969.86 | 630,969.85 |
| Metro Community Services | 302,259.00 | 332,272.39 | 634,531.39 | 149,217.76 |
| SCCAP | 167,405.00 | 325,814.98 | 493,219.98 | 351,294.96 |
| SEICAA | 111,603.00 | 248,935.07 | 360,538.07 | 83,389.92 |
| Non-profit buildings | 50,000.00 | 179,391.44 | 229,391.44 | 2,561.79 |
| **Idaho Total** | **$ 1,212,534.00** | **$ 1,148,904.74** | **$ 2,361,438.74** | **$ 1,224,050.78** |
| **Oregon** | | | | |
| CCNO | $ 6,750.00 | $ 3,375.00 | $ 10,125.00 | $ 13,746.70 |
| CINA | 38,250.00 | 19,125.00 | 57,375.00 | 15,135.05 |
| **Oregon Total** | **$ 45,000.00** | **$ 22,500.00** | **$ 67,500.00** | **$ 28,881.75** |

### *Weatherization Measures Installed*

Table 18 details home counts for which Idaho Power paid all or a portion of each measure's cost during 2023. The home counts column shows the number of times any percentage of that measure was billed to Idaho Power during the year. If totaled, measure counts would be higher than total homes weatherized because the number of measures installed in each home varies.

WAQC, like WAPs nationwide, are whole-house programs that offer several measures that have costs but do not necessarily save energy, or for which the savings cannot be measured. This includes health and safety measures and home energy audits. Health and safety measures ensure weatherization activities do not cause unsafe situations in a customer's home or compromise a home's existing indoor air quality (IAQ). Idaho Power contributes funding for the installation of items that do not save energy, such as smoke and carbon monoxide detectors, vapor barriers, electric panel upgrades, floor registers and boots, kitchen range fans, and venting of bath and laundry areas. While these items increase health, safety, and comfort and ensure certain energy-saving measures work properly, they increase costs of the job.

**Table 18. WAQC summary of measures installed in 2023**

| | Counts | | Production Costs |
|---|---|---|---|
| **Idaho Homes** | | | |
| Audit | 52 | $ | 53,410 |
| Ceiling Insulation | 14 | | 12,182 |
| LED lightbulbs | 18 | | 1,013 |
| Doors | 21 | | 18,807 |
| Ducts | 16 | | 5,205 |
| Floor Insulation | 16 | | 22,396 |
| Furnace Repair | 0 | | 0 |
| HVAC Replacement | 141 | | 885,133 |
| Health and Safety | 12 | | 12,121 |
| Infiltration | 36 | | 3,927 |
| Other | 0 | | 0 |
| Pipes | 0 | | 0 |
| Vents | 0 | | 0 |
| Wall Insulation | 3 | | 1,557 |
| Water Heater | 5 | | 9,666 |
| Windows | 35 | | 84,795 |
| **Total Idaho Homes** | | **$** | **1,110,211** |
| **Oregon Homes** | 5 | | 26,256 |
| **Total Oregon Homes** | **5** | **$** | **26,256** |
| **Idaho Non-Profits** | 1 | | 2,562 |
| **Total Idaho Non-Profit Measures** | **0** | **$** | **2,562** |

Note: Dollars are rounded.

### *Re-Weatherization*

In May 2022, with support from EEAG, Idaho Power filed a proposal (IPC-E-22-15) with the IPUC designed to address an increase in carryover funds by expanding eligibility for weatherization to include homes that had been weatherized within the last rolling 14-year period but had not received HVAC upgrades. Because these homes are not eligible to receive federal funding for re-weatherization within a rolling 14-year period based on DOE guidelines, Idaho Power's proposal was to fund HVAC upgrades at 100% of the cost for these jobs. In November 2022, the IPUC approved the company's application in Order No. 35583, and the newly approved re-weatherization option was implemented in April 2023.

After IPUC approval, a list of customers who received weatherization within a prior 14-year rolling period but did not receive HVAC system replacements were provided to weatherization managers. From these lists, weatherization managers began contacting customers and working with HVAC contractors to determine whether HVAC upgrades were warranted and to identify the type of system that would work best in the qualified home. Based on Idaho state WAP guidelines, the HVAC contractor may replace the HVAC system of the previously weatherized home and have the completed home inspected by the entity that issues the permit. Re-weatherization jobs were invoiced to Idaho Power separately from regular WAQC jobs and were paid with funds from each CAP agency's individual portion of the annual WAQC amount, which includes carry over of unused funds from previous years.

In 2023, 30 homes were re-weatherized: 5 in Capital region, 3 in Canyon/West, 17 in the Southern region, and 5 in the Eastern region (Table 19).

Of the 30 homes weatherized, 14 were manufactured homes and 16 were single-family homes. Heating upgrades included 10 zonal heat systems upgraded to ductless heat pumps, with five more zonal heat systems upgraded to air-source heat pumps where the CAP agency built ductwork to accommodate the system. Another 14 homes had their central electric furnace upgraded to air-source heat pumps, and one home had an inoperable heat pump replaced.

Spending on re-weatherization jobs totaled $358,306, with $32,573 going toward administrative costs. The average cost of the 30 re-weatherization jobs was $10,858. (Table 20)

**Table 19. WAQC re-weatherization job summary 2023**

| Region | Number of Jobs | Structures | Number of Jobs | Pre WAQC versus Post WAQC | Number of Jobs |
|---|---|---|---|---|---|
| Capital | 5 | Mobile Home | 14 | Zonal Heat to Ductless Heat Pump | 10 |
| Canyon/West | 3 | Single Family | 16 | Zonal Heat to Air-Source Heat Pump (Built Ducts) | 5 |
| Southern | 17 | | | Central Furnace to Air-Source Heat Pump | 14 |
| Eastern | 5 | | | Inoperable Heat Pump to Air-Source Heat Pump | 1 |
| **Total** | **30** | | **30** | | **30** |

**Table 20. WAQC re-weatherization spending and average job cost by agency 2023**

| Agency | Number of Jobs | Production (excludes admin.) | Administration | Total Payment (includes admin.) | Average Cost (excludes admin.) |
|---|---|---|---|---|---|
| EICAP | 1 | $6,015 | $602 | $6,617 | $6,015 |
| EI-ADA | 5 | $32,503 | $3,250 | $35,753 | $6,501 |
| METRO | 3 | $29,686 | $2,969 | $32,655 | $9,895 |
| SCCAP | 17 | $223,780 | $22,378 | $246,158 | $13,164 |
| SEICAA | 4 | $33,748 | $37,123 | $37,123 | $8,437 |
| **WAQC Re-Weatherization** | **30** | **$325,732** | **$66,321** | **$358,306** | **$10,858** |

### *Verification*

Annually, Idaho Power verifies a portion of the homes weatherized under the WAQC program. This is done through two methods. The first method uses a state monitoring process where either an independent quality-control inspector or trained peers ensure measures were installed to DOE and state WAP specifications. Utility representatives, weatherization personnel from the CAP agencies, and IDHW homes weatherized by each of the CAP agencies. In 2023, one Idaho Power funded home was chosen for review.

For the second method, Idaho Power contracts with two companies that employ building performance specialists to verify the installed measures. After verification, any required follow-up is done by CAP agency personnel. In 2023, 12 homes were verified by Idaho Power's home verifiers. Four of the 13 homes verified were re-weatherized homes and there were no findings that would have required the CAP agency or contractors to return to the home for corrections.

### Marketing Activities

Information about WAQC is available in a brochure (English and Spanish) and on the Income Qualified Customers page of Idaho Power's website. Idaho Power regional energy advisors and EOEAs promote WAQC when working directly with customers in their communities, at fairs, senior centers, and during other presentations in their regions. The CAP agencies also promote the program through their outreach activities.

In 2023, Idaho Power mailed re-weatherization offer letters to select customers (lists provided by CAP agency) in April and September. In November, Idaho Power mailed Baker County customers an informational packet about programs customers can utilize to lower their energy use and get bill assistance—within that packet was a letter about the Weatherization Assistance program.

### Cost-Effectiveness

In 2023, the WAQC program's overall cost-effectiveness was 0.14 from the UCT perspective and 0.23 from the TRC perspective. These ratios include the savings and costs associated with the re-weatherization efforts. The UCT and TRC for the WAQC-only portion of the overall program are 0.16 and 0.25, respectively. The UCT and TRC for the re-weatherization efforts alone are 0.09 and 0.10, respectively.

The savings values were updated in 2020 based on a billing analysis of program participants conducted by a third party; there were no changes to the values used for reporting from 2020 to 2023. While Idaho Power initially planned to update the analysis in 2023, the company opted to delay the analysis for another year to minimize any lingering impacts from COVID-19, as the billing analysis requires at least one year of pre- and post-weatherization data. Idaho Power plans to update this billing analysis in 2024, which will include weatherization jobs from 2019 through 2022.

While final cost-effectiveness is calculated based on measured consumption data, cost-effectiveness screening begins during the initial contacts between CAP agency weatherization staff and the customer. For Idaho state's WAP, the agency weatherization auditor uses the Ecos tool to conduct the initial audit of the home. The Ecos tool is used to compare the efficiency of the home prior to weatherization to the efficiency after the proposed improvements. The weatherization manager can split individual measure costs between Idaho Power and the agency when a minimum of 15% is paid with agency funds.

The 2023 cost-effectiveness analysis continues to incorporate the following directives from IPUC Order No. 32788:

- Applying a 100% NTG value to reflect the likelihood that WAQC weatherization projects would not be initiated without the presence of a program
- Claiming 100% of project savings
- Including an allocated portion of the indirect overhead costs
- Applying the 10% conservation preference adder
- Claiming $1 of benefits for each dollar invested in health, safety, and repair measures
- Amortizing evaluation expenses over a three-year period

Finally, the cost-effectiveness calculation removes the impacts of any accruals and reversals associated with unspent dollars carried over into the following year. The total amount of unspent funds carried into 2023 from the previous year was $11,517. Not including this amount in the cost-effectiveness calculation would understate expenses in 2023. Idaho Power will continue to work with EEAG, as well as the weatherization managers who oversee the weatherization work, to discuss ways to improve the program. For further details on the overall program cost-effectiveness assumptions, see *Supplement 1: Cost-Effectiveness*.

### Customer Education and Satisfaction

The CAP agency weatherization auditor explains to the customer which measures are analyzed and why. Further education is done as the crew demonstrates the upgrades and how they will help save energy and provide an increase in comfort. Idaho Power provides each CAP agency with energy efficiency educational materials for distribution to customers during home visits. Any customers whose homes are selected for the company's post-weatherization home verification receive additional information and can ask the home verifiers more questions.

A customer survey was used to assess major indicators of customer satisfaction throughout the service area. Program participants in all regions were asked to complete a survey after their homes were weatherized. Survey questions gathered information about how customers learned of the program, reasons for participating, how much customers learned about saving energy in their homes, and the likelihood of household members changing behaviors to use energy wisely.

Idaho Power received survey results from 114 of 147 households weatherized by the program in 2023. Some highlights include the following:

- Almost 47% of respondents learned of the program from a friend or relative, and over 10% learned of the program from an agency flyer. Several people mentioned they learned of the program from a bill stuffer or information with their Idaho Power bill.
- Almost 43% of the respondents reported their primary reason for participating in the weatherization program was to reduce utility bills, while 20% wanted to improve the comfort of their home. Almost 19% had concerns about their existing furnace.
- Over 20% reported they learned how air leaks affect energy usage, and over 19% indicated they learned how to use energy wisely during the weatherization process.
- Over 15% of respondents said they learned how to program the new thermostat. Most respondents (over 97%) reported they were likely to change habits to save energy, and 80% reported they have shared all the information about energy use with members of their household.
- Almost 89% of the respondents reported they think the weatherization they received will significantly affect the comfort of their home, and most (91.74%) said they were "very satisfied" with the program.
- Over 19% of the respondents reported the habit they were most likely to change to save energy was turning the thermostat down in winter, while over 18% said they would turn it up in the summer. Turning off lights when not in use was reported by 20% of the respondents, and washing full loads of clothes was reported by over 17% as a habit they and members of the household were most likely to adopt to save energy.

A summary of the survey is included in *Supplement 2: Evaluation*.

### 2024 Plans

In 2024, Idaho Power will continue to provide financial assistance to CAP agencies while exploring changes to improve program delivery, such as continuing the re-weatherization program for the new year and working with IDHW on ways to streamline weatherization services. The company will also continue to provide the most benefit possible to special-needs customers by working with Idaho and Oregon WAP personnel and IDHW to develop recommendations and ideas to help improve the program for customers with special needs.

Idaho Power plans to continue to verify approximately 5% of the homes weatherized under the WAQC program via home-verification companies and state monitoring processes.

In 2024, Idaho Power will support the whole-house philosophy of the WAQC program and Idaho and Oregon WAP by continuing to allow a $6,000 annual maximum average per-home cost.

In Idaho during 2024, Idaho Power expects to contribute the base amount plus available carryover funds from 2023 of just over $1,137,300 to total $2,349,800 in weatherization measures and agency administration fees. Of this amount, approximately $276,860 will be provided in the non-profit pooled fund to weatherize buildings housing non-profit agencies that primarily serve qualified customers in Idaho, with an allowance for annual unused non-profit funds to be used toward additional residential weatherization projects as needed.

Idaho Power will continue to maintain the program content on its website and include it with other marketing collateral.

## *Weatherization Solutions for Eligible Customers*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (homes) | 12 | 27 |
| | Energy Savings (kWh) | 18,184 | 48,233 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $84,428 | $198,198 |
| | Oregon Energy Efficiency Rider | $0 | $0 |
| | Idaho Power Funds | $3,292 | $7,590 |
| | Total Program Costs—All Sources | $87,719 | $205,788 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $0.347 | $0.307 |
| | Total Resource Levelized Cost ($/kWh) | $0.347 | $0.307 |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | 0.13 | 0.15 |
| | Total Resource Benefit/Cost Ratio | 0.19 | 0.23 |

### Description

Weatherization Solutions for Eligible Customers is an energy efficiency program designed to serve Idaho Power residential customers in Idaho whose income falls between 175% and 250% of the current federal poverty level. Initiated in 2008, the program is designed to mirror the WAQC program. These customers often do not have disposable income to invest in energy efficiency upgrades, and they typically live in housing similar to WAQC customers.

The program also benefits certain customers on the Idaho State WAP waiting list. When customer income overlaps both programs, this program may offer an earlier weatherization date than the state WAP, resulting in less wait time for the customer and quicker energy savings.

Potential participants are interviewed by a participating contractor to determine household occupant income eligibility, as well as to confirm the home is eligible. If the home is a rental, the landlord must agree to maintain the unit's current rent for a minimum of one year, and to help fund a portion of the cost of weatherization. If the customer is eligible, an auditor inspects the home to determine which upgrades will save energy, improve indoor air quality, and/or provide health and safety measures for the residents. To be approved, energy efficiency measures and repairs must have an SIR of 1.0 or higher, interact with an energy-saving measure, or be necessary for the health and safety of the occupants.

The Weatherization Solutions for Eligible Customers program uses a home audit tool called the HAT14.1. The home is audited for energy efficiency measures, and the auditor proposes upgrades based on the SIR ratio calculated by HAT14.1. Measures considered for improvement are window and door replacement; ceiling, floor, and wall insulation; HVAC repair and replacement; water heater repair and replacement; and pipe wrap. Also included is the potential to replace lightbulbs and refrigerators. Contractors invoice Idaho Power for the project costs, and if the home is a rental, a minimum landlord payment of 10% of the cost is required.

Idaho Power's agreement with contractors includes a provision that identifies a maximum annual average cost per home. The intent of the maximum annual average cost is to allow contractors the flexibility to service homes with greater or fewer weatherization needs. It also provides a monitoring tool for Idaho Power to forecast year-end outcomes.

### Program Activities

Due to extended COVID-19 labor shortages, some contractors continued to experience hardships hiring and training weatherization crew members, resulting in lower production numbers in 2023 as compared to 2022. One Southern region contractor weatherized 12 Idaho homes for the program. Of those 12 homes weatherized, 11 were single-family and 1 was a manufactured home. The contractor reported increased costs for materials and equipment over previous years.

An independent company performed random verifications of weatherized homes and visited with customers about the program. In 2023, two homes were verified, and measures were found to be correctly installed and performing as anticipated.

### Marketing Activities

In 2023, the company placed digital advertisements in southern Idaho's local newspaper, the *Times News*, to promote the program (see Figure 19).


**Figure 19. Weatherization Solutions ad in the *Times News***

The company shared a "success story" in the December *Connections* newsletter about a customer in Twin Falls who received assistance through the program (see Figure 20). The article pointed to the company website where customers can find program information and eligibility details (idahopower.com/weatherization).


**Figure 20. Weatherization Solutions success story in *Connections* newsletter**

### Cost-Effectiveness

In 2023, the Weatherization Solutions for Eligible Customers program cost-effectiveness was 0.13 from the UCT perspective and 0.19 from the TRC perspective.

Weatherization Solutions for Eligible Customers projects, similar to WAQC program guidelines, benefit from a pre-screening of measures through a home audit process. The home audit process ensures an adequate number of kWh savings to justify the project and provides more consistent savings for billing analysis. See WAQC cost-effectiveness for a discussion of the audit and prescreening process, which is similar for both programs. In 2024, Idaho Power plans to

conduct a billing analysis of program participants to update the savings assumptions associated with the program.

For further details on the overall program cost-effectiveness assumptions, see *Supplement 1: Cost-Effectiveness*.

### Customer Satisfaction

A customer survey was used to assess major indicators of customer satisfaction with the program throughout the service area. Program participants were asked to complete a survey after their homes were weatherized. Survey questions gathered the following information:

- How customers learned of the program
- Reasons for participating
- How much customers learned about saving energy in their homes
- The likelihood of household members changing behaviors to use energy wisely

Idaho Power received survey results from 11 of 12 households weatherized by the program in 2023. Some highlights include the following:

- Over 27% of respondents learned of the program from a friend or relative, and over 27% more learned of the program from a letter in the mail.
- Over 46% of the respondents reported their primary reason for participating in the weatherization program was to improve the comfort of their home, and over 30% wanted to reduce their utility bills.
- Twenty percent reported they learned how to reduce the amount of hot water used, and 20% also said they learned how to use energy wisely.
- Over 18% of respondents said they learned how air leaks affect energy usage, how insulation affects energy usage, and how to understand what uses the most energy in their home.
- Almost 91% of the respondents reported they think the weatherization they received will significantly affect the comfort of their home, and 100% said they were “very satisfied” with the program.
- Over 33% of the respondents reported the habit they were most likely to change was unplugging electrical equipment when not in use, and almost 10% said that washing full loads of clothes, washing full loads of dishes, and turning the thermostat down in winter were the habits they were likely to adopt to save energy.

A summary of the survey is included in *Supplement 2: Evaluation*.

### 2024 Plans

It is anticipated that program activity may be lower than normal again in 2024 due to continued worker shortages and the high volume of WAQC applicants on regional CAP agency waiting lists.

Idaho Power will update brochures as necessary to help spread the word about the program in 2024. If needed, additional marketing for the program may include bill inserts, emails, *News Briefs*, website updates, and ads in various regional publications, particularly those with a senior and/or low-income focus. Social media posts and boosts, coordinated partner content, and employee education may be used to increase awareness. Regional marketing and targeted digital ads will be considered based on need as evidenced by any regional contractor's waiting list for Weatherization Solutions for Eligible Customers services.

## Commercial & Industrial Sector Overview

In 2023, Idaho Power's C&I sector consisted of 78,719 commercial, governmental, school, and small business customers. The number of customers increased by 1,280, or 1.6%, versus 2022. Energy use per month for customers in this sector is not as homogenous as other customer sectors and can vary by several hundred thousand kWh each month depending on customer type. In 2023, the commercial sector represented 27.4% of Idaho Power's total retail annual electricity sales.

Industrial and special contract customers are Idaho Power's largest individual energy consumers. In 2023, there were 128 customers in this category, representing approximately 22.6 % of Idaho Power's total retail annual electricity sales.

Idaho Power's C&I sector has many energy efficiency programs available to commercial, industrial, governmental, schools, and small business customers. The suite of options can help businesses of all sizes implement energy efficiency measures.

**Table 21. Commercial & Industrial sector program summary, 2023**

| | | Total Cost | | Savings | |
|---|---|---|---|---|---|
| **Program** | **Participants** | **Utility** | **Resource** | **Annual Energy (kWh)** | **Peak Demand (MW)*** |
| **Demand Response** | | | | | |
| Flex Peak Program | 271 sites | $ 1,076,149 | $ 1,076,149 | | 32.9/38.8 |
| **Total** | | **$ 1,076,149** | **$ 1,076,149** | | **32.9/38.8** |
| **Energy Efficiency** | | | | | |
| CIEE | | | | | |
| Custom Projects | 95 projects | 11,359,176 | 26,228,419 | 60,667,088 | |
| Green Motors Initiative—Industrial | 17 motor rewinds | 0 | 11,915 | 63,538 | |
| New Construction | 102 projects | 2,168,636 | 2,990,934 | 10,642,465 | |
| Retrofits | 526 projects | 3,184,964 | 9,012,722 | 14,457,180 | |
| Commercial Energy-Saving Kits | 1,117 kits | 55,563 | 55,563 | 190,827 | |
| Small Business Direct Install | 166 projects | 366,674 | 366,674 | 791,512 | |
| **Total** | | **$ 17,135,013** | **$ 38,666,227** | **86,812,609** | |

**Notes:**

See Appendix 3 for notes on methodology and column definitions.

Totals may not add up due to rounding.

* Demand response program reductions are reported with 7.6% peak loss assumption. Maximum actual demand reduction/maximum demand capacity.

### *Commercial and Industrial DSM Programs*

**C&I Energy Efficiency—Custom Projects.** For projects not covered by the New Construction or Retrofits options, Custom Projects offers incentives for qualifying custom energy efficiency

projects and energy-management measures, such as strategic energy management (SEM) cohorts, tune-ups, system optimization, and recommissioning. Additionally, Idaho business customers who wish to find ways to save energy and to quantify their savings can obtain a scoping assessment and detailed assessment through this option.

**C&I Energy Efficiency—New Construction.** This option offers specific incentives for designing and building better-than-code energy-efficient features into a new construction, major renovation, addition, expansion, or change-of-space project. A PAI is available for the architect or engineer for supporting technical aspects and documentation of the project.

**C&I Energy Efficiency—Retrofits.** This option offers prescriptive incentives for energy-saving retrofits to existing equipment or facilities.

**Green Motors Initiative (GMI).** This initiative offers incentives to rewind motors. Under the GMI, service center personnel are trained and certified to repair and rewind motors to improve reliability and efficiency. If a rewind returns a motor to its original efficiency, the process is called a "Green Rewind." By rewinding a motor under this initiative, customers may save up to 40% of the cost of a new motor.

**Commercial Energy-Saving Kits.** This program offered free commercial kits filled with products and tips to help businesses save energy. The commercial kit was assembled and delivered directly to Idaho Power's business customers by a third-party vendor. Commercial Energy-Saving Kits closed in 2023 due to cost-effectiveness.

**Flex Peak Program.** This demand response program pays an incentive to C&I customers who voluntarily reduce energy use during periods of high energy demand or for other system needs.

**Small Business Direct Install (SBDI).** This program targeted typically hard-to-reach small business customers. SBDI was implemented by a third-party contractor that provided turn-key services. Idaho Power paid 100% of the cost to install eligible measures for customers who use less than 25,000 kWh annually. SBDI was offered to eligible customers in a strategic geo-targeted approach. SBDI closed in 2023 after offering the program to customers throughout the Idaho Power service area and after experiencing cost-effective challenges.

**Oregon Commercial Audits.** This statutory-required program offers free energy audits, evaluations, and educational products to Oregon customers to help them achieve energy savings.

### *Marketing*

In 2023, Idaho Power continued to market the programs listed above, targeting the following customers: commercial, industrial, government, schools, small businesses, electrical contractors, architects, engineers, and other design professionals.

### Bill Inserts

A bill insert highlighting how Idaho Power's incentives can save customers money was included in 38,503 business customer bills in March, and a version of the insert was included in 38,035 bills in July.

### Print and Digital Advertising

In 2023, the print ads focused on promoting offered incentives and their availability to businesses of all sizes. The company also continued to promote energy efficiency with messages around safe, reliable, affordable, clean energy in select publications.

Print ads ran in the *Idaho Business Review* in February, March, May, August, September, October, November, and December. Also, ads ran in the Building Owners and Managers Association (BOMA) membership directory and symposium program, *Idaho Business Review Top Projects Awards* publication, and the Idaho Association of General Contractors membership directory. Additionally, Idaho Power sponsored the Construction section in the *Idaho Business Review's Book of Lists*, which included an energy efficiency ad and an article highlighting an energy efficiency project and the company's energy efficiency programs.

Idaho Power continued using search engine marketing to display Idaho Power's C&I Energy Efficiency Program near the top of the search results with the paid search terms when customers search for energy efficiency business terms. These ads received 117,699 impressions and 19,172 clicks.

### Newsletters

Idaho Power produces and distributes *Energy@Work*, a quarterly newsletter about Idaho Power company information and energy efficiency topics for business customers. In 2023, each newsletter was delivered electronically, with the addition of a hard-copy newsletter in the second quarter.

- In March, the spring issue was emailed to 14,506 customers. The issue focused on Flex Peak demand response program enrollment and energy efficiency incentives benefitting Amalgamated Sugar and the Ford Idaho Center.
- The summer issue was emailed to 15,191 customers and mailed to 25,180 in June. The issue focused on summer energy efficiency tips, enrollment in the campus cohort for energy efficiency, using feedback to improve the customer experience, and 2023 training opportunities.
- The fall issue was emailed to 18,647 customers in September. The issue included information on energy efficiency incentives that benefited the Purpose Center in Pocatello, Retrofits program incentive updates, and Idaho Power's efforts on improving reliability.

- The winter issue was emailed to 18,820 customers in December. The issue included a thank-you to participants in the Flex Peak demand response program, an article about earning incentives to repair compressed air system leaks, the introduction of the Multifamily program, and information on the Nampa School District earning an incentive for energy efficiency.

### Radio

Idaho Power sponsored messages on public radio stations in Boise, Twin Falls, and Pocatello from August through September. The company ran a total of 406 messages in Boise and Twin Falls, and 703 messages in Pocatello.

### Social Media

Idaho Power continued using regular LinkedIn posts focused on energy-saving tips, program details, and incentives. When appropriate, these messages were also shared on Idaho Power's Facebook and X pages.

### Public Relations

Idaho Power provides PR support to customers who want to publicize the work they have done to become more energy efficient. Upon request, Idaho Power creates large-format checks used for media events and/or board meetings. Idaho Power will continue to assist customers with PR opportunities by creating certificates for display within their buildings and participating in press events or opportunities, if requested.

These opportunities were available in 2023 for several companies, including Amalgamated Sugar, The Purpose Center of Pocatello, the Ford Idaho Center, and Nampa School District.

### Association and Event Sponsorships

Idaho Power's C&I Energy Efficiency Program typically sponsors several associations and events.

The company sponsored the BOMA Commercial Real Estate Symposium, February 6 and 7, 2023 and placed an energy efficiency ad and an article highlighting an energy efficient project in the event program. During the event, BOMA played a short video highlighting Idaho Power's commercial and industrial programs, slides were presented with energy efficiency tips and program information that rotated on the screen before the event, and Idaho Power had a booth with materials promoting energy efficiency. Energy efficiency program takeaway brochures were placed at each table.

Idaho Power remained a sponsor of the *Idaho Business Review's Top Projects Awards* held in October in Boise. An Idaho Power employee spoke about the value of energy efficiency and encouraged participation in the energy efficiency programs. An ad to congratulate the top

project finalists and associated professional firms was placed in the event program with energy efficiency program information.

### Customer Satisfaction

Idaho Power conducts the *Burke Customer Relationship Survey* each year. In 2023, on a scale of zero to 10, small business survey respondents rated Idaho Power 7.96 regarding offering programs to help customers save energy, and 7.88 related to providing information on how to save energy and money. Over 18% of small business respondents indicated they have participated in at least one Idaho Power energy efficiency program. Of the small business survey respondents who have participated in at least one Idaho Power energy efficiency program, 95.4% are "very" or "somewhat" satisfied with the program.

In 2023, on a scale of zero to 10, large C&I survey respondents rated Idaho Power 8.86 regarding offering programs to help customers save energy, and 8.86 related to providing customers with information on how to save energy and money. Over 37% of large C&I respondents indicated they have participated in at least one Idaho Power energy efficiency program. Of the large C&I survey respondents who have participated in at least one Idaho Power energy efficiency program, 100% are "very" or "somewhat" satisfied with the program.

### Training and Education

In 2023, Idaho Power engineers, program staff, field representatives, and hired consultants continued to provide technical training and education to help customers learn how to identify opportunities to improve energy efficiency in their facilities. The company has found that these activities increase awareness and participation in its energy efficiency and demand response programs and enhance customer program satisfaction. To market this service and distribute the training schedule and resources, Idaho Power used its website, email, and the *Energy@Work* newsletter.

During each training session, a program engineer gave an overview of the C&I Energy Efficiency Program incentives available to customers.

As part of the training and education outreach activity, Idaho Power collaborated with and supported stakeholders and organizations, such as Integrated Design Lab (IDL) and the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE). Using Idaho Power funding, IDL performed several tasks aimed at increasing the energy efficiency knowledge of architects, engineers, trade allies, and customers. Specific activities included sponsoring a Building Simulation Users Group (BSUG), conducting Lunch & Learn sessions at various design and engineering firms, and offering the Energy Resource Library (ERL).

Idaho Power delivered five technical training sessions in 2023. Topics included the following:

- Harmonics (Burley—In person only)
- Harmonics (Boise—Hybrid)
- Energy Efficiency Programs Workshop (Boise—Hybrid)
- Fundamentals of Compressed Air Systems (Pocatello—Hybrid)
- Industrial Refrigeration (Boise—Hybrid)

The level of participation in 2023 remained high, with 185 individuals signing up and 159 attending the technical sessions. Customer feedback indicated the average satisfaction level was 94%. Idaho Power's average cost to deliver the technical trainings in 2023 was approximately $3,529.97 per class. Idaho Power continues to assess feedback from customers to offer relevant courses as well as accommodate their technical training needs.

Additionally, Idaho Power offered six live, online technical training sessions to industrial wastewater customers, and extended invitations to those outside of the cohort participants. Topics included the following:

- Water Conservation for Energy Savings
- Blower Optimization
- Data Variability
- Anaerobic Digestion
- Cohort overview and Energy Basics
- Wastewater Typical No-/Low-Cost Opportunities

Industrial wastewater trainings were attended by 74 participants. Cohort members and other operators were invited and offered continuing education units for industrial wastewater professionals. Each course is designed to study improved operation, quality, and energy performance for different systems.

Aside from the classes listed above, Idaho Power also partnered with the Northwest Energy Efficiency Council (NEEC) to administer Building Operator Certification (BOC) Level I and Level II Courses. Idaho Power sponsored 15 customers who signed up for the training and paid $900 of the $2,095 tuition cost upon completion. Furthermore, Idaho Power sponsored two customers to attend BOC continuing education webinars in which Idaho Power paid 50% of the tuition.

### *Field Staff Activities*

Idaho Power is staffed with knowledgeable and enthusiastic energy advisors who conduct annual visits to each of the company's large power customers. These annual meetings frequently lead to further engagements, as the advisors learn about ongoing and upcoming projects where Idaho Power's expertise can provide significant support to their operations.

The topic of energy efficiency remains a key focus during yearly meetings with customers. Although many have leveraged incentives to boost efficiency in 2023, some faced challenges due to limited staffing, which affected their participation.

Additionally, there's a growing trend toward monitoring and reducing carbon footprints, extending beyond their own operations to include their suppliers' footprints. Some customers are even considering a shift to 100% electric energy to align with their sustainability objectives and reduce their carbon impact. Idaho Power has been actively assisting these customers in evaluating energy efficiency opportunities to align effectively with their energy management goals and sustainability objectives.

Overall, findings continue to indicate that the most cost-effective way for customers to achieve their sustainability goals and reduce costs is through energy efficiency. Many are benefiting from cohort programs, which facilitate long-term behavioral changes in their operations for greater energy efficiency.

## *Commercial and Industrial Energy Efficiency Program*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings*** | | | |
| | Participants (projects) | 740 | 728 |
| | Energy Savings (kWh)** | 85,830,271 | 106,683,366 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source***** | | | |
| | Idaho Energy Efficiency Rider | 16,711,552 | $16,301,140 |
| | Oregon Energy Efficiency Rider | 349,484 | $266,764 |
| | Idaho Power Funds | 16,714,001 | $3,445 |
| | Total Program Costs—All Sources | 16,712,776 | $16,571,349 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $0.021 | $0.016 |
| | Total Resource Levelized Cost ($/kWh) | $0.047 | $0.043 |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | 2.79 | 2.86 |
| | Total Resource Benefit/Cost Ratio | 1.48 | 1.33 |

*Metrics for each option (New Construction, Custom Projects, and Retrofits) are reported separately in the appendices and in *Supplement 1: Cost-Effectiveness*.

**2022 total includes 19,851 kWh of energy savings from 9 GMI projects. 2023 total includes 63,538 kWh of energy savings from 17 GMI projects.

***2022 and 2023 dollars include totals for New Construction, Custom Projects, and Retrofits.

### Description

Three major program options targeting different energy efficiency projects are available to commercial, industrial, governmental, schools, and small business customers in the company's Idaho and Oregon service areas: Custom Projects, New Construction, and Retrofits.
Idaho Power has found providing facility energy assessments, customer technical training, and education services are key to encouraging customers to consider energy efficiency modifications. Incentives reduce customers' payback periods for custom modifications and promote energy-saving operations that might not otherwise be completed. The 2023 activities and results not already described in the C&I Sector Overview are described below.

#### *Custom Projects*

The Custom Projects option provides incentives for energy efficiency modifications to new and existing facilities. The goal is to encourage energy savings in Idaho and Oregon service areas by helping customers implement energy efficiency upgrades or energy management projects. Additionally, Idaho Power operates SEM cohorts under the Custom Projects option.

The Custom Projects option also offers energy assessment services and customer training to help identify and evaluate potential energy-saving modifications or projects.

Interested customers submit a pre-approval application to Idaho Power for potential modifications identified by the customer, Idaho Power, or a third-party consultant. Idaho Power reviews each application and works with the customer and vendors to provide or gather sufficient information to support the estimated energy-savings calculations, then pre-approves the project. Then, the customer moves forward with the project. In some cases, large, complex projects may take as long as two or more years to complete.

Once the project is completed, customers submit a payment application, and each project is reviewed to ensure energy-saving measures are installed and operating and energy savings are achieved. Idaho Power engineering staff or a third-party consultant verifies the energy-savings methods and calculations. Through this verification process, the energy savings are finalized and the project costs are calculated.

On the larger and more complex projects, Idaho Power or a third-party consultant conducts on-site power monitoring and data verification (M&V) before and after project implementation to confirm energy savings are obtained and are within program guidelines. If changes in project scope take place, Idaho Power recalculates energy savings and incentive amounts based on the actual installed equipment and performance.

### *New Construction*

The New Construction option enables customers in Idaho Power's Idaho and Oregon service areas to incorporate energy-efficient design features and technologies into a new construction, major renovation, addition, expansion, or change-of-space project. The customer may otherwise lose savings opportunities for these types of projects. Initiated in 2004, the New Construction option currently offers incentives for 34 energy-saving building and design features related to efficient lighting, lighting controls, building shell, HVAC equipment, HVAC controls, variable speed drives, refrigeration, compressed air equipment, appliances, and other equipment. A complete list of the measures offered through New Construction is included in *Supplement 1: Cost-Effectiveness*. The new construction and major renovation project design and construction process often encompasses multiple calendar years. In addition to the customer incentive, a PAI is available to architects and/or engineers for supporting technical aspects and documentation of a project.

### *Retrofits*

Retrofits is Idaho Power's prescriptive measure option for existing facilities that offers incentives to customers in Idaho and Oregon for a defined list of energy efficiency upgrade measures. Eligible measures cover a variety of energy-saving opportunities in lighting, HVAC,

building shell, food service equipment, and other commercial measures. A complete list of the measures offered through Retrofits is included in *Supplement 1: Cost-Effectiveness*.

### Program Activities—Custom Projects

The Custom Projects option provides incentives for both custom capital projects and energy-management projects.

Incentive levels for custom capital projects remained the same in 2023, at $0.18 per estimated kWh savings for one year, up to 70% of the project cost.

Idaho Power provides incentives for conducting pressurized, underground water leak assessments and fixing those leaks. The program reimburses $1,000 per 5 miles of pipe inspected with ultrasound leak detection for a third-party leak assessment in addition to the standard capital project incentive of $0.18 per kWh of first-year savings for repair.

The energy management incentive of $0.025 per first-year kWh saved, up to 100% of the eligible costs (added in 2020), also remained the same in 2023. Compared to typical custom capital projects, energy management projects tend to have the following:

- A shorter measure life and a much lower cost
- O&M changes that save energy without interrupting the customer's service or production
- Cost-effective energy savings from measures rooted in low-cost O&M improvements

Compressed air system leak repairs are eligible under the energy management incentive at $0.025 per kWh estimated to be saved in one year, up to 100% of project cost. Customers can use their own instrumentation or work with one of Idaho Power's third-party consultants to identify leaks. Energy savings achieved from fixing leaks can be quantified, and project costs are calculated by factoring in the material cost to fix the leaks as well as any labor requirements.

Idaho Power funds the cost of engineering services, and increased the maximum from $4,500 up to $6,000 for conducting energy scoping assessments to encourage its larger customers to adopt energy efficiency improvements. The increase was implemented to allow additional identification and estimation of demand response opportunities eligible for the Flex Peak Program. This led to the initiation of 10 assessments that included Flex Peak Demand Response strategy identification, eight of which were completed in 2023. The company is currently contracted with six firms to provide scoping assessments and general energy efficiency engineering support services through 2025. Two of the firms are focused on energy modeling to support cohorts and other energy management offerings. The other four firms provide a wide array of engineering services, including scoping assessments, detailed assessments, energy modeling, Green Motors rewind facilitation, and various SEM programs.

Supply chain issues and customer staff turnover impacts continued to present challenges for projects in 2023, and many projects were slowed down by these issues. Despite these challenges, the Custom Projects option had a successful year with a total of 95 completed projects (two of which were in Oregon) and achieved energy savings of 60,667 MWh (Table 22), which is an 8% increase compared to 2022.

Idaho Power also received 104 new applications in 2023, representing a potential of 43,114 MWh of savings on future projects.

In 2023, Idaho Power contractors completed 45 assessments on behalf of Idaho Power customers. These assessments identified over 54,078 MWh of savings potential, which was used as the basis of savings for some projects completed in 2023 and will be used to promote future projects.

**Table 22. Custom Projects annual energy savings by primary option measure, 2023**

| Option Summary by Measure | Number of Projects | kWh Saved |
|---|---|---|
| Compressed Air | 11 | 8,297,579 |
| Energy Management | 20 | 7,561,125 |
| Fans | 1 | 115,167 |
| HVAC | 5 | 685,562 |
| Other | 4 | 827,555 |
| Pump | 3 | 425,915 |
| Refrigeration | 24 | 17,305,585 |
| VFD | 27 | 25,448,600 |
| **Total*** | **95** | **60,667,088** |

*Does not include GMI project counts and savings.

Custom Projects engineers and the key account energy advisors visited large C&I customers to conduct initial facility walk-throughs, commercial/industrial efficiency program informational sessions, and training on specific technical energy-saving opportunities. Virtual/remote capabilities were implemented when health or safety restrictions were necessary. Idaho Power provided sponsorship for the 2023 ASHRAE Technical Conference that had numerous energy efficiency related presentations. Idaho Power also provided a sponsorship and a leadership team member to the American Council for an Energy Efficiency Economy to support North American SEM Collaborative activities. Custom Projects engineers gave presentations on Idaho Power programs and offerings at the Cohort for Schools Final Workshop, the Idaho Rural Water Association Spring Conference, and multiple presentations at Cohort Workshops (virtual). Idaho Power sponsored exhibit booths at the Idaho Rural Water Association Spring Conference, ASHRAE Technical Conference, and Facilities Maintenance Expo.

The Streamlined Custom Efficiency (SCE) offering works to keep vendor engagement high, targeting projects that are typically too small to participate under the Custom Projects option.

Currently, the SCE offering provides custom incentives for refrigeration controllers for walk-in coolers; process-related VFDs; and other small, vendor-based projects that do not qualify for prescriptive incentives.

Idaho Power contracted with a third party to manage SCE data collection and analysis for each project. In 2023, the SCE offering processed 27 projects totaling 7,607 MWh of savings and $862,517 in incentives.

### *Cohorts*

Idaho Power has SEM cohorts to engage with customers in group settings, allowing interaction and economies of scale in working with multiple customers on SEM.

The Industrial Energy Efficiency Cohort (IEEC), Campus Cohort for Energy Efficiency (CCFEE), and the Continuous Energy Improvement (CEI) Cohort for Schools program offerings are driving a significant number of new projects in addition to an increase in projects from the SCE offering while providing high levels of customer satisfaction with the programs. Reported cohort savings correlate to energy management incentives; any capital projects promoted or identified in SEM are reported and incentivized through the Custom Projects, New Construction or Retrofits options of the C&I Program, not as a cohort savings number.

Cohorts are structured to offer three phases of support.

1. The active phase, typically the first two years of engagement with strong consultant support, includes energy team development, energy policy development, energy model creation, training and report-out workshops, energy champion and team calls, and general energy efficiency awareness.
2. The maintaining phase includes medium consultant support and is typically years three through five or six. This phase includes consultant maintenance of facility energy models, monthly energy champion calls, report-out workshops, and ongoing general development to transition to self-sustaining operations.
3. The sustaining phase is typically beyond year five or six where the participants manage activities on their own, including maintenance of energy models and ongoing focus on energy-saving activities. Participants in this phase have the option to participate in report-out workshops, but cohort-related energy savings are no longer claimed and consultant support is minimal.

**Water Supply Optimization Cohort (WSOC).** The WSOC began in January 2016. The goal of the cohort is to equip water professionals with the skills necessary to independently identify and implement energy efficiency opportunities that produce long-term energy and cost savings. The Eastern Idaho Water Cohort (EIWC) began in January 2018 with the goal to offer the WSOC to the eastern part of Idaho Power's service area. These two cohorts are collectively

represented under the WSOC offering, despite EIWC being two years junior to WSOC in terms of program life. All the participants in this cohort completed their fifth year and transitioned into the sustaining phase. The cohort offering was wrapped up, but engagements for capital projects and trainings are still ongoing.

**Wastewater Energy Efficiency Cohort (WWEEC).** In January 2014, Custom Projects launched WWEEC, a two-year cohort training approach and incentives for low-cost or no-cost energy improvements for 11 municipal wastewater facilities in Idaho Power's service area. In 2016, Idaho Power increased the duration of WWEEC to further engage customers. The participants in this cohort graduated to sustaining mode, or they ceased engagement with the program. This cohort was transitioned to be supported through the new Industrial Energy Efficiency Cohort for any wastewater facility that wants energy efficiency support.

**Industrial Energy Efficiency Cohort (IEEC).** Year one of the IEEC officially began in September 2022. Recruitment efforts for the first year were limited to municipal wastewater facilities or large industrial facilities that had their own wastewater treatment systems. Two municipal and four industrial customers signed up to participate in the first year.

Program year two began in September 2023. One facility did not continue with the program due to exhausting their opportunities to save energy and nearing completion of their entirely new wastewater system. Two new industrial customers joined for year two as the cohort has an open enrollment to support new participants as they join. There are seven active participants in year two. A new focus of the cohort that began in year two was to incorporate a "holistic approach" that could support more than just wastewater systems. Since the cohort includes large industrial customers, participants now can have subsystems upstream of the wastewater treatment analyzed for energy efficiency opportunities. Examples of subsystems include compressed air, refrigeration, HVAC, process equipment, and more. To this end, the cohort was renamed from Industrial Wastewater Energy Cohort to Industrial Energy Efficiency Cohort. This cohort continues to offer technical trainings to non-cohort participants to continue the engagement of customers in the Idaho Power programs.

**Campus Cohort for Energy Efficiency (CCFEE).** The new CCFEE kicked off in June 2023 with five different customers enrolled and 21 sites. This cohort is for any customer that operate a campus of facilities including, but not limited to, universities, hospitals, correctional facilities, and government facilities.

In 2023, three workshops were held for cohort participants in which they learned about HVAC fundamentals, engaging employees in energy efficiency, building an energy team, and tracking their energy usage with modeling. There were also on-site visits conducted for the participants. The first visit was focused on touring the campus and doing a deep dive into their HVAC system

and controls to see how they might make it run more efficiently. The second visit was a focused "treasure hunt" in which teams walked the site to identify energy efficiency opportunities.

So far, a total of 819 possible energy-savings measures have been identified across the 21 sites. Project implementation on some of these measures has already taken place and will continue to take place in 2024 with the final energy savings reporting period ending in July 2024.

**Continuous Energy Improvement Cohort for Schools.** The goal of this cohort is to equip school district personnel with hands-on training and guidance to help them get the most out of their systems while reducing energy consumption. The sixth program year of the Cohort for Schools ran from June 2022 through May 2023 to coincide with the standard school calendar; reported energy savings are based on the program year.

Five school districts participated in the program in 2023. Of those five, three districts are modeling all schools in their district. One district added two new facilities each in this program year for a total of 40 facilities engaged with the offering during the 2023 program year. The cohort is implemented by a third-party consultant that provided final savings reports for each school district, which totaled 75,405 kWh. Incentive checks were provided totaling $1,885.13 for 2023. All facilities were re-baselined in 2023, as most were originally baselined in 2016, and COVID-19 impacts have fundamentally changed the way many facilities are operating. This re-baselining is the primary reason for lower savings this year compared to prior years.

Activities in 2023 included managing a list of energy efficiency opportunities for each facility detailing low- and no-cost opportunities to reduce energy consumption. The consultant worked with each participant to complete as many identified opportunities as possible. Afterward, the consultant checked in monthly by phone to review the list of opportunities and to discuss current activities. Idaho Power provided program and incentive information, both in hard copy and electronically, along with many other energy-saving resources pertinent to school facilities.

Final program year workshops were held September 20, 2023, in Boise and September 21, 2023, in Twin Falls where results were reported for the program year. Districts shared successes, lessons learned, and other details pertinent to their energy-saving journeys.

The 2023 to 2024 program year activities will continue until May 31, 2024. Idaho Power will review final M&V reports to establish energy savings and eligible costs for the program year activities and will distribute the corresponding incentives to participating school districts.

### *Green Motors Initiative*

Idaho Power participates in the Green Motors Practices Group's (GMPG) GMI. Under the GMI, service center personnel are trained and certified to repair and rewind motors to improve reliability and efficiency. If a rewind returns a motor to its original efficiency, the process is called a "Green Rewind." By rewinding a motor under this initiative, customers may save up to

40% of the cost of a new motor. The GMI is available to Idaho Power's agricultural, commercial, and industrial customers.

Currently, nine motor service centers have signed on as GMPG members in Idaho Power's service area. Under the initiative, Idaho Power pays service centers $2.00 per horsepower (hp) for each National Electrical Manufacturers Association (NEMA)-rated motor up to 5,000 hp that receives a verified Green Rewind. Half of that incentive is passed on to the customer as a credit on their rewind invoice. The GMPG requires all member service centers to sign and adhere to the GMPG Annual Member Commitment Quality Assurance agreement. The GMPG is responsible for verifying QA.

In 2023, a total of 17 C&I customers' motors were rewound, and the savings for the GMI was 63,538 kWh.

### Program Activities—New Construction

In 2023, a total of 102 projects were completed, resulting in 10,642,465 kWh of energy savings in Idaho and Oregon. The C&I construction industry was extremely active in Idaho Power's service area in 2023, although the industry is experiencing higher interest rates, causing delays for some projects. New Construction had a 16% increase in number of projects and a 61% decrease in total savings compared to 2022: in 2023 the average savings was 104,338 kWh compared to 313,813 kWh in 2022.

Maintaining a consistent offering is important for large projects with long construction periods; however, changes are made to enhance customers' choices or to meet new code changes. Idaho Power strives to keep the New Construction option consistent by making changes approximately every other year. The program was updated in 2023 by adding one new measure to its offerings: an incentive for electrically heated indoor pool covers, added September 5, 2023.

In addition to the customer incentive, a PAI is available to the architects or engineers for supporting technical aspects and documentation of a project. The PAI is equal to 20% of the participant's total incentive with a maximum allowed of $5,000 per application.

The PAI increases the engagement with architects and engineers and is most beneficial to small and medium businesses as they prepare project documentation. These customers typically do not have staff with a technical background in construction, which can make completing applications and submitting documentation a challenge.

In 2023, a total of 51 projects, or 50% of the projects paid, received the PAI compared to 43 projects, or 49% of the total projects paid, in 2022. The PAI will continue to be offered due to positive feedback from customers, architects, and engineers.

In 2023, third-party on-site verification occurred on 13 of the 102 projects, or 13% of the total projects completed.

The New Construction engineer and Idaho Power energy advisors continued outreach to customers, professionals, and professional organizations throughout 2023. Meetings were held with specific customers or professionals to build relationships with the local design community and to discuss Idaho Power's New Construction option as well as the overall C&I Energy Efficiency Program. An Idaho Power representative attended 14 Lunch and Learn sessions provided by the IDL to provide energy efficiency program information to attendees. Additionally, Idaho Power energy advisors and the New Construction engineer presented program information to three professional organizations, three government agencies, two suppliers, and three design firms. Idaho Power energy advisors also provided energy efficiency program information during customer visits and calls.

See *Supplement 2: Evaluation* for the complete IDL report.

### Program Activities—Retrofits

The Retrofits option achieved 14,457,180 kWh of energy savings in 2023, representing 526 projects. Lighting retrofits comprised most of the energy savings and project count.

In an effort to increase program participation, and in consideration of the feedback received from several participating trade allies, the company reviewed the lighting measure incentive levels. It was found that incentive increases could be cost-effectively made to respond to market feedback. The incentive for screw-in LED lamps was removed to reflect EISA lighting standards that became effective in 2023. At the same time, the company reviewed the program's non-lighting measures and determined some measures could be added to the menu and some existing measures needed slight modification or removal.

Idaho Power offered two in-person technical lighting training classes for trade allies and large customers on the topic of networked/luminaire level lighting controls. The company also held Retrofits program update workshops in Twin Falls, Pocatello, and Boise, along with two virtual options, to review the pending changes with trade allies and large commercial customers. In addition, the company met with several trade ally companies (in person and virtually, per their request) to review the Retrofits program and associated incentives.

Idaho Power continued its contracts with various consultants to provide ongoing program support for lighting and non-lighting project reviews and inspections, as well as trade ally outreach.

### Marketing Activities

Idaho Power continued to primarily market the C&I Energy Efficiency Program as a single offering to businesses.

See the C&I Sector Overview for the company's additional efforts to market the C&I Energy Efficiency Program. Below are the option-specific marketing efforts for 2023.

#### *Custom Projects*

In addition to program-level marketing activities, Idaho Power created multiple brochures including a revamped Industrial Energy Efficiency Cohort brochure, a Campus Cohort recruitment brochure, a Compressed Air Leak Repair brochure, and a School Cohort Success and Recruitment brochure. Idaho Power continued to present large-format checks to interested Custom Projects participants and publicized these events to local media, when applicable. Several of these were facilitated by key account energy advisors in 2023.

In 2023, Idaho Power continued to promote GMI as part of the C&I Energy Efficiency Program marketing efforts.

#### *New Construction*

The company continued to place banners on select construction sites highlighting that the facility is being built or enhanced with energy efficiency in mind. A banner remained at St. Luke's McCall Medical Center throughout 2023. Also, the brochure, website, and FAQs were updated to reflect any program changes.

#### *Retrofits*

The company updated the brochures, website, and FAQs to reflect changes in the program measures. Periodically, the company sent out emails promoting lighting incentives. The company's customer solutions advisors then followed up by making phone calls to customers who received the email.

### Cost-Effectiveness

#### *Custom Projects*

Projects submitted through the Custom Projects option must meet certain cost-effectiveness requirements, which include TRC, UCT, and/or PCT tests, depending on the state. The program requires that all costs related to the energy efficiency implementation and energy-savings calculations are gathered and submitted with the program application. Payback is calculated with and without incentives, along with the estimated dollar savings for installing energy efficiency measures. As a project progresses, any changes to the project are used to recalculate energy savings and incentives before the incentives are paid to the participant. To aid in

gathering or verifying the data required to conduct cost-effectiveness and energy-savings calculations, third-party engineering firms are sometimes used to provide an assessment, or engineering M&V services are available under the Custom Projects option.

The UCT and TRC ratios for the program are 2.91 and 1.44, respectively. Non-energy impacts were applied in 2023 based on an estimated per-kWh value by C&I end-uses. These values were provided by a third party as part of the 2019 impact evaluation of the New Construction and Retrofits options. Details for the program cost-effectiveness are in *Supplement 1: Cost-Effectiveness*.

### *New Construction*

To calculate energy savings for the New Construction option, Idaho Power verifies the incremental efficiency of each measure over a code or standard practice installation baseline. Savings are calculated through two main methods. When available, savings are calculated using actual measurement parameters, including the efficiency of the installed measure compared to code-related efficiency. When precise measurements are unavailable, savings are calculated based on industry-standard assumptions. Because the New Construction option is prescriptive and the measures are installed in new buildings, there are no baselines of previous measurable kWh usage in the building. Therefore, Idaho Power uses industry-standard assumptions and the International Energy Conservation Code (IECC) to calculate the savings based on an assumed baseline (i.e., how the building would have used energy absent of efficiency measures).

New Construction incentives are calculated mainly through a dollar-per-unit equation using square footage, tonnage, operating hours, or kW reduction.

The UCT and TRC ratios for the program are 2.78 and 2.74, respectively. Non-energy impacts were applied in 2023 based on an estimated per-kWh value by C&I end-uses. These values were provided by a third party as part of the 2019 impact evaluation of the New Construction and Retrofits options. The decrease in the program's overall cost-effectiveness is largely due to the decrease in savings between 2022 and 2023.

Complete, updated measure-level details for cost-effectiveness can be found in *Supplement 1: Cost-Effectiveness*.

### *Retrofits*

For most of 2023, Idaho Power used most of the same savings and assumptions as were used after the program changes in 2022 for the Retrofits option. For all lighting measures, Idaho Power uses a Lighting Tool developed by a third party. An initial analysis is conducted to see if the lighting measures shown in the tool are cost-effective based on the average input of watts and hours of operation, while the actual savings for each project are calculated based on specific information regarding the existing and replacement fixture. For most non-lighting

measures, deemed savings from the *Technical Reference Manual* (TRM) or the RTF are used to calculate the cost-effectiveness. The program made slight modifications to its offerings in September 2023. At that time, incentives for most lighting measures increased and the savings for the food service equipment measures were updated with the current savings from the RTF workbooks. The new savings were reflected on all applications after the September 2023 program update.

The UCT and TRC ratios for the program are 2.35 and 1.17, respectively. Non-energy impacts were applied in 2023 based on an estimated per-kWh value by C&I end-uses. These values were provided by a third party as part of the 2019 impact evaluation of the New Construction and Retrofits options.

Complete updated measure-level details for cost-effectiveness can be found in *Supplement 1: Cost-Effectiveness*. Assumptions for measures prior to the September 2023 update can be found in the *Demand-Side Management 2022 Annual Report, Supplement 1: Cost-Effectiveness*.

### Customer Satisfaction

In 2023, a survey was sent to Retrofits customers who had a lighting project installed by a contractor to evaluate the customers' satisfaction level. Survey questions gathered information about how customers learned of the program and their satisfaction with the program, contractor, and equipment.

The survey invitation was sent to 251 program participants, and Idaho Power received survey results from 69 respondents. Some highlights include the following:

- More than 56% of respondents learned of the program from a contractor, and more than 14% learned of the program from an Idaho Power employee.
- Approximately 84% of respondents said they were "very satisfied" with the program, and almost 12% of respondents indicated they were "somewhat satisfied."
- Approximately 86% of respondents said they were "very satisfied" with the contractor they hired to install their equipment, and approximately 12% of respondents indicated they were "somewhat satisfied."
- Nearly 90% of respondents said they were "very satisfied" with the equipment installed, and over 7% of respondents said they were "somewhat satisfied."

A copy of the survey results is included in *Supplement 2: Evaluation*.

### 2024 Plans

In 2024, the three options will continue to be marketed as part of Idaho Power's C&I Energy Efficiency Program. Below are specific program option strategies.

### *Custom Projects*

In 2024, the company plans to expand deployment of the commercial energy-savings tool, Find n' Fix, which, in conjunction with engineering services, helps identify and quantify energy-savings opportunities for commercial customers. Also, the compressed air leak detection and repair offering available to larger customers, like the water-leak measure launched in 2020, will be marketed and potentially expanded in 2024 to allow for calculations from other types of ultrasonic leak detectors.

Activities and coaching will continue for the campus, school, and industrial cohort participants.

The Industrial Wastewater Energy Cohort transitioned to a holistic approach offering and became the IEEC to support other energy efficiency opportunities in addition to wastewater. This will allow recruitment to broaden in 2024 to more industrial customers without wastewater treatment systems.

Idaho Power will continue to provide the following:

- In-person or virtual site visits and energy-scoping assessments by Custom Projects engineers or consultants to identify projects and energy savings opportunities.
- Funding for detailed energy assessments for larger, complex projects. Virtual assessments can also be offered in many cases.
- M&V of larger, complex projects. Virtual M&V can also be used as conditions allow.
- Technical training for customers, presented virtually or in person as conditions allow.

### *New Construction*

Idaho Power will continue to build relationships in 2024 by sponsoring technical training through the IDL to address the energy efficiency education needs of design professionals throughout Idaho Power's service area.

### *Retrofits*

Idaho Power will continue to offer a menu of lighting and non-lighting incentives to commercial customers in 2024.

## *Commercial Energy-Saving Kits*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (kits) | 1,117 | 334 |
| | Energy Savings (kWh) | 190,827 | 48,758 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $53,167 | $21,604 |
| | Oregon Energy Efficiency Rider | $2,397 | $1,140 |
| | Idaho Power Funds | $0 | $25 |
| | Total Program Costs—All Sources | $55,563 | $22,770 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $0.054 | $0.059 |
| | Total Resource Levelized Cost ($/kWh) | $0.054 | $0.059 |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | 1.02 | 0.78 |
| | Total Resource Benefit/Cost Ratio | 1.17 | 0.87 |

### Description

The Commercial Energy-Saving Kit (Commercial ESK) program was offered to commercial business customers in Idaho and Oregon. One kit was offered to business customers who had not previously received a commercial kit. The kit included: two 9-watt LED A lamps, two 8-watt LED BR30 lamps, a bathroom aerator, an exit sign retrofit, and a kitchen aerator. Idaho Power used a third-party vendor for kit assembly and mailing. The vendor sent the kit directly to the customer on the company's behalf. The Commercial ESK program closed in June 2023.

### Program Activities

The savings for Commercial ESK were largely based on the assumed installation rates for each kit item. A 2022 evaluation recommended the company consider removing exit sign retrofit kits and the aerators due to low installation rates and the associated lower savings. Additionally, the evaluators recommended the company remove the LED lightbulbs from the kit due to the EISA lighting standards that went into effect in 2023. The 2022 evaluation recommended that Idaho Power consider providing other measures to add to the kit.

Idaho Power consulted with its commercial kit vendor to identify any additional measures. One suggestion from the evaluator was occupancy sensors, but there were concerns around proper installation and compatibility with existing systems as well as cost-effectiveness.

Considering the foregoing, the company concluded the Commercial ESK would no longer be cost-effective. As a result, the company ended the Commercial ESK offer in June 2023.

**Table 23. Number of kits distributed per state and associated energy savings**

| State | Total Distributed | kWh Savings |
|---|---|---|
| Idaho | 1,072 | 182,697 |
| Oregon | 45 | 8,130 |

### Marketing Activities

In 2023, Idaho Power promoted the commercial kits using LinkedIn ads, March through June, resulting in 548 clicks.

The company displayed a pop-up ad to small business customers who logged into My Account in May, resulting in 211 users clicking on the ad. Customers signing into My Account could click the pop-up ad and request a kit through the vendor's online order form.

In March, April, May, and June, the company sent an email to over 14,000 business customers. This tactic resulted in a 45.19% open rate and 213 kits ordered the day the March email was sent, a 42.9% open rate and 121 kits ordered the day the April email was sent, a 42.7% open rate and 131 kits ordered the day the May email was sent, and a 41.48% open rate and 103 kits ordered the day the June email was sent. Idaho Power's customer solutions advisors (CSA) also promoted the commercial kit during their calls with business customers and offered to sign up customers who requested the kit during the call.

### Cost-Effectiveness

Because no deemed savings values exist for the Commercial ESK program, Idaho Power made several assumptions. When the offering launched in mid-2018, the installation rates of the items in the kit were unknown. Idaho Power estimated the installation rates based on professional judgement. Idaho Power updated this assumption in 2021 based on the follow-up survey sent to customers in 2020. In 2022, evaluators surveyed 2021 participants and updated the installation rates for each item.

At the November 2021 EEAG meeting, Idaho Power shared the cost-effectiveness challenges for the kit program and proposed four possible options. With direction from EEAG, it was decided to simplify the offering to one kit, continue sending the kit per customer request, and track the business type ordering the kit. For the LEDs and aerators, savings vary based on the average annual hours of use (HOU) and annual gallons of water used by business type. As recommended by the evaluators, Idaho Power continued to update the electric water heat saturation assumptions based on the self-reported fuel type at the time of enrollment. However, Idaho Power was unable to update the installation rates as recommended by the evaluation. Idaho Power received 63 responses to its survey. While the installation rates appeared higher than

what was shown in the evaluation, the results were not statistically significant. Therefore, Idaho Power used the installation rates from the 2022 evaluation.

The 2023 average savings per kit was 170 kWh, which is an increase over the 2022 average kit savings of 148 kWh. This increase in per-unit savings is largely due to the variety of self-reported business types that received kits, which impacted the HOU and gallons of water use assumptions. While the kits were cost-effective in 2023, the offering continued to face cost-effectiveness challenges. With the full implementation of the EISA lightbulb standards in July 2023, the evaluators recommended removal of LED lightbulbs from the kit offering. Due to the declining savings opportunities and rising costs, the kits would no longer be cost-effective going forward. The program closed June 30, 2023.

For more information about the cost-effectiveness savings and assumptions, see *Supplement 1: Cost-Effectiveness*.

### Customer Satisfaction

In 2023, a follow-up survey was sent to program participants. The purpose of the survey was to obtain the installation rates for the kit items. Idaho Power received 63 responses. Due to the low number of survey responses, Idaho Power did not use the installation rates from the survey to update the savings assumptions for the program.

- 73% of respondents said they were “very satisfied” with the program, and almost 16% of respondents indicated they were “somewhat satisfied.”
- 71% of respondents indicated they installed both 9-watt LED A lamp lightbulbs.
- 52% of respondents indicated they installed the first 8-watt LED BR30 lightbulb while 40% of respondents indicated they installed the second 8-watt LED BR30 lightbulb.
- 16% of respondents indicated they installed the LED retrofit kit for exit signs.
- 43% of respondents indicated they installed the kitchen aerator.
- 44% of respondents indicated they installed the bathroom aerator.

A copy of the survey results is included in *Supplement 2: Evaluation*.

### 2024 Plans

No activities are planned for 2024, as this program is closed.

## *Flex Peak Program*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (buildings) | 271 | 159 |
| | Energy Savings (kWh) | n/a | n/a |
| | Demand Reduction (MW)* | 32.9/38.8 | 24.5/30.0 |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $135,731 | $84,582 |
| | Oregon Energy Efficiency Rider | $242,133 | $151,148 |
| | Idaho Power Funds | $698,285 | $283,888 |
| | Total Program Costs—All Sources | $1,076,149 | $519,618 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | n/a | n/a |
| | Total Resource Levelized Cost ($/kWh) | n/a | n/a |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | n/a | n/a |
| | Total Resource Benefit/Cost Ratio | n/a | n/a |

* Maximum actual demand reduction/maximum potential demand reduction. Demand response program reductions are reported with 7.6% peak loss assumptions in 2023 and 9.7% peak loss assumptions in 2022.

### Description

The Flex Peak Program is a voluntary demand response program where large C&I customers in Idaho and Oregon are eligible to earn a financial incentive for reducing load. The objective of the program is to reduce the demand on Idaho Power's system during periods of high energy demand or for other system needs.

The program originated in 2009—as the FlexPeak Management program—administered by a third-party contractor. In 2015, Idaho Power took over full administration and changed the name to Flex Peak Program. The IPUC issued Order No. 33292 on May 7, 2015, and the OPUC approved Advice No. 15-03 on May 1, 2015, authorizing Idaho Power to implement an internally managed Flex Peak Program (Schedule No. 82 in Idaho and Schedule No. 76 in Oregon) and to continue recovering its demand response program costs in the previous manner. A new program option per Case IPC-E-22-24 went into effect in 2023, with the addition of the automatic dispatch option.

Customers with the ability to offer load reduction of at least 20 kW are eligible to enroll in the program. The 20-kW threshold allows a broad range of customers to participate.

The parameters of the program are in Schedule 76 in Oregon and Schedule 82 in Idaho, and include the following:

- A minimum of three events will occur each program season
- Events can occur any weekday (excluding Independence Day and Labor Day) between 3 and 10 p.m. and last between two to four hours
- Events can occur up to four hours per day and up to 16 hours per week, but no more than 60 hours per program season
- Idaho Power will notify participants four hours prior to the initiation of an event
- If prior notice of an event has been sent, Idaho Power can choose to cancel the event and notify participants of cancellation at least 30 minutes prior to the start of the event
- Customers can choose a manual or automatic dispatch option (2023 was the first year Idaho Power offered an automatic dispatch option)

A minimum of three events allows the company to test processes and software and helps customers fine tune their curtailment plan. Additionally, the company believes by calling at least three events per season the program will be more effective in providing consistent and reliable reduction.

### *Program Incentives*

The program includes both a fixed and variable incentive payment. The fixed incentive is calculated by multiplying the actual kW reduction by $3.25 for weeks when an event is called or the weekly nominated kW amount by $3.25 for weeks when an event is not called. The variable energy incentive is calculated by multiplying the kW reduction by the event duration hours to achieve the total kilowatt-hour (kWh) reduction during an event. The variable incentive payment is $0.20 per kWh and is implemented for events that occur after the first four events.

The program also includes an incentive adjustment of $2.00 per kW not achieved for each event hour when participants do not achieve their nominated amount during events, which is subtracted from their credit or payment. Incentives are calculated using Idaho Power's interval metering billing data. Participants can elect to have their incentive checks mailed or their Idaho Power account credited within 45 days of the end of the program season. The incentive structure offered for the 2023 season is listed in Table 24.

**Table 24. Flex Peak 2023 incentive structure**

| Fixed-Capacity Payment Rate* | Variable Energy Payment Rate** |
|---|---|
| $3.25 per Weekly Effective kW Reduction | $0.20 per kWh (actual kW reduction x hours of event) |
| **Adjustment (subtracted from payment)** | |
| $2.00 per kW of nomination not achieved for each hour of the event | |

*To be prorated for partial weeks

**Does not apply to first four program events

### Program Activities

In 2023, 82 participants enrolled 271 sites in the program. This was an increase of 18 participants and 120 sites from the previous year (2022). Existing customers were automatically re-enrolled. There were five customers (eight sites) that did not re-enroll, as demand reduction was not in line with their facilities' needs for 2023. Participants had a nominated demand reduction of 31.4 MW in the first week of the program and ended the season with a nominated demand reduction of 37.0 MW. The maximum potential demand reduction of the program came from the nominated amount in the ninth week of the season at 38.8 MW. The reason the company uses the full nominated amount from the highest week for the maximum potential demand reduction is because events can and have achieved the full nominated amount.

The weekly nomination was comprised of 255 of the 271 sites. The maximum realization rate achieved during the season was 86%, and the season average for the three events combined was 69%. The realization rate is the percentage of demand reduction achieved versus the amount of demand reduction committed for an event. The highest hourly demand reduction achieved was 32.9 MW (at generation level) during the August 1 event (Table 25).

**Table 25. Flex Peak Program demand response event details**

| Event Details | Tuesday, August 1 | Tuesday, August 15 | Thursday, August 17 |
|---|---|---|---|
| Event time | 3–7 p.m. | 4–8 p.m. | 5–9 p.m. |
| Average temperature | 100° F | 101° F | 102° F |
| Maximum hourly demand reduction (MW) | 32.9 | 21.2 | 26.3 |

Enrollment specific to the Oregon service area included six participants totaling nine sites enrolled. These nine sites had an average nominated capacity for the season of 8.4 MW and achieved a maximum reduction during the season of 10.0 MW during hour four on the August 1 event. Individual participant performance as well as total program event performance can be found in *Supplement 2: Evaluation*.

New in 2023 was the automatic dispatch option. Customers that chose to participate in this way utilized a load control device that Idaho Power operates. There were two automatic dispatch participants controlling a total of nine sites in 2023. A total of 80 participants chose the manual option for 262 sites.

New this year, Idaho Power initiated 10 energy assessments for large customers to help determine potential for load shed and identify specific load shed tactics and sequences that could be initiated for events. Eight assessments were completed and resulted in three enrollments into the program for 2023.

The company used historical data and industry-specific load reduction potential to identify and conduct 75 energy advisor target visits with customers and incorporated reduction strategies into energy assessments and cohort trainings to identify potential load reduction opportunities. The program created an Event Day Action Plan for the energy advisors to use during their target visits to help customers identify potential load reduction opportunities.

The company hosted three workshops geared toward controls contractors, building owners/operators, and customers, highlighting the new automatic dispatch option.

Figures 21 and 22 represent the enrolled capacity (total nominations) for 2023 by regional service areas and by business type, respectively.

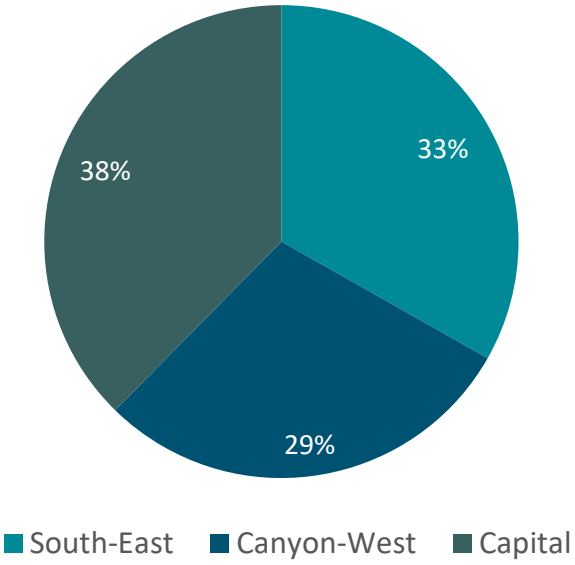


**Figure 21. Enrolled capacity (% of total nomination) by region, 2023**

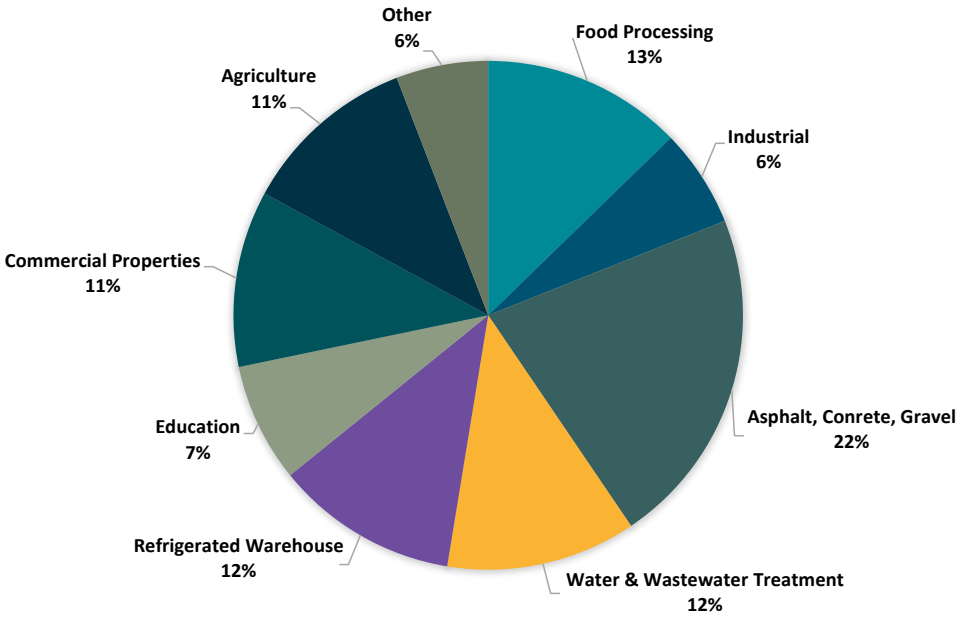


**Figure 22. Enrolled capacity (% of total nomination) by business type, 2023**

Idaho Power uses interval metering data to calculate the reduction achieved per site, providing each participant and associated energy advisor with an individualized report showing their hourly baseline, actual usage, and reduction after each event. The program specialist identifies participants who under/over reduce, thus potentially needing to adjust their nomination and/or load-reduction strategy. The energy advisor works directly with participants to refine their nomination for future events.

### Marketing Activities

In 2023, the program brochures and website were updated to reflect the addition of the automatic dispatch option. The company ran a My Account pop-up ad in May promoting enrollment to large commercial customers that resulted in 65 users clicking on the ad.
In March, the company emailed 21 national accounts in its service area. Also, the company sent an email in March to 11,381 business customers and an email in May to 490 business customers. This tactic resulted in a 44.27% open rate in March and 43.05% open rate in May. Additionally, a LinkedIn ad ran March through May promoting program enrollment resulting in 1,519 clicks, and a thank-you note to participants was posted on LinkedIn in October.

This year the company included new marketing tactics of digital display ads and search engine marketing. Web users were exposed to 2,047,636 display ads (animated GIF image ads embedded on a website) based on their demographics, related to online articles they viewed, or their use of a particular mobile web page or app. Users clicked the ads 10,486 times, resulting in a click-through rate of 0.5%. Search engine marketing displayed Idaho Power's Flex

Peak Program near the top of the search results with the paid search terms when customers search for Flex Peak and demand response terms. These ads received 5,321 impressions and 830 clicks.

The company's energy advisors shared program details with potential and current participants. The Flex Peak Program continued to be included in its C&I Energy Efficiency Program collateral. Additional details can be found in the C&I Sector Overview.

### Cost-Effectiveness

Idaho Power determines cost-effectiveness for its demand response programs using the approved method for valuing demand response under IPUC Order No. 35336 and approved by the OPUC on February 8, 2022, in Docket No. ADV 1355. Using financial and avoided cost assumptions from the *2021 Integrated Resource Plan*, the defined cost-effective threshold for operating Idaho Power's three demand response programs for the maximum allowable 60 hours is $84.57 per kW under the current program parameters.

The Flex Peak Program was dispatched for 12 event hours and achieved a maximum load reduction of 32.9 MW and a maximum nomination capacity of 38.8 MW. The total cost of the program in 2023 was $1,076,149. Had the Flex Peak Program been used for the full 60 hours, the potential cost would have been approximately $1.4 million. Using the potential cost and the average maximum capacity results in a cost of $36.40 per kW, which shows the program was cost-effective.

A complete description of Idaho Power cost-effectiveness of its demand response programs is included in *Supplement 1: Cost-Effectiveness.*

### Evaluations

To evaluate the program each year, Idaho Power prepares a Flex Peak Program End-of-Season Report that presents load reduction calculations and analysis, and detailed results from the program season. See *Supplement 2: Evaluation* for the 2023 report. A brief overview of the results is provided in this section.

Figure 23 compares the average and maximum demand reduction achieved for each event. The maximum actual demand reduction achieved ranged from a low of 21.2 MW with a realization rate of 54% to a high of 32.9 MW with a realization rate of 86%.

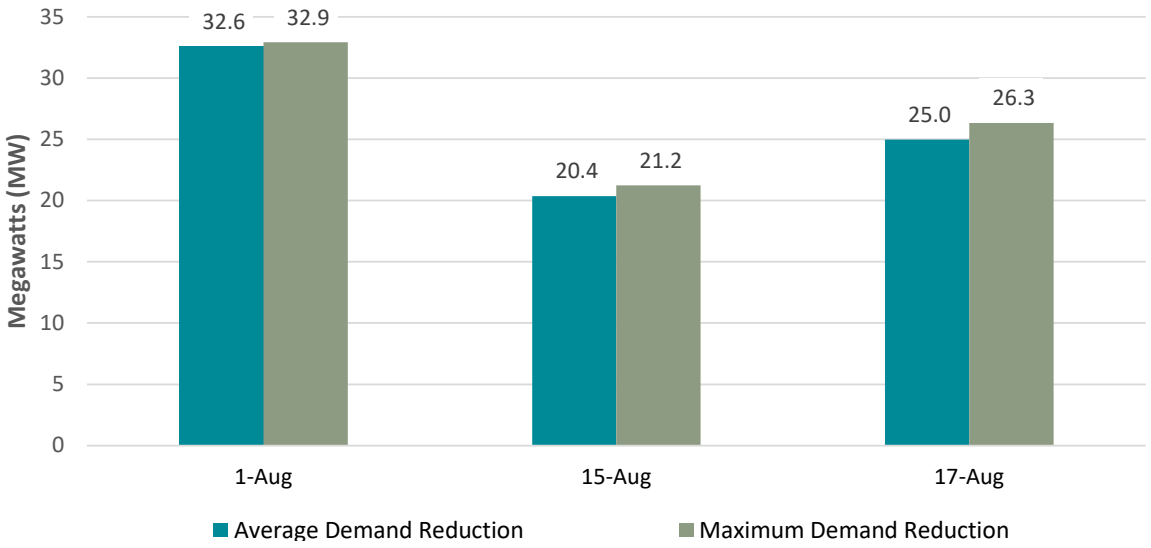


**Figure 23. Average and maximum demand reduction achieved per event, 2023**

The program currently contributes approximately 12.3% of the company's overall DR portfolio and can be relied on to provide dispatchable load reduction to the electrical grid.

### 2024 Plans

For the upcoming season, Idaho Power will continue its focus on retaining currently enrolled participants and will be using email marketing, paid search, digital display ads, and other tactics to boost program enrollment. Energy assessments conducted by Idaho Power engineers or contract engineers will be offered to large customers to help determine potential for load shed and identify specific load shed tactics and sequences that could be initiated for events.
The company will continue to assess customer interest and seek collaborative ways for their participation in the program. The program will also continue to be marketed along with the C&I Energy Efficiency Program.

## *Oregon Commercial Audits*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (audits) | 7 | 12 |
| | Energy Savings (kWh) | n/a | n/a |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $0 | $0 |
| | Oregon Energy Efficiency Rider | $6,402 | $7,493 |
| | Idaho Power Funds | $0 | $0 |
| | Total Program Costs—All Sources | $6,402 | $7,493 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | n/a | n/a |
| | Total Resource Levelized Cost ($/kWh) | n/a | n/a |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | n/a | n/a |
| | Total Resource Benefit/Cost Ratio | n/a | n/a |

### Description

Oregon Commercial Audits identifies opportunities for all Oregon C&I building owners, governmental agencies, schools, and small businesses to achieve energy savings. Initiated in 1983, this statutory required program (ORS 469.865) is offered under Oregon Tariff Schedule No. 82.

Through this program, Idaho Power provides no-cost energy audits, evaluations, and educational products to customers through a third-party contractor. During the audits, the contractor inspects the building shell, HVAC equipment, lighting systems, and operating schedules, if available, and reviews past billing data. These visits provide an opportunity for the contractor to discuss available incentives and specific business operating practices for energy savings. The contractor may also distribute energy efficiency program information and remind customers that Idaho Power personnel can offer additional energy-savings tips and information. Business owners can decide to change operating practices or make capital improvements designed to use energy wisely.

### Program Activities

During 2023, there were seven audits completed at separate facilities for seven customers. The program contractor conducted the audits, and an Idaho Power energy advisor was available to assist customers.

### Marketing Activities

Idaho Power sent its annual direct-mailing to 1,715 Oregon commercial customers in October to explain the program's no-cost or low-cost energy audits and the available incentives and resources.

### Cost-Effectiveness

As previously stated, the Oregon Commercial Audits program is a statutory program offered under Oregon Schedule 82, the Commercial Energy Conservation Services Program. Because the required parameters of the Oregon Commercial Audits program are specified in Oregon Schedule 82 and the company abides by these specifications, this program is deemed to be cost-effective. Idaho Power claims no energy savings from this program.

### 2024 Plans

Idaho Power does not expect to make any operational changes in 2024. The company will continue to market the program through the annual customer notification and will consider additional opportunities to promote the program to eligible customers via its energy advisors.

## *Small Business Direct Install*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (audits) | 166 | 680 |
| | Energy Savings (kWh) | 791,512 | 3,228,365 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $357,404 | $1,317,820 |
| | Oregon Energy Efficiency Rider | $9,270 | $27,558 |
| | Idaho Power Funds | $0 | $51 |
| | Total Program Costs—All Sources | $366,674 | $1,345,429 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $0.055 | $0.049 |
| | Total Resource Levelized Cost ($/kWh) | $0.055 | $0.049 |
| **Benefit/Cost Ratios*** | | | |
| | Utility Benefit/Cost Ratio | 0.97 | 0.95 |
| | Total Resource Benefit/Cost Ratio | 1.48 | 1.50 |

*2023 cost-effectiveness ratios include evaluation expenses. If evaluation expenses were removed from the program's cost-effectiveness, the 2023 UCT and TRC would be 1.08 and 1.64, respectively.

### Description

Idaho Power launched the SBDI program in November 2019 targeting typically hard-to-reach, small business customers in Idaho who use less than 25,000 kWh annually. Idaho Power paid 100% of the cost to assess eligibility and install lighting measures for these customers, using a third-party contractor to operate the program. SBDI was offered to eligible customers in a strategic geo-targeted approach. The offering closed in March 2023 after offering the program to customers throughout the Idaho Power service area and due to cost-effectiveness challenges.

### Program Activities

SBDI was planned to be a three-year program—concluding after the offer was extended to customers in each of the company's regions. The program ended in March 2023. In January 2023, the company's contractor followed up on the marketing letters sent at the end of 2022 with calls to eligible customers offering one final opportunity to hear about the program and to declare their interest in participating. As customers responded to the letters and follow-up calls, lighting assessments were scheduled. Customers who agreed to have LEDs installed at their facility were scheduled for project installation. In 2023 the SBDI contractor completed 166 project installations, and 14 post-installation inspections prior to program close in March.

### Marketing Activities

No proactive marketing was performed in 2023 as the program was scheduled to end in March 2023. The final proactive marketing of SBDI was performed late in 2022, which resulted in the final activity early in 2023. The program contractor followed up with 130 phone calls in January 2023, after customers received the letters.

### Cost-Effectiveness

In 2023, the projects in the SBDI program were all lighting upgrades. Idaho Power's third-party contractor calculates the savings based on the existing fixture wattage, the replacement fixture wattage, and the HOU. The UCT and TRC ratios for the program are 0.97 and 1.48 respectively. Non-energy impacts were applied in 2023 based on an estimated per kWh value by C&I end-uses. These values were provided by a third-party as part of the 2019 impact evaluation of the New Construction and Retrofits options. Finally, if the amount incurred for the 2023 evaluation was removed from the program's cost-effectiveness, the UCT would be 1.08 and the TRC would be 1.64.

In 2022, Idaho Power discussed the future cost-effectiveness challenges facing the program with EEAG. These challenges included the reduced savings potential from screw-in lightbulbs and increased costs associated with materials and labor. If the cost of this free service were to rise, it would be increasingly difficult for the program to be cost-effective from the UCT perspective. As a result, the offering closed in March 2023.

Details for the program cost-effectiveness are in *Supplement 1: Cost-Effectiveness*.

### Customer Satisfaction

Idaho Power's third-party implementer sent customer satisfaction surveys to program participants in 2023, of which 48 surveys were completed. Key highlights include the following:

- All respondents reported they were satisfied with the program, 96% of respondents said they were "very satisfied" with the program, and 4% of respondents indicated they were "somewhat satisfied."
- 94% of respondents found it "very easy" to participate in the program and almost 4% reported it was "somewhat easy" to participate in the program.
- All respondents reported they would be likely to recommend the program to other small businesses, with 94% of respondents saying they were "very likely" and nearly 6% reporting they were "somewhat likely."
- All respondents were satisfied with the equipment installed at their business, with 92% of respondents reporting they were "very satisfied" and 8% of respondents saying they were "somewhat satisfied."

A copy of the survey results is included in *Supplement 2: Evaluation*.

### Evaluations

In 2023, Idaho Power contracted with a third party to conduct an impact evaluation of the SBDI program. The evaluation found the results for the SBDI program to align with similar programs of the same nature.

The evaluation found no changes to the claimed savings for a 100% realization rate.
The evaluation concluded the program ran smoothly and resulted in satisfied customers.

See the complete SBDI impact evaluation report in *Supplement 2: Evaluation*.

### 2024 Plans

SBDI closed in March 2023. The company will explore the possibility of a modified small business offering in 2024.

## Irrigation Sector Overview

The irrigation sector is comprised of agricultural customers operating water pumping or water delivery systems to irrigate agricultural crops or pasturage. End-use electrical equipment primarily consists of agricultural irrigation pumps and center pivots. The irrigation sector does not include water pumping for non-agricultural purposes, such as domestic water supply or the irrigation of lawns, parks, cemeteries, and golf courses.

- In July 2023, the active irrigation service locations totaled 21,630 system-wide, which is an increase of 1.4% compared to July 2022. The increase is primarily caused by adding service locations for pumps and center-pivot irrigation systems as land is converted from furrow and surface irrigation to sprinkler irrigation.
- Irrigation customers accounted for 1,805,855 MWh of energy usage in 2023, versus 1,949,766 MWh in 2022. The approximately 8% decrease is primarily because of the substantially cooler, wetter year. This sector represented nearly 12% of Idaho Power's total electricity sales, and approximately 30% of July sales. Though annual electricity use may vary substantially for weather-related reasons, and there are now more irrigation customers, the energy-use trend for this sector has not changed significantly in many years because of the following:
  - The added energy usage from new customers is relatively small compared to the energy use of the average existing customer
  - Ongoing improvements through energy efficiency efforts and system replacement offset much of the added energy use

The Irrigation Efficiency Rewards program, including the GMI, experienced decreased annual savings, dropping from 6,954,805 kWh in 2022 to 4,562,888 kWh in 2023. This was due primarily to a decrease in the average size of the custom projects and a decrease in the savings and measures from small maintenance upgrades in the Menu Incentive Option of the program.

Idaho Power re-enrolled the majority of the 2022 Irrigation Peak Rewards participants in 2023, with 2,439 service points and a maximum load reduction potential of 252.1 MW. Table 26 summarizes the overall expenses and program performance for both programs and shows the actual load reduction was 187.7MW.

**Table 26. Irrigation sector program summary, 2023**

| Program | Participants | Total Cost | | Savings | |
|---|---|---|---|---|---|
| | | Utility | Resource | Annual Energy (kWh) | Peak Demand (MW)* |
| **Demand Response** | | | | | |
| Irrigation Peak Rewards | 2,439 service points | $ 8,299,830 | $ 8,299,830 | | 187.7/252.1 |
| **Total** | | **$ 8,299,830** | **$ 8,299,830** | | **187.7/252.1** |
| **Energy Efficiency** | | | | | |
| Irrigation Efficiency Rewards | 643 projects | 1,708,967 | 14,744,378 | 4,558,425 | |
| Green Motors Initiative—Irrigation | 4 motor rewinds | 0 | 1,911 | 4,463 | |
| **Total** | | **$ 1,708,967** | **$ 14,746,288** | **4,562,888** | |

**Notes:**

See Appendix 3 for notes on methodology and column definitions.

Totals may not add up due to rounding.

* Maximum actual demand reduction/maximum demand capacity. Demand response program reductions are reported with 7.6% peak loss assumption.

## *Irrigation DSM Programs*

**Irrigation Efficiency Rewards.** An energy efficiency program designed to encourage customers to replace or improve inefficient irrigation systems and components. Customers receive incentives through the Custom Incentive Option for extensive retrofits and new systems and through the Menu Incentive Option for small maintenance upgrades.

**Irrigation Peak Rewards.** A demand response program designed to reduce load from irrigation pumps during periods of high energy demand or for other system needs. Participating service points are automatically controlled by Idaho Power switches or manually interrupted by the customer for very large pumping installations, for certain system configurations or when switch communication is not available.

**Green Motors Initiative.** An energy efficiency program to incentivize the rewinding of irrigation motors. Under the GMI, service center personnel are trained and certified to repair and rewind motors to improve reliability and efficiency. If a rewind returns a motor to its original efficiency, the process is called a "Green Rewind." Idaho Power pays service centers to rewind qualified irrigation motors. Half of this incentive is then given to the customer as a credit on the rewind invoice.

## *Marketing*

In 2023, the company mailed a winter edition of *Irrigation News* to all irrigation customers in its service area. In part, the newsletter educated customers about energy efficiency incentives, how to download the mobile app, and education on and enrollment information for the Irrigation Peak Rewards program.

The application for new or upgraded service was put into a tear-pad version so agricultural representatives (ag reps) could easily provide an application to an irrigator during one-on-one visits.

The company also placed numerous print ads in agricultural publications to reach the target market in smaller farming communities. Publications included the *Capital Press*, *Power County Press/Aberdeen Times*, *Potato Grower* magazine, *Owyhee Avalanche*, and *The Ag Expo East and West* programs. Idaho Power used radio advertising to show support for the Future Farmers of America and Ag Week conferences.

January through March, the company ran 1,430 radio ads promoting the Irrigation Efficiency Rewards program. The 30-second spots ran in eastern and southern Idaho on a variety of stations, including news/talk, sports, classic rock, adult hits, and country.

Additionally, a Facebook and Instagram post ran in March for national agriculture day. The post featured an ag rep promoting irrigation programs.

### *Customer Satisfaction*

Idaho Power conducts the *Burke Customer Relationship Survey* each year. In 2023, on a scale of zero to 10, irrigation survey respondents rated Idaho Power 7.52 regarding offering programs to help customers save energy, and 7.34 related to providing customers with information on how to save energy and money. Almost 23% of irrigation respondents indicated they have participated in at least one Idaho Power energy efficiency program. Of the irrigation survey respondents who have participated in at least one Idaho Power energy efficiency program, 95% are “very” or “somewhat” satisfied with the program.

### *Training and Education*

Idaho Power continued to market its irrigation programs by offering in-person workshops, staffing booths at three agricultural shows/expos, dealer presentations, and offering individual presentations to irrigation customers. In 2023, Idaho Power provided seven irrigation workshops and one conference seminar for the Irrigation Efficiency Rewards and Irrigation Peak Rewards programs; this number was greatly increased compared to 2022 as COVID-19 restrictions were reduced. Approximately 369 customers attended in-person workshops or the seminar.

### *Field Staff Activities*

Idaho Power ag reps were available to be on-site with customers in 2023, offering Idaho Power energy efficiency and demand response program information, education, training, and irrigation system assessments and audits across the service area.

Also, in 2023, ag reps continued their engagement with agricultural irrigation equipment dealers with the goal of sharing expertise about energy-efficient system designs and increasing awareness about the program. Ag reps participated in training sponsored by the nationally based Irrigation Association to maintain or obtain their Certified Irrigation Designer and Certified Agricultural Irrigation Specialist accreditations.

## *Irrigation Efficiency Rewards*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings*** | | | |
| | Participants (projects) | 647 | 525 |
| | Energy Savings (kWh) | 4,562,888 | 6,954,805 |
| | Demand Reduction (MW) | n/a | n/a |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $1,474,741 | $1,950,122 |
| | Oregon Energy Efficiency Rider | $127,827 | $74,622 |
| | Idaho Power Funds | $106,399 | $55,284 |
| | Total Program Costs—All Sources | $1,708,967 | $2,080,027 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | $0.042 | $0.027 |
| | Total Resource Levelized Cost ($/kWh) | $0.361 | $0.179 |
| **Benefit/Cost Ratios**** | | | |
| | Utility Benefit/Cost Ratio | 2.06 | 2.69 |
| | Total Resource Benefit/Cost Ratio | 2.22 | 2.54 |

* 2022 total includes 16,950 kWh of energy savings from six Green Motors projects. 2023 total includes 4,463 kWh of energy savings from four Green Motors projects.

**Cost-effectiveness reflective of sector cost-effectiveness ratios because of the inclusion of Green Motors savings and costs. 2023 cost-effectiveness ratios include evaluation expenses. If evaluation expenses were removed from the program's cost-effectiveness, the 2023 UCT and TRC would be 2.11 and 2.23, respectively.

### Description

Initiated in 2003, the Irrigation Efficiency Rewards program encourages energy-efficient equipment use and design in irrigation systems. Qualified irrigators in Idaho Power's service area can receive financial incentives and reduce their electricity usage through participation in the program. Two options help meet the needs for major or minor changes to new or existing systems: Custom Incentive Option and Menu Incentive Option. Irrigation customers can also qualify for an incentive when they "rewind" their irrigation motors.

#### *Custom Incentive Option*

The Custom Incentive Option is offered for extensive retrofits to existing systems or the installation of an efficient, new irrigation system.

For a new system, Idaho Power determines whether the equipment is more energy efficient than the standard before approving the incentive. If an existing irrigation system is changed to a new water source, it is considered a new irrigation system under this program. The incentive for a new system is $0.25 per estimated kWh saved in one year, not to exceed 10% of the project cost.

For existing system upgrades, the incentive is $0.25 per estimated kWh saved in one year or $450 per estimated kW demand reduction, whichever is greater. The incentive is limited to 75% of the total project cost.

The qualifying energy efficiency measures include hardware changes that result in a reduction of the potential kWh use of an irrigation system or that result in a potential demand reduction. Idaho Power reviews and analyzes each project, considering prior usage history, irrigation system maps, system design details, invoices, and, in many situations, post-installation demand data to verify savings and incentives.

#### *Menu Incentive Option*

The Menu Incentive Option covers a portion of the costs of repairing and replacing specific components that help the irrigation system use less energy. This option is designed for systems where small maintenance upgrades provide energy savings from these seven measures:

1. New flow-control type nozzles
2. New nozzles for impact, rotating, or fixed head sprinklers
3. New or rebuilt impact or rotating type sprinklers
4. New or rebuilt wheel-line levelers
5. New complete low-pressure pivot package (sprinkler, regulator, and nozzle)
6. New drains for pivots or wheel lines
7. New riser caps and gaskets for hand lines, wheel lines, and portable main lines

Incentives are based on a predetermined kWh savings per component from the RTF.

#### *Green Motors Initiative*

Idaho Power also participates in the GMPG GMI. Under the initiative, Idaho Power pays service centers $2.00 per hp for motors 15 to 5,000 hp that receive a verified Green Rewind. Half of that incentive is passed on to irrigation customers as a credit on their rewind invoice.

### Program Activities

In 2023, a total of 643 projects were completed: 566 Menu Incentive Option projects that provided an estimated 2,054 MWh of energy savings, and 77 Custom Incentive Option projects that provided 2,504 MWh of energy savings (50 new systems and 27 existing systems).

Also, a total of four irrigation customers' motors were rewound under the GMI and accounted for 4,463 kWh in savings.

### Marketing Activities

In addition to activities mentioned in the Irrigation Sector Overview, the Idaho Power ag reps and program specialist worked one-on-one with irrigation dealers and vendors who are key to

the successful promotion of the program. Between February and March 2023, the ag reps held seven workshops for their customers. The workshops focused on the Irrigation Efficiency Rewards program, the Irrigation Peak Rewards program, water supply outlook forecasts, Idaho Power's hydro operations, and how Idaho Power meets customer's energy needs in extreme conditions. The ag reps shared Idaho Power's website and self-help tools. The ag reps also visited irrigation vendors in their area to distribute custom and menu efficiency applications and talk about the program.

### Cost-Effectiveness

Idaho Power calculates cost-effectiveness using different savings and benefits assumptions and measurements for the Custom Incentive Option and the Menu Incentive Option.

Each application under the Custom Incentive Option received by Idaho Power undergoes an assessment to estimate the energy savings that will be achieved through a customer's participation in the program. On existing system upgrades, Idaho Power calculates the savings of a project by determining what changes are made and comparing it to the service point's previous five years of electricity usage on a case-by-case basis. On new system installations, the company uses standard practices as the baseline and determines the efficiency of the applicant's proposed project. Based on the specific equipment to be installed, the company calculates the estimated post-installation energy consumption of the system. The company verifies the completion of the system installation through aerial photographs, maps, and field visits to ensure the irrigation system is installed and used in the manner the applicant's documentation describes.

Each application under the Menu Incentive Option received by Idaho Power also undergoes an assessment to ensure deemed savings are appropriate and reasonable. Payments are calculated on a prescribed basis by measure. In some cases, the energy-savings estimates are adjusted downward from deemed RTF savings to better reflect known information on how the components are actually being used. For example, a half-circle rotation center pivot will save half as much energy per sprinkler head as a full-circle rotation center pivot. All deemed savings are based on seasonal operating hour assumptions by region. If a system's usage history indicates it has lower operating hours than the assumptions, like the example above, the deemed savings are adjusted. For 2023, Idaho Power used the same savings and assumptions source used in 2022.

The UCT and TRC for the program without Green Motors are 2.05 and 2.22, respectively. With Green Motors, the UCT and TRC are 2.06 and 2.22. If evaluation expenses were removed from the program's cost-effectiveness, the UCT and TRC would be 2.11 and 2.23, respectively.

Complete measure-level details for cost-effectiveness can be found in *Supplement 1: Cost-Effectiveness*.

### Evaluations

In 2023, Idaho Power contracted with a third party to conduct an impact evaluation on the Irrigation Efficiency Rewards program. The review noted the program is well-managed with comprehensive support from a knowledgeable and responsive Idaho Power staff. The evaluators reviewed sample project data, completed desk reviews, conducted site verifications, and verified kWh savings claimed. The report noted that the Menu Incentive Option of the program is streamlined and easily understood, and that the Custom Incentive Option savings are highly customized and calculated by the ag reps and program engineer. The evaluators calculated a 2022 program year kWh savings realization rate of 97.4% (99.9% for the Menu Incentive Option and 95.8% for the Custom Incentive Option). Recommendations from this evaluation are listed below (in italics), followed by Idaho Power's response:

***Streamline Custom Incentive Option calculations*.** Idaho Power will take this recommendation under advisement and plans to review the Custom Incentive Option's calculations to simplify the process in 2024.

***Create a reference for Custom Incentive Option calculation assumptions*.** The company agrees with this recommendation and will incorporate a reference table for assumptions in 2024.

***Review baseline energy consumption for irrigation system projects with multiple pumps*.** The company agrees with this recommendation and will take this recommendation under advisement when reviewing multiple pump projects in 2024.

***Continue to use meter data to calibrate the Custom baseline energy consumption*.** Idaho Power agrees with this recommendation and will continue to use and document the AMI data for projects in 2024.

***Continue to organize digital files*.** The company will take this recommendation under advisement for continuous improvement.

See the complete analysis report in *Supplement 2: Evaluation*.

### 2024 Plans

Irrigation Efficiency Rewards program marketing plans typically include conducting at least seven customer-based irrigation workshops to promote energy efficiency, technical education, and program understanding. Idaho Power has committed to a booth at the Idaho Irrigation Equipment Show & Conference, Western Ag Expo, Idaho Potato Conference, and the Southern Ag Show in 2024 to promote the Irrigation Efficiency Rewards program and what customers can do to save energy and participate in the programs to earn an incentive. Marketing the program to irrigation supply companies will continue to be a priority, as they are an important part of getting the program in front of customers.

The company will promote the program in agriculturally focused editions of newspapers, magazines, radio ads, an Irrigation Newsletter to all irrigation customers, e-mail updates and reminders, social media posts, and paid search ads. The radio ads will run during the winter/spring throughout the company's South-East region.

## *Irrigation Peak Rewards*

| | | 2023 | 2022 |
|---|---|---|---|
| **Participation and Savings** | | | |
| | Participants (service points) | 2,439 | 2,142 |
| | Energy Savings (kWh) | n/a | n/a |
| | Demand Reduction (MW)* | 187.7/252.1 | 155.1/255.6 |
| **Program Costs by Funding Source** | | | |
| | Idaho Energy Efficiency Rider | $616,755 | $569,467 |
| | Oregon Energy Efficiency Rider | $258,884 | $272,171 |
| | Idaho Power Funds** | $7,424,190 | $7,661,502 |
| | Total Program Costs—All Sources | $8,299,830 | $8,503,140 |
| **Program Levelized Costs** | | | |
| | Utility Levelized Cost ($/kWh) | n/a | n/a |
| | Total Resource Levelized Cost ($/kWh) | n/a | n/a |
| **Benefit/Cost Ratios** | | | |
| | Utility Benefit/Cost Ratio | n/a | n/a |
| | Total Resource Benefit/Cost Ratio | n/a | n/a |

* Maximum actual demand reduction/maximum potential demand reduction. Demand response program reductions are reported with 7.6% peak loss assumption in 2023 and 9.7% peak loss assumption in 2022.

** The 2023 O&M expense, amounting to $1,771, was initially charged to the Idaho Rider. The correction was made in 2024.

### Description

Idaho Power's Irrigation Peak Rewards program is a voluntary, demand response program available to all agricultural irrigation customers. The Irrigation Peak Rewards program pays irrigation customers a financial incentive to interrupt the operation of participating irrigation pumps at potentially high system load periods (summer peak). Initiated in 2004, the purpose of the program is to minimize or delay the need for new supply-side resources.

Idaho Power estimates future capacity needs in the *Integrated Resource Plan* and then plans resources to mitigate shortfalls. The Irrigation Peak Rewards program is a result of this planning process, and the success of the program is measured by the amount of demand reduction available to Idaho Power during periods of high energy demand or for other system needs.

The Irrigation Peak Rewards program is available to Idaho Power irrigation customers receiving service under schedules 24 and 84 in Idaho and Oregon. All irrigation customers are eligible to participate. There are two options for shut off: an automatic dispatch option and a manual dispatch option. Due the size of the program, the participants are currently split into four approximately equal-sized groups that can be used independently on different days or used all together at the same time or staggered out at different times on an event day.

**Automatic Dispatch Option.** Pumps enrolled in the Automatic Dispatch Option have one of two devices installed that control the irrigation pump(s) via signal from Idaho Power. This option requires that all pumps shut off at a site for the demand-response event. Approximately 99% of the devices are demand response units (DRU) and use Idaho Power's Automated Metering Infrastructure (AMI) to send a signal that opens the contactor and shuts off the pump.
The other 1% of automatic dispatch participants have a cellular device (cell device) installed. The cell device has the same load-control feature as the AMI DRU, except a cellular network signal is used to send the command for shut off during the event.

**Manual Dispatch Option.** Pumps with at least 1,000 cumulative hp, or that Idaho Power has determined to have limited communication availability, or due to system configuration, are eligible for the Manual Dispatch Option, where participants manually control which pumps are turned off during a load control event. Manual participants are required to select a nominated load reduction of kW available and anticipated for shut off during the season. They may choose to shut down all or partial load at the site. Aggregate customers participate manually by identifying a group of pumps across multiple sites to participate as an aggregate. The customer nominates a kW reduction for the aggregate and is compensated by the actual load reduction during the event.

Program event parameters for both interruption options are listed below:

- Season dates June 15 to September 15
- Minimum of three events per season
- Events may occur any weekday or Saturday (excluding Independence Day and Labor Day holidays) between the hours of 3–10 p.m. (standard interruption option), or between the hours of 3–11 p.m. (extended interruption option)
- Events may occur up to four hours per day and up to 16 hours per week, but no more than 60 hours per program season—applies to both standard interruption option and extended interruption option
- Idaho Power notifies automatic participants by phone, email, and/or text messaging four hours before the start of the event whenever possible
- Idaho Power notifies manual participants by phone, email, and/or text four hours before the start of the event
- Idaho Power may cancel the event and notify participants of the cancellation up to 30 minutes before the event start time
- Parameters for Irrigation Peak Rewards do not apply to system emergencies

The Irrigation Peak Rewards incentive structure includes fixed incentives (billing credits) and variable event-related incentives. Participants receive fixed incentives that are not tied to events: a demand credit and an energy credit. The fixed demand and fixed energy credits for

the automatic dispatch participants are applied to the monthly bill for billing dates June 15 through September 15. The fixed demand and fixed energy credits for the manual dispatch participants are paid with a check. Credits are prorated for periods when meter reading/billing cycles do not align with the Irrigation Peak Rewards season dates. Monthly billing credits for 2023 are summarized in Table 27.

- Fixed demand credits are calculated by multiplying the monthly billing kW by the demand-related incentive amount
- Fixed energy credits are calculated by multiplying the total monthly billing kWh usage by the energy-related incentive amount

**Table 27. Monthly fixed billing credits for manual and automatic options**

| Fixed Demand Credit ($/billing kW) | Fixed Energy Credit ($/billing kWh) |
|---|---|
| $5.25 | $0.008 |

Variable incentives apply if more than four events occur in the season. Participants who choose the extended interruption option (3–11 p.m.) are paid a higher variable credit. The variable incentive rates for 2023 are listed in Table 28.

**Table 28. Variable incentive after the fourth event**

| Standard Option 3–10 p.m. Variable Energy Credit per hour of the event ($/billing kW) | Extended Option 3–11 p.m. Variable Energy Credit per hour of the event ($/billing kW) |
|---|---|
| $0.18 | $0.25 |

Program rules allow customers to opt out of dispatch events while incurring an opt-out fee of $6.25 per kW. The opt-out fee is calculated by multiplying $6.25 times the kW based on the current month's billing or kW not achieved for Manual Dispatch Option participants. The kW not achieved for the Manual Dispatch Option refers to the amount that was nominated minus the actual kW reduction that was achieved. The opt-out penalties will not exceed the total credit that would have been paid with full participation.

Idaho Power has expanded the use of AMI technology with the use of DRUs installed at pump locations. AMI technology provides the ability to turn off pumps during an Irrigation Peak Rewards event by sending a command through the power line. The AMI system also allows Idaho Power to analyze the interval metering data of participating pumps during load control events. Interval metering reports provide data to help determine which DRUs functioned properly, and which pumps were turned off and stayed off during the event. During the 2023 season, 2,612 DRUs were active and installed at 2,309 pump locations.

In addition to using AMI technology, Idaho Power developed its own load control device. This device uses a cellular network signal to communicate with and shut off the pump during a

load-control event. Hourly usage data is not available for these sites. During the end of 2020 and spring 2021 many of the cellular devices were exchanged for DRUs due to an AMI substation expansion project. Only 34 pump locations remain with 42 cellular devices.

### Program Activities

In January 2023, Idaho Power mailed Irrigation Peak Rewards enrollment packets to all irrigation customers. The packets included an enrollment worksheet with estimated credits for participation, contact worksheets, and a program brochure. Total billing demand was 361.6 MW with 2,439 pumps enrolled for the 2023 season (2,309 with DRUs, 33 with cell devices, and 97 participating under manual option).

For purposes of the program, the three regions shown on Figure 2 (Introduction section) are further divided into sub-regions: Western, Canyon, and Oregon, located primarily within the Canyon-West region, and Southern and Eastern, located primarily within the South-East region.

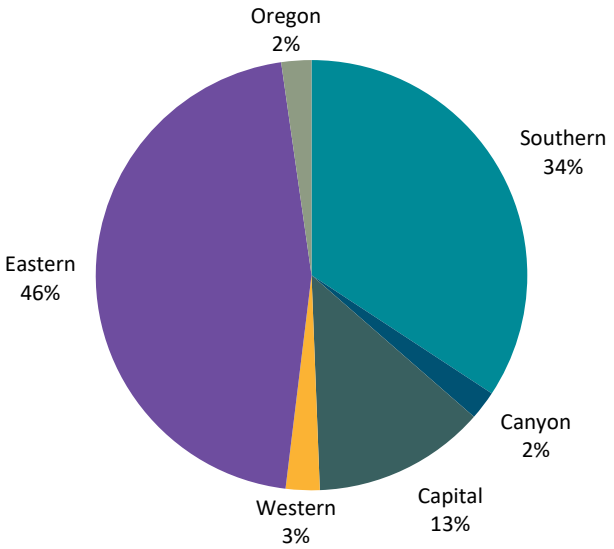


**Figure 24. Percentage of participants by sub-region, 2023**

**Table 29. Eligible pump locations and participation levels by area**

| Idaho Power Sub-Region | Eligible Service Locations | Manual Dispatch Option | Automatic Dispatch Option | Total Enrolled by Area | Eligible Enrolled |
|---|---|---|---|---|---|
| Canyon | 2,922 | | 53 | 53 | 1.8% |
| Western | 2,371 | 6 | 56 | 62 | 2.6% |
| Oregon | 2,327 | | 55 | 55 | 2.4% |
| Capital | 1,877 | 89 | 226 | 315 | 16.8% |
| Eastern | 3,564 | | 1,118 | 1,118 | 31.4% |
| Southern | 8,774 | 2 | 834 | 836 | 9.5% |
| **Total** | **21,835** | **97** | **2,342** | **2,439** | **11.2%** |

In 2023, Idaho Power enrolled 2,439 (11.2%) of the eligible service points in its service area in the program. This was an increase of 13.9% participating service locations over 2022. Program participants in 2023 had a combined billing demand of 361,590 kW, an increase from the 2022 season, where participant billing demand totaled 346,333 kW. The key factor impacting the higher participation was efforts by the ag reps to increase participation in the spring by contacting the 150 customers with the highest demand.

Though enrollment was higher, the maximum potential capacity was lower in 2023 due to both the change in the line loss calculation and the coincident factor for pumps, which can vary from year to year due to weather and crop type.

Idaho Power actively monitors and maintains the reliability of participating devices both pre-season and during the season. Communication status reports are reviewed weekly to identify possible issues at a participating pump. The company worked with three electrical contractors across the region in 2023 to maintain, troubleshoot, repair, and exchange program devices.

In 2023, participants were organized into four groups, labeled A, B, C, and D. Table 30 shows the event performance by date. The program was used on seven days. Three days had two groups participating, two days had all four groups participating, and two days had one group participating. Each participant experienced 16 total event hours in the season. The program maximum potential demand reduction was 252.1 MW and the actual maximum demand reduction achieved was 187.7 MW on August 1, 2023, with all four groups participating (Table 30). Demand reduction analytical methods and results are provided in the end-of-season report in *Supplement 2: Evaluation*.

**Table 30. Irrigation Peak Rewards demand response event details**

| Event Details | Thursday, July 6 | Friday, July 21 | Saturday, July 22 | Tuesday, August 1 | Tuesday, August 15 | Wednesday, August 16 | Thursday, August 17 |
|---|---|---|---|---|---|---|---|
| Event Time (p.m.) | 6-10 | 3-10 | 6-10 | 3–10 | 5–9 | 4-9 | 4–10 |
| Groups | A | B,C | D | A,B,C,D | A,C | B, D | A,B,C,D |
| High Temperature[1] | 96° F | 105° F | 103° F | 100° F | 104° F | 105° F | 103° F |
| Maximum Demand Reduction | 54 MW | 113 MW | 53 MW | 188 MW | 86 MW | 90 MW | 169 MW |
| Opt-outs | 30 | 11 | 11 | 5 | 2 | 4 | 35 |

[1] National Weather Service, recorded in the Boise area

### Marketing Activities

In 2023, the program brochures and website were refreshed. Idaho Power used workshops, direct-mail, and outreach calls to encourage past participants to re-enroll in the program and potential new participants to enroll for the first time. The brochure, enrollment worksheet, and contact worksheet were mailed to all eligible participants in January 2023.

The company ran a My Account pop-up ad in May promoting enrollment to irrigation customers. It resulted in 22 users clicking on the ad. In April, the company sent an email to 2,816 irrigation customers and an email in May to 123 irrigation customers. This tactic resulted in a 47.20% open rate in April and 52.86% open rate in May. Additionally, a Facebook and Instagram ad ran March through June promoting program enrollment resulting in 93 clicks, and a thank-you note to participants was posted on Facebook in October.

This year the company included new marketing tactics of digital display ads, search engine marketing, and radio. Web users were exposed to 804,363 display ads (animated GIF image ads embedded on a website) based on their demographics, related to online articles they viewed, or their use of a particular mobile web page or app. Users clicked the ads 951 times, resulting in a click-through rate of 0.12%. Search engine marketing displayed Idaho Power's Irrigation Peak Rewards program near the top of the search results with the paid search terms when customers searched for Irrigation Peak Rewards and demand response terms. These ads received 13,503 impressions and 312 clicks. February through May, the company ran 986 radio ads promoting the Irrigation Peak Rewards program. The 30-second spots ran in Boise and eastern and southern Idaho on a variety of stations, including news/talk, sports, classic rock, adult hits, and country.

See the Irrigation Sector Overview section for additional marketing activities.

### Cost-Effectiveness

Idaho Power determines cost-effectiveness for its demand response programs using the approved method for valuing demand response under IPUC Order No. 35336 and approved by the OPUC on February 8, 2022, in Docket No. ADV 1355. Using financial and avoided cost assumptions from the *2021 Integrated Resource Plan*, the defined cost-effective threshold for operating Idaho Power's three demand response programs for the maximum allowable 60 hours is $84.57 per kW under the current program parameters.

The Irrigation Peak Rewards participants were dispatched for 4 events, resulting in 39 event hours and achieving a maximum demand reduction of 187.7 MW with a maximum potential capacity of 252.1 MW. The total expenses in 2023 were $8.3 million and would have been approximately $10.7 million if the program had been operated for the full 60 hours. Using the potential cost and the maximum potential capacity results in a cost of $42.57 per kW, which shows the program was cost-effective.

A complete description of cost-effectiveness results for Idaho Power's demand response programs is included in *Supplement 1: Cost-Effectiveness.*

### Evaluations

To evaluate the program each year, Idaho Power prepares an Irrigation Peak Rewards program Report that presents load reduction calculations and analysis, and results from the program season. See *Supplement 2: Evaluation* for the 2023 report. A brief overview of the program results is provided in this section.

A realization rate is used to measure the program's potential performance if an all-group event were to be called on any day during the season. This rate reflects the load that is on and available for shutoff during a demand response event. The realization rate percentage includes the expected event performance loss due to factors such as device failures and opt-outs. For the 2023 season, these factors combined to an average realization rate reduction of 11.3%.

On July 6, 2023, the program achieved its highest potential, with a realization rate of 66.8% and a peak potential reduction of 252.1 MW for the season. The realization rate is typically the highest at the end of June and the beginning of July when a larger percentage of irrigation pumps are operating nearly 24 hours per day, seven days per week. Later in the season, when many pumps are not operating due to crop maturity and reduced watering demands, the realization rate is lower.

A breakdown of the load reduction for each event day and each event hour for the 2023 program season, including line losses, is shown in Table 31.

**Table 31. Irrigation Peak Rewards program MW load reduction for events, including line losses**

| | | Hourly Load Reduction (MW) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Event Date | Groups | 3–4 pm | 4–5 pm | 5–6 pm | 6–7 pm | 7–8 pm | 8–9 pm | 9–10 pm |
| 7/6/2023 | A | – | – | – | 54.4 | 53.3 | 52.7 | 52.0 |
| 7/21/2023 | B, C | 54.3 | 59.5 | 75.4 | 114.3 | 59.2 | 55.1 | 40.4 |
| 7/22/2023 | D | – | – | – | 46.8 | 53.4 | 53.1 | 51.9 |
| 8/1/2023 | A, B, C, D | 33.1 | 100.9 | 143.0 | 187.7 | 152.6 | 86.8 | 44.9 |
| 8/15/2023 | A, C | 2.6 | 17.4 | 85.2 | 86.1 | 81.9 | 67.8 | – |
| 8/16/2023 | B, D | – | 42.0 | 91.2 | 91.7 | 91.8 | 46.1 | – |
| 8/17/2023 | A, B, C, D | – | 89.1 | 127.2 | 169.3 | 168.5 | 79.0 | 42.0 |

Figure 25 shows the total hourly system load for all participants for the 24-hour period on August 1, 2023. A reduction in system demand during the active event period from hour ending at 4 through hour ending at 10 p.m. is clearly shown on the graph; the gradual drop and subsequent rise in system load is due to the staggered start/end times for the four groups participating. Maximum demand reduction occurred during the hour ending at 7 p.m., when all groups were shut down. The small system load shown for that hour is attributed to opt-outs and load left on during the event.

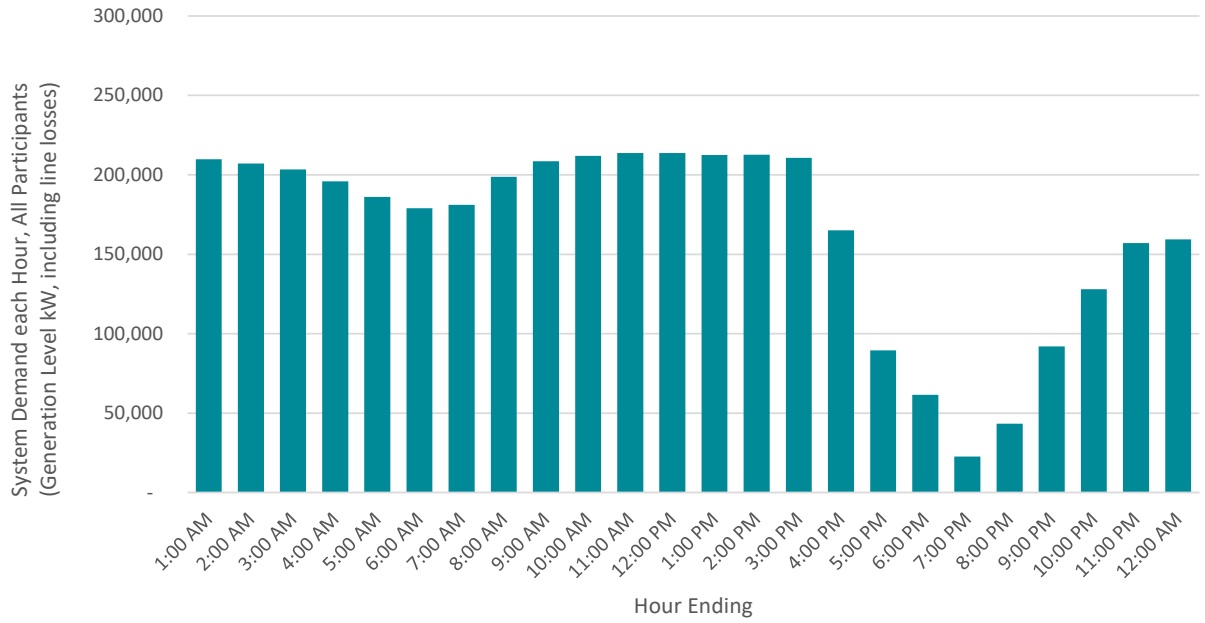


Figure 25. Participant load (kW) by hour on event day August 1, 2023

### 2024 Plans

For the 2024 program season, all irrigation customers will receive a comprehensive enrollment packet containing an informational brochure, enrollment worksheet and a contact worksheet. For all new pump signups, a demand response unit will need to be installed by a contracted electrician prior to the program season.

Idaho Power will have an informational booth at the local 2024 Ag Expos including Western, Eastern, and Southern. The Irrigation Peak Rewards program will be the focus of in-person workshops presented by Idaho Power ag reps in winter 2024. For the upcoming season, Idaho Power will continue its focus on retaining currently enrolled participants and will consider using email marketing, radio, paid search, digital display, and other new tactics to boost program enrollment. The ag reps will continue to remind and inform customers and encourage program participation in person and by phone.

# Other Programs and Activities

## *Idaho Power's Internal Energy Efficiency Commitment*

Renovation projects continued at the Idaho Power Corporate Headquarters (CHQ) in downtown Boise, with a project to exchange the old T-12 parabolic lighting fixtures with LED fixtures. Remodels continued to incorporate energy efficiency measures, such as lower partitions for better transfer of daylight, transom lighting, and automated lighting controls.

The CHQ building also participated in the Flex Peak Program again in 2023 and committed to reduce up to 200 kW of electrical demand during events. Unlike other program participants, Idaho Power does not receive any financial incentives for its participation.

## *Local Energy Efficiency Funds*

The purpose of Local Energy Efficiency Funds (LEEF) is to provide modest funding for short-term projects that do not fit within Idaho Power's energy efficiency programs but provide a direct benefit to the promotion or adoption of beneficial energy efficiency behaviors or activities. Because Idaho Power has been modifying its existing programs and expanding programs over the years to include as many cost-effective energy efficiency measures as possible for all customers, there has been minimal participation in the LEEF offering.

In 2023, Idaho Power received five LEEF applications. They were generally related to home equipment replacement requests for items, such as windows, water and space heating systems, and appliances. The applications were reviewed, and the products referenced in the submittals were found to be standard, widely available products, and therefore not appropriate for LEEF. A residential program specialist followed up with the applicants to provide information on incentives currently available through Idaho Power's H&CE Program.

## *Energy Efficiency Advisory Group (EEAG)*

Formed in 2002, EEAG provides input on enhancing existing DSM programs and on implementing energy efficiency programs. Currently, EEAG consists of 13 members representing a cross-section of Idaho Power customers from the residential, industrial, commercial, and irrigation sectors, as well as individuals representing low-income households, environmental organizations, state agencies, city governments, public utility commissions, and Idaho Power.

EEAG meets quarterly, and when necessary, Idaho Power facilitates additional meetings and/or calls to address special topics. In 2023, four EEAG meetings were held on February 8, May 10 (virtual meeting), August 17, and November 8. EEAG meetings are generally open to the public and attract a diverse audience. Idaho Power appreciates the input from the group and

acknowledges the commitment of time and resources the individual members give to participate in EEAG meetings and activities.

During these meetings, Idaho Power discussed new energy efficiency program ideas and new measure proposals, marketing methods, and specific measure details. The company provided the status of energy efficiency programs and expenses, gave updates of ongoing programs and projects, and supplied general information on DSM issues and other important issues occurring in the region.

Idaho Power relies on input from EEAG to provide a customer and public-interest view of energy efficiency and demand response. Additionally, Idaho Power regularly provides updates on current and future cost-effectiveness of energy efficiency programs and how changes in the IRP will impact DSM alternate costs, which Idaho Power uses in calculating cost-effectiveness. In the meetings, Idaho Power frequently requests input and feedback from EEAG members on programmatic changes, marketing tactics, and incentive levels.

Throughout 2023, Idaho Power relied on input from EEAG on existing and potential new DSM programs. For complete meeting notes, see *Supplement 2: Evaluation*.

## *Market Transformation*

Idaho Power's energy efficiency programs and activities are gradually transforming markets by changing customers' knowledge, use, and application of energy-efficient technologies and principles. The traditional market transformation definition is an effort to permanently change the existing market for energy efficiency goods and services by engaging and influencing large national companies to manufacture or supply more energy-efficient equipment. Through market transformation activities, there is promotion of the adoption of energy-efficient materials and practices before they are integrated into building codes or become standard equipment.

Idaho Power and Avista Utilities continued working with a third-party marketing firm on a project that began in 2020 to explore potential opportunities to accelerate market transformation; the goal is to benefit customers in both utilities' service areas beyond what NEEA is currently providing. This work resulted in a market transformation pilot that began in 2021 for DHPs in both Idaho Power's and Avista's service areas. The pilot was completed in 2023 and the results will be reviewed in 2024. A copy of the report is included in *Supplement 2: Evaluation.*

### NEEA

Idaho Power has funded NEEA since its inception in 1997. NEEA's role is to look to the future to find emerging opportunities for energy efficiency and to create a path forward to make those opportunities a reality in the region.

Idaho Power participates in NEEA with funding from the Idaho and Oregon Riders. The current NEEA contract is for the five years from 2020 to 2024. NEEA categorizes the savings it achieves in five categories: total regional savings, baseline savings, local program savings, net market effects, and co-created saving created by NEEA and its utility funders working collaboratively. Of the 360 to 500 average megawatts (aMW) of savings forecast for 2020 to 2024, NEEA expects 70 to 100 aMW to be net market effects, and 115 to 152 aMW to be co-created savings. The current contract commits Idaho Power to paying NEEA a total of $14.7 million, or approximately $2.9 million annually.

In 2023, Idaho Power participated in all NEEA committees and workgroups, including representation on the Regional Portfolio Advisory Committee (RPAC) and the Board of Directors. Idaho Power representatives participated in the two overarching coordinating committees, the RPAC, Cost-Effectiveness and Evaluation Advisory Committee (CEAC), Regional Emerging Technology Advisory Committee (RETAC), and the Idaho Energy Code Collaborative. The company also participated in NEEA's initiatives, including the Commercial Building Stock Assessment (CBSA), Residential Building Stock Assessment (RBSA), and SEM.

NEEA performed several market progress evaluation reports (MPER) on various energy efficiency efforts this year. In addition to the MPER, NEEA provides market research reports through third-party contractors for energy efficiency initiatives throughout the Northwest. Links to these and other reports mentioned below are provided in *Supplement 2: Evaluation* and on NEEA's website under *Resources & Reports*. For information about all committee and workgroup activities, see the NEEA Activities information below.

### NEEA Marketing

To support NEEA efforts, Idaho Power educated residential customers on Heat Pump Water Heater (HPWH) and DHPs and educated commercial customers and participating contractors on NXT Level Lighting Training and LLLC.

Idaho Power continued to encourage trade allies to take the NXT Level Lighting Training. Idaho Power posted NXT Level Lighting Training information on its website and on LinkedIn in May.

To promote LLLC, Idaho Power continued using a link to an informational LLLC flyer on its main Retrofits and Lighting web pages. The company also posted about LLLCs on LinkedIn in May.

### NEEA Activities: All Sectors

For the 2020 to 2024 funding cycle, NEEA and its funders have reorganized the advisory committees into two coordinating committees: the Products Coordinating Committee and the Integrated Systems Coordinating Committee. Additionally, NEEA and its funders form working groups as needed in consultation with the RPAC. The RPAC will continue, as well as the

Cost-Effectiveness and Evaluation Advisory and the RETAC committees. The Idaho Energy Code Collaborative will also remain intact.

The company currently has representation on both coordinating committees. These committees provide utilities with the opportunity to give meaningful input into the design and implementation of NEEA initiatives, as well as to productively engage with each other. Quarterly meetings were held in 2023 for both committees, and working groups were formed by the coordinating committees to focus on topics relevant to all sectors, as described below.

### *Cost-Effectiveness and Evaluation Advisory Committee*

The advisory committee meets four times a year to review evaluation reports, cost-effectiveness, and savings assumptions. One of the primary functions of the work group is to review all savings assumptions updated since the previous reporting cycle. The committee also reviews NEEA evaluation studies and data collection strategies and previews forthcoming research and evaluations.

The CEAC met in November 2023 to discuss the results and recommendations from the independent third-party evaluation of NEEA's impacts within the State of Idaho. The evaluation was conducted on behalf of Avista and Idaho Power. While NEEA noted that several of the recommendations could be accommodated with minimal impacts, the recommendation regarding evaluating NEEA's influence on codes needed to be vetted with the CEAC due to its impacts to other utilities in the region. NEEA presented its proposed process and timeline to meet this recommendation and will update CEAC throughout 2024.

### *Idaho Energy Code Collaborative*

Since 2005, the State of Idaho has been adopting a state-specific version of the International Energy Conservation Code (IECC). The Idaho Energy Code Collaborative was formed to assist the Idaho Building Code Board (IBCB) in the vetting and evaluation of future versions of the IECC for the residential and commercial building sectors. NEEA facilitates the group, comprised of individuals having diverse backgrounds in the building industry and energy code development. Building energy code evaluations are presented by the group at the IBCB public meetings. The group also educates the building community and stakeholders to increase energy code knowledge and compliance. Idaho Power is an active member.

The Idaho Energy Code Collaborative provided statewide resources to builders and related stakeholders in support of the current building energy codes. The collaborative also provided resources to address the Idaho governor's executive order 2020-01: Zero-Based Regulation initiative. The goal of this initiative was to reduce state regulation which involved the review of proposed revisions to Idaho's IDAPA 24.39.30, Building Code Rules. Subject matter experts

within the collaborative provided detailed evaluations to stakeholders to convey the implications of the proposed revisions. Guidance was provided to the administers of the initiative: the Division of Occupational and Professional Licenses and the Idaho Building Code Board.

Other resources supporting current codes included monthly training sessions, a monthly technical newsletter by email, and a robust website—IdahoEnergyCode.com. Idaho Power will continue to participate in the Idaho Energy Code Collaborative.

### *Regional Emerging Technology Advisory Committee (RETAC)*

Idaho Power participated in the RETAC, which met quarterly in 2023 to review RETAC's emerging technology pipeline, developed with assistance from the BPA, NEEA, and the NWPCC. Throughout 2023, RETAC focused primarily on space-heating and water-heating products for residential and commercial markets. The technologies for these products centered on heat pumps. RETAC discussed the current state of the technologies and their associated gaps and issues. Other meeting topics included smart home systems, switched reluctance motors, smart valves, dual fuel heat pumps, and microgrid pilots. This work will continue in 2024.

### *Regional Portfolio Advisory Committee*

RPAC is responsible for overseeing NEEA's market transformation programs and their advancement through key milestones in the "Initiative Lifecycle." RPAC members must reach a full consent vote at selected milestones for a program to advance to the next stage. In 2018, NEEA and RPAC formed an additional group called the RPAC Plus (RPAC+), which included marketing subject matter experts to help coordinate NEEA's marketing activities with those of the funders. RPAC convenes quarterly meetings and adds other webinars as needed.

In 2023, RPAC conducted four quarterly meetings, three of which were virtual and one of which was hybrid. Throughout 2023, RPAC received updates of savings forecasts, portfolio priorities, and committee reports.

In the first regular quarterly meeting on February 27, NEEA staff provided an annual charter review, shared out results of the HPWHs *Boring But Efficient* campaign, updated the committee on portfolio status and priorities and variable speed heat pumps.

On May 18, NEEA staff provided an Efficiency Exchange Conference recap and updates on the HPWH Consumer Consideration Marketing Campaign, business planning, and the Federal Funding Coordination Workgroup. They provided a Market Transformation refresher and a review of the portfolio reforecast. They provided updates on the Variable Speed Heat Pumps program and on NEEA's Manufactured Homes program.

At the August 29 meeting, NEEA provided an update on the HPWH Marketing Campaign timing, 2024 operations planning, and business planning. They continued with a Market

Transformation refresher from Q1, reviewed the RPAC voting process, and held a vote on advancing the Advanced Heat Pumps Program to the market development phase. Unanimous consent was achieved by all RPAC members present and/or casting votes electronically.

NEEA also provided workgroup updates on Federal Funding Coordination, Dual Fuel Products, and Dual Fuel Measurement Methodology.

At the November 2 meeting, NEEA provided updates on the HPWH Marketing Campaign timing, coordinating committees, and the Federal Funding Coordination Workgroup.

### NEEA Activities: Residential

NEEA provides BetterBuiltNW online builder and contractor training and manages the regional homes database, AXIS.

#### *Residential Building Stock Assessment (RBSA)*

The RBSA is a study conducted approximately every five years. Its purpose is to determine common attributes of residential homes and to develop a profile of the existing residential buildings in the Northwest. The information is used by the regional utilities and the NWPCC to determine load forecast and energy-savings potential in the region. NEEA began work on the RBSA in mid-2020.

Idaho Power participated in monthly workgroup meetings to discuss the study's objectives, framework, sampling design, and communication plan. Site visits in the region began at the end of 2021 and continued through 2022. For residential customers who chose to participate, the third-party contractor scheduled a site visit with a field technician who collected information on the home's characteristics. While site visits for single-family homes were completed in 2022, NEEA conducted field work for multifamily buildings through quarter 3 of 2023.

Due to delays in receiving the demographic and housing characteristics file from the 2020 U.S. Census as well as challenges in recruiting multifamily tenants, completion of the study has been delayed. A final report will be available by quarter 2 of 2024.

### NEEA Activities: Commercial/Industrial

NEEA continued to provide support for C&I energy efficiency activities in Idaho in 2023, which included partial funding of the IDL for trainings and additional tasks.

#### *Commercial Building Stock Assessment (CBSA)*

NEEA began work on the CBSA in 2022. The CBSA is a study conducted approximately every five years, and the information is used by utilities in the Pacific Northwest and the NWPCC to determine load forecast and electrical energy-savings potential in the region.

For commercial customers who choose to participate in the study, the third-party contractor schedules a site visit with a field technician who collects information on equipment and building characteristics that affect energy consumption. This includes HVAC equipment, lighting, building envelope, water heating, refrigeration and cooking, computers and miscellaneous equipment, and cooling towers.

Beginning in August 2022, Idaho Power staff participated in the monthly working group. The CBSA is still in the early design phase of the study, thus the objectives and priorities are still being determined. A request for proposal to select a contractor was issued in early 2023 to select a firm to lead the study and a second RFP was issued in late 2023 to select a firm to provided engineering support. Site visits for the study are planned for 2024 through 2025. The report is slated to be released in 2026.

#### *Very High-Efficiency Dedicated Outside Air Systems (DOAS)*

NEEA's High-Performance HVAC program focused on design of market intervention strategies based on market and field research associated with very high efficiency DOAS. Very high-efficiency DOAS pairs a very high-efficiency heat/energy recovery ventilator (HRV/ERV) type of DOAS with a high-efficiency heating and cooling system, while following set design principles that maximize efficiency. NEEA created the Energy Modeling Guide for Very High Efficiency DOAS and Calibrated Energy Savings for Very High Efficiency DOAS in Multi-Family Housing in 2023. Additional resources for utilities are provided on the BETTERBRICKS website.

#### *Luminaire Level Lighting Controls (LLLC)*

Throughout 2023, NEEA engaged with key manufacturers and their sales channels to encourage promotion of LLLC to their customers and projects. NEEA continued to partner with utilities to offer trade ally training opportunities for awareness and increased understanding of Networked Lighting Controls (NLC)/LLLC systems. Two of the training classes were held in Idaho Power's service area, with 18 trade allies receiving NLC/LLLC training.

NEEA continued to offer a variety of LLLC educational resources for use by utilities and their customers and trade allies. These materials are found at betterbricks.com. In addition, NEEA is actively working with utilities in the Pacific Northwest to develop case studies of commercial buildings that incorporated LLLC.

### NEEA Funding

In 2020, Idaho Power and NEEA commenced a five-year agreement for the 2020 to 2024 funding cycle. Per this agreement, NEEA implements market transformation programs in the company's service area and Idaho Power is committed to fund NEEA based on a quarterly estimate of expenses up to the five-year total direct funding amount of $14.7 million, or approximately $2.9 million annually. On February 20, 2020, Idaho Power received

IPUC Order No. 34556, supporting Idaho Power's participation in NEEA from 2020 to 2024 with such participation to be funded through the Idaho Rider and subject to a prudency review.

In 2023, Idaho Power paid $2,726,302 to NEEA: $2,589,987 from the Idaho Rider for the Idaho jurisdiction and $136,315 from the Oregon Rider for the Oregon jurisdiction. Other expenses associated with Idaho Power's participation in NEEA activities, such as administration and travel, were also paid from the Idaho and Oregon Riders.

Final NEEA savings for 2023 will be released later in 2024. Preliminary estimates reported by NEEA indicate Idaho Power's share of regional market transformation savings as 23,914 MWh. These savings are reported in two categories: 1) codes-related and standards-related savings of 20,665 MWh (86%) and 2) non-codes-related and non-standards-related savings of 3,249 MWh (14%).

In 2022, NEEA changed its savings methodology for reporting state codes savings. Because code adoption varies between states, NEEA transitioned to report energy savings for state building codes using a state allocation approach, as the funder share allocation methodology no longer provided a reasonable representation of code savings occurring in a funder's service area. Previously, NEEA used the funder share allocation methodology for non-codes-related savings. Idaho Power requested that non-code savings use the service area allocation approach. While NEEA has committed to providing the final 2023 savings using the service area methodology, these preliminary savings use partial 2023 data supplemented with 2022 data to approximate trends and local program incentives specific to Idaho Power's service area.

In the *Demand-Side Management 2022 Annual Report*, preliminary estimated savings reported were 24,448 MWh. The final NEEA savings for 2022 reported herein are 24,125 MWh, and include savings from code-related initiatives as well as non-codes-related initiatives. Idaho Power relies on NEEA to report the energy savings and other benefits of NEEA's regional portfolio of initiatives. For further information about NEEA, visit their website at neea.org.

### *Regional Technical Forum*

The RTF is a technical advisory committee to the NWPCC that was established in 1999 to develop standards to verify and evaluate energy efficiency savings. Since 2004, Idaho Power has supported the RTF by providing annual financial support, regularly attending monthly meetings, participating in subcommittees, and sharing research and data beneficial to the forum's efforts.

The forum is made up of both voting members and corresponding members from investor -owned and public utilities, consultant firms, advocacy groups, ETO, and BPA, all with varied expertise in engineering, evaluation, statistics, and program administration. The RTF advises the NWPCC during the development and implementation of the regional power plan regarding the following RTF charter items:

- Developing and maintaining a readily accessible list of eligible conservation resources, including the estimated lifetime costs and savings associated with those resources and the estimated regional power system value associated with those savings.
- Establishing a process for updating the list of eligible conservation resources as technology and standard practices change, and an appeal process through which utilities, trade allies, and customers can demonstrate that different savings and value estimates should apply.
- Developing a set of protocols by which the savings and system value of conservation resources should be estimated, with a process for applying the protocols to existing or new measures.
- Assisting the NWPCC in assessing 1) the current performance, cost, and availability of new conservation technologies and measures; 2) technology development trends; and 3) the effect of these trends on the future performance, cost, and availability of new conservation resources.
- Tracking regional progress toward the achievement of the region's conservation targets by collecting and reporting regional research findings and energy savings annually.

The current agreement to sponsor the RTF extends through 2024. Under this agreement, Idaho Power is the fourth largest RTF funder, at a rate of $713,300 for the five-year period. For this funding cycle, gas utilities and the gas portion dual-fuel utilities are also funding the RTF.

When appropriate and when the work products are applicable to the climate zones and load characteristics in Idaho Power's service area, Idaho Power uses the savings estimates, measure protocols, and supporting work documents provided by the RTF. In 2023, Idaho Power staff participated in RTF meetings as a voting member and is represented on the RTF Policy Advisory Committee.

Throughout the year, Idaho Power reviews any changes enacted by the RTF to savings, costs, or parameters for existing and proposed measures. The company then determines how the changes might be applicable to, or whether they impact, its programs and measures. The company accounted for all implemented changes in planning and budgeting for 2023.

### *Residential Energy Efficiency Education Initiative*

Idaho Power recognizes the value of general energy efficiency awareness and education in creating behavioral change and customer demand for, and satisfaction with, its programs. The REEEI promotes energy efficiency to the residential sector. The company achieves this by creating and delivering educational materials and programs that result in wise and informed choices regarding energy use and increased participation in Idaho Power's energy efficiency programs.

### Kill A Watt Meter Program

The Kill A Watt™ Meter Program remained active in 2023. As a refresh, Idaho Power reached out to each library in its service area to promote the program with new librarians and replace and replenish missing items in the kits. Idaho Power's Customer Care Center and field staff continued to encourage customers to learn about the energy used by specific appliances and activities within their homes by visiting a local library to check out a Kill A Watt meter. It was promoted throughout the year in *News Briefs* to local media and was demonstrated during the October KTVB segment on phantom load.


**Figure 26. Kill A Watt meter**

### Teacher Education

In 2023, Idaho Power and Intermountain Gas teamed up to provide two professional development workshops focusing on principles of energy and energy efficiency. These four-day, for-credit workshops for middle and high school teachers were offered at the College of Western Idaho (Nampa) and the College of Southern Idaho (Twin Falls) as part of the summer institutes sponsored by the Idaho STEM Action Center. A total of 25 teachers completed the trainings and returned to their schools with complete sets of classroom materials, along with the experience necessary to use them effectively to engage their students in hands-on, minds-on energy exploration.

## Customer Education and Marketing

Idaho Power looks for ways to emphasize energy efficiency education in its *Connections* newsletter, bill inserts, and digital channels. In addition, the company has developed a library of *Energy Efficiency Guides* and other collateral focusing on various audiences and subject matter.

In 2023, REEEI and Idaho Power's Corporate Communications department completed a comprehensive review of Idaho Power's educational materials and distribution channels, looking for additional opportunities. Following the review, the company determined that a 46% decline in newspaper distribution between 2021 and 2023 in the communities served (Table 32), as well as the desire to meaningfully engage the greatest number of customers, suggested an adjustment to the production cadence and distribution channels for the *Energy Efficiency Guides*.

**Table 32. Decline in newspaper circulation between 2021 and 2023**

| Newspaper | 2021 | 2022 | 2023 |
|---|---|---|---|
| Argues Observer/TV Reminder | 19,500 | 19,500 | 14,700 |
| Bingham News Chronicle | 3,200 | 3,200 | 0 |
| Boise Weekly | 15,000 | 15,000 | 5,000 |
| Hells Canyon Journal | 650 | 650 | 750 |
| Idaho Mountain Express | 14,000 | 14,000 | 14,500 |
| Idaho Press/EMI/Meridian Press/Kuna Melba News | 51,182 | 37,910 | 31,700 |
| Idaho State Journal | 10,267 | 9,400 | 7,200 |
| Idaho Statesman | 31,450 | 10,698 | 6,320 |
| Idaho World | 2,450 | 1,400 | 1,400 |
| Malheur Enterprise | 1,550 | 1,550 | 1,450 |
| Mountain Home News | 2,300 | 2,300 | 2,300 |
| Owyhee Avalanche | 1,100 | 1,700 | 1,750 |
| Power County Press/Aberdeen Times | 1,700 | 2,150 | 2,150 |
| Recorder Herald | 2,500 | 2,400 | 900 |
| Star News | 4,000 | 4,000 | 4,000 |
| Times News/The Voice | 56,200 | 53,250 | 22,253 |
| **Total Circulation** | **217,049** | **179,108** | **116,373** |

With the goal of distributing up-to-date seasonal energy efficiency education to the widest range of customers, Idaho Power decided to produce a new guide every nine months, creating the opportunity for an updated fall, winter, spring, and summer guide every third year. Because of the overall decline in print media's circulation, the primary distribution channel was shifted from newspapers to an online resource—although a hard copy continued to be available for events and via U.S. mail upon request. The first fall-themed *Energy Efficiency Guide* was published in October 2023. The guide focused on information such as weatherizing homes for winter comfort and maximum savings, how to choose the right light for your home, outdoor

lighting, how to shop for energy-efficient products, and tax credits and incentives for energy efficiency upgrades.

Idaho Power promoted the *Fall Energy Efficiency Guide* on its homepage, in the October energy efficiency bill insert sent to 298,088 customers, through social media, and by emailing a link to 329,595 residential customers that received 2,562 click throughs. For customers with limited access to online options or who may not have received the email, the bill insert provided a link, as well as a telephone number, for requesting a hard copy of the guide. Printed copies of the guide were also available for customers at fall events and presentations. In addition to a link to the current guide, Idaho Power's website also provides links to past seasonal guides.

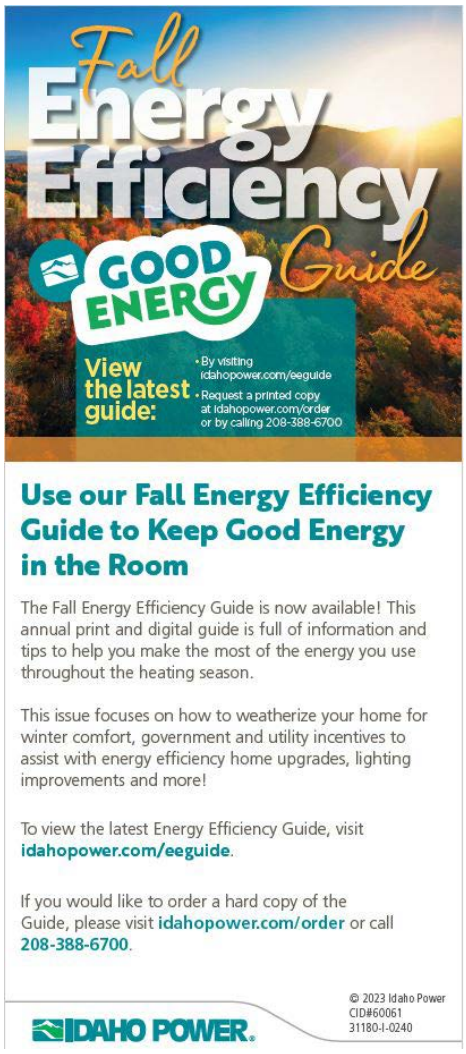


**Figure 27. Fall Energy Efficiency Guide bill insert**

Idaho Power continued to increase customer awareness of energy-saving ideas via distribution of the 96-page booklet *30 Simple Things You Can Do to Save Energy*, a joint publishing project between Idaho Power and The EarthWorks Group. In 2023, the sixth edition was published,

and the newly updated booklet was used to fulfill direct web requests from customers, shared by energy advisors during in-home visits, and sent to customers in response to inquiries received by Idaho Power's Customer Care Center.

Idaho Power continues to recognize that educated employees are effective advocates for energy efficiency and Idaho Power's energy efficiency programs. Idaho Power energy efficiency program specialists connected with energy advisors and other employees from each of Idaho Power's geographical regions and the Customer Care Center to discuss educational initiatives and answer questions about the company's energy efficiency programs.

REEEI distributed energy efficiency messages through a variety of other communication methods in 2023. Idaho Power participated in 144 events highlighting energy efficiency. Program specialists and EOEAs shared information about programs and other energy-saving ideas in an additional 709 presentations and trainings for audiences of all ages throughout the year. To increase opportunities with adult audiences and more secondary-school-aged young people, the EOEAs carried out a concerted marketing effort—establishing relationships with over 304 new influencers and decision-makers. Additionally, Idaho Power's energy efficiency program specialists responded with detailed answers to 179 customer questions about energy efficiency and related topics that were either forwarded from the Idaho Power's Customer Care Center or received via Idaho Power's website.

Idaho Power's social media channels and *News Briefs* focused on content designed to help customers save energy, including quarterly bill inserts and emails that provided all residential customers with easy steps to get their home ready for each season, and behavioral tips for reducing energy use. Throughout the year, 10 separate *News Briefs* and 32 Tip Tuesdays offered timely suggestions on ways to save.


**Figure 28. Summer energy-saving tip**

Idaho Power promoted National Energy Awareness Month on social media in October. *News Briefs* and the regular KTVB television spots also highlighted Energy Awareness Month activities.


**Figure 29. Energy Awareness Month — social media post**

The REEEI continued to provide energy efficiency tips in response to media inquiries and in support of Idaho Power's social media posts. In addition to supplying information for publications, such as *Connections,* bill inserts, and Idaho Power's social media pages, energy efficiency tips and content were provided for the multi-media ad campaign, and *News Briefs* sent to local media. Idaho Power also paid for two energy efficiency segments with *Idaho Today* (KTVB) in May and October. The May segment focused on summer energy efficiency tips and the October segment shared information on phantom load and fall tips. Each interview segment reached approximately 5,000 customers.


**Figure 30. Summer social media post**

### 2024 Program

The initiative's 2024 goals are to improve customer awareness of the wise use of energy, increase program participation, and promote educational and energy-saving ideas that result in energy-efficient, conservation-oriented behaviors.

In addition to producing and promoting a new *Summer Energy Efficiency Guide* and distributing other educational materials, the initiative will continue to manage both the educational and savings components of the Educational Distributions program. Examples of activities conducted under Educational Distributions include distributing LED nightlights, administering the SEEK program, and distributing welcome kits.

The initiative will continue to educate customers using a multi-channel approach to explore new technologies and/or program opportunities that incorporate a behavioral component.

## *University of Idaho Integrated Design Lab*

Idaho Power is a founding supporter of the IDL (idlboise.com), which is dedicated to the development of high-performance, energy-efficient buildings in the Intermountain West. Idaho Power has worked with the IDL since its inception in 2004 to educate the public about how energy-efficient building practices and strategies benefit the business and the customer. In 2023, Idaho Power entered into an agreement with the IDL to perform the tasks and services described below.

### Foundational Services

The goal of this task is to provide energy efficiency technical assistance and project-based training to building industry professionals and customers. Requests for IDL involvement in building projects are categorized into one of three types:

- Phase I projects are simple requests that can be addressed with minimal IDL time

- Phase II projects are more complex requests that require more involvement and resources from the lab
- Phase III projects are significantly more complex and must be co-funded

The IDL provided technical assistance on 18 new projects in Idaho Power's service area in 2023: 15 Phase I projects, three Phase II projects, and no Phase III projects. Eight of the projects were on new buildings, nine were on existing buildings, and one was general design assistance. The number of projects increased by two compared to 2022. The related report is in the IDL section of *Supplement 2: Evaluation*.

### Lunch & Learn

The goal of the Lunch & Learn task is to educate architects, engineers, and other design and construction professionals about energy efficiency topics through a series of educational lunch sessions.

In 2023, the IDL provided 20 in-person technical training lunches. A total of 172 architects, engineers, designers, project managers, and others attended.

The topics of the lunches (and the number performed of each) were: The Architect's Business Case for Energy Performance Modeling (5); Daylighting Multipliers—Increasing Daylighting Harvesting Efficiency (2); Air Infiltration and Passive Systems (3); Luminaire Level Lighting Controls (2); High-Performance Classrooms (3); The Future of Lighting Controls (1); HVAC Load Calculations—Tips & Tricks (2); and ASHRAE Standard 209 Energy Modeling (2). The related report is in the IDL section of *Supplement 2: Evaluation*.

### Building Simulation Users Group (BSUG)

The goal of this task is to facilitate the Idaho BSUG, which is designed to improve the energy efficiency related simulation skills of local design and engineering professionals.

In 2023, six BSUG sessions were hosted by the IDL. All sessions were hosted in a hybrid format in which participants could choose to join in person or virtually. The sessions were attended by 155 professionals. Evaluation forms were completed by attendees for each session. Analyzing results from the first six questions that rated the sessions on a scale of 1 to 5, with 5 being "excellent" and 1 being "poor," the average session rating was 4.41 for 2023. For the final question, "The content of the presentation was …"on a scale of 1 to 5, with 1 being "too basic," 3 being "just right," and 5 being "too advanced," the average session rating was 3.33 for 2023.

Each presentation was archived for remote access anytime, along with general BSUG content through the IDL website. The related report is in the IDL section of *Supplement 2: Evaluation*.

### Energy Resource Library (ERL)

The ERL gives customers access to resources for measuring and monitoring energy use on various systems. The goal of this task is to operate and maintain the library, which includes a web-based loan tracking system, and to teach customers how to use the resources in the library.

The inventory of the ERL consists of over 900 individual pieces of equipment. In 2023, 16 new tools were added to replace old data logging models, current transformers, air-quality sensors to complete tool kits, and added accessories for kits. The tools and manuals are available at no cost to customers, engineers, architects, and contractors in Idaho Power's service area to aid in the evaluation of energy efficiency projects and equipment they are considering. A contactless pick-up and drop-off system is available if desired.

In 2023, loan requests totaled 30 with 29 loans completed and one on-going. Loans were made to nine different locations and 14 unique users, four of which were new ERL users. The majority of tools were borrowed for principal investigations or audits, although loans were also made for determining baselines before energy efficiency measures were implemented. Tools were also used to verify energy efficiency measures. The ERL web page recorded 5,220 visits in 2023 compared to 2,768 visits in 2022. The related report is in the IDL section of *Supplement 2: Evaluation*.

### Digital Design Tools Update

Over the years, the IDL has developed several digital design tools to assist local firms. These tools require updating over time. In 2023, 17 tools were hosted on the IDL website and made available for use and download serving as a one-stop resource for engineers and architects for early design considerations. IDL provided priority for each tool and will update in future tasks. Work in 2023 was primarily focused on developing visualization tools for CBECS 2018 data that was released in late 2022 and development of an Indoor Air Quality tool. The related report for this task is in the IDL section of *Supplement 2: Evaluation*.

### Fan Savings from UV Lamps

Fan Savings from UV Lamps is a new task for 2023 that will be continued in 2024. In-duct Ultraviolet Germicidal Irradiation (UVGI) prevents microbial growth on cooling coils, which can reduce fan energy and can result in net energy savings depending on the building type and airflow. Energy savings are a result of cleaner cooling coils having less of a pressure restriction that the fan must overcome. Efforts for 2023 included the research of potential impacts from UVGI implementation and attempts at logging data between identical equipment, with and without the UVGI technology installed. Due to logging equipment difficulties, the equipment logging will take place in 2024 with support from a local engineering firm.

### 2024 IDL Strategies

In 2024, the IDL will continue work on Foundational Services, Lunch & Learn sessions, BSUG, ERL, Digital Design Tools Update, Fan Savings from UV Lamps, and two new tasks: Passive Window Design and Compressed Air Testing.

## *Distributed Energy Resources*

Pursuant to Order Nos. 32846 and 32925 in Case No. IPC-E-12-27 and Order No. 34955 in Case No. IPC-E-20-30, Idaho Power files its annual *Distributed Energy Resources (DER) Status Report* with the IPUC in April each year. The report provides updates on participation levels of customer generation, system reliability considerations, and accumulated excess net energy credits. The report can be accessed on Idaho Power's website (idahopower.com/solar); links to the three most recent reports are located to the right on the web page, in the section labeled *Annual DER/Customer Generation Status Reports*.

# CONCLUSIONS

This DSM report provides a summary of activities performed by Idaho Power to offer DSM programs to all its customers throughout 2023. Programs are generally designed to educate, inform, and/or reward customers.

The savings from energy efficiency programs, including the estimated savings from NEEA, were 139,683 MWh, and the energy efficiency portfolio was cost-effective from all three benefit/cost methodologies (UCT, TRC, and PCT).

Idaho Power successfully operated its three demand response programs in 2023, with total demand response capacity approximately 316 MW and an actual max load reduction of 240 MW.

The DSM programs are carefully managed and monitored for ways to improve savings, cost-effectiveness, and value to the customer. Three energy efficiency programs were closed in 2023, either because rising costs have impacted cost-effectiveness or because market trends have lessened the savings potential of the offerings and measures. One new program designed for multifamily projects was introduced in 2023, to reach customers that do not easily fit within other residential or commercial programs.

Idaho Power's collaboration with multiple stakeholders lays the groundwork for building a more energy-efficient future with the long-term goal of permanently changing the existing market.

This *DSM 2023 Annual Report* satisfies the reporting obligation set forth by IPUC Order No. 29419 in Case No. IPC-E-03-19.

# GLOSSARY OF ACRONYMS

A/C—Air Conditioning or Air Conditioner

Ad—Advertisement

AMI—Advanced Metering Infrastructure

aMW—Average Megawatt

AHRI—Air-Conditioning, Heating, and Refrigeration Institute

ASHRAE—American Society of Heating, Refrigeration, and Air Conditioning Engineers

ASHP—Air-Source Heat Pumps

B/C—Benefit/Cost

BCASEI—Building Contractors Association of Southeast Idaho

BCASWI—Building Contractors Association of Southwestern Idaho

BOC—Building Operator Certification

BOMA—Building Owners and Managers Association

BPA—Bonneville Power Administration

BSU—Boise State University

BSUG—Building Simulation Users Group

BTU—British Thermal Units

C&I—Commercial and Industrial

CAP—Community Action Partnership

CAPAI—Community Action Partnership Association of Idaho, Inc.

CBSA— Commercial Building Stock Assessment

CCFEE—Campus Cohort for Energy Efficiency

CCNO—Community Connection of Northeast Oregon, Inc.

CCS—Commissioning, Sizing, and Controls

CEAC—Cost-Effectiveness Advisory Committee

CEI—Continuous Energy Improvement

CEL—Cost-Effective Limit

CFM—Cubic Feet per Minute

CHQ—Corporate Headquarters (Idaho Power)

CIEE—Commercial and Industrial Energy Efficiency

CINA—Community in Action

COP—Coefficient of Performance

CR&EE—Customer Relations and Energy Efficiency

CSA–Customer Solutions Advisors

CSI—College of Southern Idaho

DHP—Ductless Heat Pump

DOAS—Dedicated Outside Air Systems

DOE—US Department of Energy

DR—Demand Response

DSM—Demand-Side Management

EA5—EA5 Energy Audit Program

ECM—Electronically Commutated Motor

EEAG—Energy Efficiency Advisory Group

EEI—Edison Electric Institute

EICAP—Eastern Idaho Community Action Partnership

EISA—*Energy Independence and Security Act of 2007*

EIWC—Eastern Idaho Water Cohort

EL ADA—El Ada Community Action Partnership

EM&V—Evaluation, Measurement, and Verification

EPA—Environmental Protection Agency

EOEA—Education and Outreach Energy Advisors

ERL—Energy Resource Library

ERV— Recovery Ventilator

ESK—Energy-Saving Kit

ETO—Energy Trust of Oregon

ft—Feet

GMI—Green Motors Initiative

GMPG—Green Motors Practice Group

GWh–Gigawatt-hour

H&CE—Heating & Cooling Efficiency

HER—Home Energy Report

HOU—Hours of Use

hp—Horsepower

HPWH—Heat Pump Water Heater

HRV—Heat Recovery Ventilator

HSPF—Heating Seasonal Performance Factor

HUD—Housing and Urban Development

HVAC—Heating, Ventilation, and Air Conditioning

IAQ—Indoor Air Quality

IBCA—Idaho Building Contractors Association

IBCB—Idaho Building Code Board

ID—Idaho

IDHW—Idaho Department of Health and Welfare

IDL—Integrated Design Lab

IEEC—Industrial Energy Efficiency Cohort

IECC—International Energy Conservation Code

IP—Internet Protocol

IPMVP—International Performance Measurement and Verification Protocol

IPUC—Idaho Public Utilities Commission

IRP—Integrated Resource Plan

ISM—In-Stadium Marketing

ISR—In-Service Rate

ISU—Idaho State University

kW—Kilowatt

kWh—Kilowatt-hour

LEEF—Local Energy Efficiency Funds

LIHEAP—Low Income Home Energy Assistance Program

LLLC—Luminaire Level Lighting Controls

M&V—Monitoring and Verification

MPER—Market Progress Evaluation Report

MVBA—Magic Valley Builders Association

MW—Megawatt

MWh—Megawatt-hour

n/a—Not Applicable

NEB—Non-Energy Benefit

NEEA—Northwest Energy Efficiency Alliance

NEEC—Northwest Energy Efficiency Council

NEEM—Northwest Energy-Efficient Manufactured Housing Program

NEMA—National Electrical Manufacturers Association

NLC—Networked Lighting Controls

NPR—National Public Radio

NREL—National Renewable Energy Laboratory's

NTG—Net to Gross

NWPCC—Northwest Power and Conservation Council

O&M—Operation and Maintenance

OPUC—Public Utility Commission of Oregon

OR—Oregon

ORS—Oregon Revised Statute

OTT—Over-the-Top

PAI—Professional Assistance Incentive

PCA—Power Cost Adjustment

PCT—Participant Cost Test

PLC—Powerline Carrier

PR—Public Relations

PTCS—Performance Tested Comfort System

QA—Quality Assurance

QC—Quality Control

RBSA—Residential Building Stock Assessment

RCT—Randomized Control Trial

REEEI—Residential Energy Efficiency Education Initiative

REM—Required Energy Modeling

RESNET—Residential Energy Services Network

RETAC—Regional Emerging Technology Advisory Committee

Rider—Energy Efficiency Rider

RIM—Ratepayer Impact Measure

RPAC—Regional Portfolio Advisory Committee

RPAC+—Regional Portfolio Advisory Committee Plus

RTF—Regional Technical Forum

SAS—Statistical Analysis System

SBDI—Small Business Direct Install

SCCAP—South Central Community Action Partnership

SCE—Streamlined Custom Efficiency

SEEK—Student Energy Efficiency Kits

SEICAA—Southeastern Idaho Community Action Agency

SEM—Strategic Energy Management

SIR—Savings-to-Investment Ratio

SRVBCA—Snake River Valley Building Contractors Association

TRC—Total Resource Cost

TRM—Technical Reference Manual

TSV—Thermostatic Shower Valve

UCT—Utility Cost Test

UVGI—Ultraviolet Germicidal Irradiation

VFD—Variable Frequency Drive

WAP—Weatherization Assistance Program

WAQC—Weatherization Assistance for Qualified Customers

WSOC—Water Supply Optimization Cohort

WWEEC—Wastewater Energy Efficiency Cohort

# APPENDICES

**Appendix 1. Idaho Rider, Oregon Rider, and NEEA payment amounts (January–December 2023)**

| | | |
|---|---|---|
| **Idaho Energy Efficiency Rider** | | |
| 2023 Beginning Balance | $ | (3,767,319) |
| 2023 Funding plus Accrued Interest as of December 31, 2023 | | 34,697,140 |
| **Total 2023 Funds** | | **30,929,821** |
| 2023 Expenses as December 31, 2023 | | (30,229,460) |
| **Ending Balance as of December 31, 2023** | **$** | **700,361** |
| **Oregon Energy Efficiency Rider** | | |
| 2023 Beginning Balance | $ | 154,052 |
| 2023 Funding plus Accrued Interest as of December 31, 2023 | | 2,142,378 |
| **Total 2023 Funds** | | **2,296,430** |
| 2023 Expenses as of December 31, 2023 | | (1,489,400) |
| **Ending Balance as of December 31, 2023** | **$** | **807,030** |
| **NEEA Payments** | | |
| 2023 NEEA Payments as of December 31, 2023 | $ | 2,726,302 |
| **Total** | **$** | **2,726,302** |

## Appendix 2. 2023 DSM expenses by funding source (dollars)

| Sector/Program | Idaho Rider | Oregon Rider | Non-Rider Funds | Total |
|---|---|---|---|---|
| **Energy Efficiency/Demand Response** | | | | |
| **Residential** | | | | |
| A/C Cool Credit | $ 1,536,873 | $ 85,060 | $ 365,690 | $ 1,987,623 |
| Easy Savings: Low-Income Energy Efficiency Education | — | — | 146,232 | 146,232 |
| Educational Distributions | 880,568 | 21,720 | — | 902,287 |
| Energy Efficient Lighting | 278,610 | 15,586 | — | 294,197 |
| Heating & Cooling Efficiency Program | 593,407 | 30,640 | — | 624,047 |
| Home Energy Audit | 230,011 | — | — | 230,011 |
| Home Energy Report Program | 883,505 | — | — | 883,505 |
| Multifamily Energy Efficiency Program | 22,758 | 1,216 | — | 23,974 |
| Oregon Residential Weatherization | — | 7,860 | — | 7,860 |
| Rebate Advantage | 130,233 | 6,867 | — | 137,100 |
| Residential New Construction Program | 195,102 | 194 | — | 195,296 |
| Shade Tree Project | 262,344 | — | — | 262,344 |
| Weatherization Assistance for Qualified Customers | — | — | 1,317,041 | 1,317,041 |
| Weatherization Solutions for Eligible Customers | 84,428 | — | 3,292 | 87,719 |
| **Commercial/Industrial** | | | | |
| Commercial and Industrial Energy Efficiency Program | | | | |
| Custom Projects | 11,221,008 | 136,943 | 1,224 | 11,359,176 |
| New Construction | 2,139,603 | 29,033 | — | 2,168,636 |
| Retrofits | 3,002,681 | 182,283 | — | 3,184,964 |
| Commercial Energy-Saving Kits | 53,167 | 2,397 | — | 55,563 |
| Flex Peak Program | 135,731 | 242,133 | 698,285 | 1,076,149 |
| Small Business Direct Install | 357,404 | 9,270 | — | 366,674 |
| **Irrigation** | | | | |
| Irrigation Efficiency Rewards | 1,474,741 | 127,827 | 106,399 | 1,708,967 |
| Irrigation Peak Rewards | 616,755 | 258,884 | 7,424,190 | 8,299,830 |
| **Energy Efficiency/Demand Response Total** | **$ 24,098,928** | **$ 1,157,914** | **$ 10,062,354** | **$ 35,319,196** |
| **Market Transformation** | | | | |
| NEEA | 2,589,987 | 136,315 | — | 2,726,302 |
| **Market Transformation Total** | **$ 2,589,987** | **$ 136,315** | **$ —** | **$ 2,726,302** |
| **Other Programs and Activities** | | | | |
| Commercial/Industrial Energy Efficiency Overhead | 890,300 | 47,055 | (1) | 937,354 |
| Energy Efficiency Direct Program Overhead | 290,729 | 15,317 | — | 306,046 |
| Oregon Commercial Audits | — | 6,402 | — | 6,402 |
| Residential Energy Efficiency Education Initiative | 359,242 | 13,430 | (1,357) | 371,316 |
| Residential Energy Efficiency Overhead | 1,204,872 | 63,557 | — | 1,268,429 |
| **Other Programs and Activities Total** | **$ 2,745,144** | **$ 145,761** | **$ (1,358)** | **$ 2,889,547** |
| **Indirect Program Expenses** | | | | |
| Energy Efficiency Accounting & Analysis | 952,424 | 48,461 | 199,616 | 1,200,501 |
| Energy Efficiency Advisory Group | 14,422 | 769 | — | 15,191 |
| Special Accounting Entries | (171,445) | 180 | — | (171,264) |
| **Indirect Program Expenses Total** | **$ 795,401** | **$ 49,410** | **$ 199,616** | **$ 1,044,428** |
| **Grand Total** | **$ 30,229,460** | **$ 1,489,400** | **$ 10,260,613** | **$ 41,979,473** |

## Appendix 3. 2023 DSM program activity

| Program | Participants | | Total Costs: Program Administrator [b] | Total Costs: Resource [c] | Savings: Annual Energy (kWh) | Savings: Peak Demand [d] (MW) | Measure Life (Years) | Nominal Levelized Costs [a]: Utility ($/kWh) | Nominal Levelized Costs [a]: Total Resource ($/kWh) |
|---|---|---|---|---|---|---|---|---|---|
| **Demand Response[1]** | | | | | | | | | |
| A/C Cool Credit | 18,714 | homes | $ 1,987,623 | $ 1,987,623 | n/a | 19.6/25.3 | n/a | n/a | n/a |
| Flex Peak Program | 271 | sites | 1,076,149 | 1,076,149 | n/a | 32.9/38.8 | n/a | n/a | n/a |
| Irrigation Peak Rewards | 2,439 | service points | 8,299,830 | 8,299,830 | n/a | 187.7/252.1 | n/a | n/a | n/a |
| **Total** | | | **$ 11,363,602** | **$ 11,363,602** | | **240.2/316.2** | | | |
| **Energy Efficiency** | | | | | | | | | |
| **Residential** | | | | | | | | | |
| Easy Savings: Low-Income Energy Efficiency Education | 99 | HVAC tune-ups | 146,232 | 146,232 | 46,109 | | 3 | 1.068 | 1.068 |
| Educational Distributions | 53,028 | kits/giveaways | 902,287 | 902,287 | 3,960,690 | | 8 | 0.034 | 0.034 |
| Energy Efficient Lighting | 184,950 | lightbulbs | 294,197 | 402,523 | 883,491 | | 15 | 0.032 | 0.044 |
| Heating & Cooling Efficiency Program | 1,035 | projects | 624,047 | 1,987,191 | 1,040,069 | | 16 | 0.056 | 0.180 |
| Home Energy Audit | 337 | audits | 230,011 | 274,124 | 11,329 | | 13 | 2.156 | 2.570 |
| Home Energy Report Program[2] | 96,901 | treatment size | 883,505 | 883,505 | 17,659,087 | | 1 | 0.047 | 0.047 |
| Multifamily Energy Savings Program | 0 | projects | 23,974 | 23,974 | – | | 11 | – | – |
| Oregon Residential Weatherization | 3 | audits/projects | 7,860 | 7,860 | – | | 45 | n/a | n/a |
| Rebate Advantage | 79 | homes | 137,100 | 159,600 | 214,236 | | 44 | 0.042 | 0.049 |
| Residential New Construction Program | 64 | homes | 195,296 | 241,468 | 234,945 | | 58 | 0.053 | 0.066 |
| Shade Tree Project | 2,462 | trees | 262,344 | 262,344 | 11,199 | | 40 | 1.571 | 1.571 |
| Weatherization Assistance for Qualified Customers | 167 | homes/non-profits | 1,317,041 | 2,115,268 | 314,260 | | 30 | 0.304 | 0.487 |
| *WAQC* | *137* | *homes/non-profits* | *958,736* | *1,756,963* | *263,060* | | *30* | | |
| *WAQC—Re-Weatherized Homes* | *30* | *homes/non-profits* | *358,306* | *358,306* | *51,200* | | *30* | | |
| Weatherization Solutions for Eligible Customers | 12 | homes | 87,719 | 87,719 | 18,184 | | 30 | 0.347 | 0.347 |
| **Sector Total** | | | **$ 5,111,613** | **$ 7,494,096** | **24,393,598** | | **5** | **$ 0.045** | **$ 0.068** |
| **Commercial/Industrial** | | | | | | | | | |
| Commercial Energy-Saving Kits | 1,117 | kits | 55,563 | 55,563 | 190,827 | | 6 | 0.054 | 0.054 |
| Custom Projects | 95 | projects | 11,359,176 | 26,228,419 | 60,667,088 | | 14 | 0.019 | 0.044 |
| Green Motors—Industrial | 17 | motor rewinds | | 11,915 | 63,538 | | 8 | n/a | n/a |
| New Construction | 102 | projects | 2,168,636 | 2,990,934 | 10,642,465 | | 14 | 0.021 | 0.029 |

| Program | Participants | Total Costs: Program Administrator [b] | Total Costs: Resource [c] | Savings: Annual Energy (kWh) | Savings: Peak Demand [d] (MW) | Measure Life (Years) | Nominal Levelized Costs [a]: Utility ($/kWh) | Nominal Levelized Costs [a]: Total Resource ($/kWh) |
|---|---|---|---|---|---|---|---|---|
| Retrofits | 526 projects | 3,184,964 | 9,012,722 | 14,457,180 | | 12 | 0.025 | 0.070 |
| Small Business Direct Install | 166 projects | 366,674 | 366,674 | 791,512 | | 11 | 0.055 | 0.055 |
| **Sector Total** | | **$ 17,135,013** | **$ 38,666,227** | **86,812,609** | | **14** | **$ 0.020** | **$ 0.045** |
| **Irrigation** | | | | | | | | |
| Green Motors—Irrigation | 4 motor rewinds | | 1,911 | 4,463 | | 21 | n/a | n/a |
| Irrigation Efficiency Reward | 643 projects | 1,708,967 | 14,744,378 | 4,558,425 | | 12 | 0.042 | 0.361 |
| **Sector Total** | | **$ 1,708,967** | **$ 14,746,288** | **4,562,888** | | **12** | **$ 0.042** | **$ 0.361** |
| **Energy Efficiency Portfolio Total** | | **$ 23,955,594** | **$ 60,906,611** | **115,769,095** | | **12** | **$ 0.023** | **$ 0.59** |
| **Market Transformation** | | | | | | | | |
| Northwest Energy Efficiency Alliance (codes and standards) | | | | 20,665,282 | | | | |
| Northwest Energy Efficiency Alliance (other initiatives) | | | | 3,248,819 | | | | |
| **Northwest Energy Efficiency Alliance Totals[3]** | | **$ 2,726,302** | **$ 2,726,302** | **23,914,101** | | | | |
| **Other Programs and Activities** | | | | | | | | |
| **Residential** | | | | | | | | |
| Residential Energy Efficiency Education Initiative | | 371,316 | 371,316 | | | | | |
| **Commercial** | | | | | | | | |
| Oregon Commercial Audits | 7 audits | 6,402 | 6,402 | | | | | |
| **Other** | | | | | | | | |
| Energy Efficiency Direct Program Overhead | | 2,511,829 | 2,511,829 | | | | | |
| **Total Program Direct Expense** | | **$ 40,935,045** | **$ 77,886,062** | **139,683,196** | | | | |
| Indirect Program Expenses | | 1,044,428 | 1,044,428 | | | | | |
| **Total DSM Expense** | | **$ 41,979,473** | **$ 78,930,490** | | | | | |

[a] Levelized Costs are based on financial inputs from Idaho Power's *2021 IRP*, and calculations include line-loss adjusted energy savings.

[b] The Program Administrator Cost is the cost incurred by Idaho Power to implement and manage a DSM program. Dollars are rounded to nearest whole unit, which may result in minor rounding differences.

[c] The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

[d] Demand response program reductions are reported with 7.6% peak loss assumptions. Maximum actual demand reduction and maximum demand capacity.

[1] Peak Demand is the peak performance of each respective program and not combined performance on the actual system peak hour.

[2] Savings have been reduced by 0.44% to avoid double counting of savings in other energy efficiency programs.

[3] Savings are preliminary estimates provided by NEEA. Final savings for 2023 will be provided by NEEA April 2024.

## Appendix 4. 2023 DSM program activity by state jurisdiction

| Program | Idaho Participants | Idaho Program Administrator Costs | Idaho Demand Reduction (MW)/ Annual Energy Savings (kWh) | Oregon Participants | Oregon Program Administrator Costs | Oregon Demand Reduction (MW)/ Annual Energy Savings (kWh) |
|---|---|---|---|---|---|---|
| **Demand Response**[1] | | | | | | |
| A/C Cool Credit | 18,501 homes | $ 1,902,563 | 19.4/25 | 213 homes | $ 85,060 | 0.2/0.3 |
| Flex Peak Program | 262 sites | 833,848 | 22.3/27.7 | 9 sites | 242,301 | 10.6/11.1 |
| Irrigation Peak Rewards | 2,439 service points | 8,039,460 | 183.5/246.4 | 55 service points | 260,370 | 4.2/5.7 |
| **Total** | | **$ 10,775,871** | **225.2/299.1** | | **$ 587,730** | **15/17.1** |
| **Energy Efficiency** | | | | | | |
| **Residential** | | | | | | |
| Easy Savings: Low-Income Energy Efficiency Education | 99 HVAC tune-ups | 146,232 | 46,109 | n/a HVAC tune-ups | n/a | n/a |
| Educational Distributions | 51,670 kits/giveaways | 880,568 | 3,876,746 | 1,358 kits/giveaways | 21,720 | 83,944 |
| Energy Efficient Lighting | 175,093 lightbulbs | 278,610 | 834,690 | 9,857 lightbulbs | 15,586 | 48,801 |
| Heating & Cooling Efficiency Program | 1,006 projects | 593,407 | 998,955 | 29 projects | 30,640 | 41,115 |
| Home Energy Audit | 337 audits | 230,011 | 11,329 | n/a audits | n/a | n/a |
| Home Energy Report Program | 96,901 treatment size | 883,505 | 17,659,087 | n/a treatment size | n/a | n/a |
| Multifamily Energy Savings Program | 0 projects | 22,758 | 0 | 0 projects | 1,216 | 0 |
| Oregon Residential Weatherization | n/a | | | 3 audits/projects | 7,860 | 0 |
| Rebate Advantage | 75 homes | 130,233 | 202,551 | 4 homes | 6,867 | 11,685 |
| Residential New Construction Program[2] | 64 homes | 195,102 | 234,945 | n/a homes | 194 | 0 |
| Shade Tree Project | 2,462 trees | 262,344 | 11,199 | n/a trees | n/a | n/a |
| Weatherization Assistance for Qualified Customers | 162 homes/non-profits | 1,216,848 | 305,675 | 5 homes/non-profits | 100,194 | 8,585 |
| Weatherization Solutions for Eligible Customers | 12 homes | 87,719 | 18,184 | n/a homes | n/a | n/a |
| **Sector Total** | | **$ 4,927,337** | **24,199,469** | | **$ 184,277** | **194,129** |
| **Commercial** | | | | | | |
| Commercial Energy-Saving Kits | 1,072 kits | 53,167 | 182,697 | 45 kits | 2,397 | 8,130 |
| Custom Projects | 93 projects | 11,222,172 | 60,123,293 | 2 projects | 137,004 | 543,795 |
| Green Motors—Industrial | 16 motor rewinds | | 53,401 | 1 motor rewinds | | 10,137 |
| New Construction | 100 projects | 2,139,603 | 10,566,927 | 2 project | 29,033 | 75,538 |
| Retrofits | 513 projects | 3,002,681 | 13,751,064 | 13 projects | 182,283 | 706,116 |

| Program | Idaho Participants | Idaho Program Administrator Costs | Idaho Demand Reduction (MW)/ Annual Energy Savings (kWh) | Oregon Participants | Oregon Program Administrator Costs | Oregon Demand Reduction (MW)/ Annual Energy Savings (kWh) |
|---|---|---|---|---|---|---|
| Small Business Direct Install | 162 projects | 357,404 | 774,190 | 4 projects | 9,270 | 17,322 |
| **Sector Total** | | **$ 16,775,026** | **85,451,571** | | **$ 359,987** | **1,361,038** |
| **Irrigation** | | | | | | |
| Green Motors—Irrigation | 4 motor rewinds | | 4,463 | 0 motor rewinds | | 0 |
| Irrigation Efficiency Rewards | 609 projects | 1,575,820 | 4,171,363 | 34 projects | 133,147 | 387,062 |
| **Sector Total** | | **$ 1,575,820** | **4,175,826** | | **$ 133,147** | **387,062** |
| **Market Transformation** | | | | | | |
| Northwest Energy Efficiency Alliance (codes and standards) | | | 20,255,854 | | | 409,428 |
| Northwest Energy Efficiency Alliance (other initiatives) | | | 3,038,426 | | | 210,393 |
| **Northwest Energy Efficiency Alliance Totals[3]** | | **$ 2,589,987** | **23,294,280** | | **$ 136,315** | **619,821** |
| **Other Programs and Activities** | | | | | | |
| **Residential** | | | | | | |
| Residential Energy Efficiency Education Initiative | | 357,953 | | | 13,362 | |
| **Commercial** | | | | | | |
| Oregon Commercial Audits | | | | 7 audits | 6,402 | |
| **Other** | | | | | | |
| Energy Efficiency Direct Program Overhead | | 2,385,901 | | | 125,928 | |
| **Total Program Direct Expense** | | **$ 39,387,895** | | | **$ 1,547,150** | |
| Indirect Program Expenses | | 985,037 | | | 59,391 | |
| **Total Annual Savings** | | | **137,121,146** | | | **2,562,050** |
| **Total DSM Expense** | | **$ 40,372,931** | | | **$ 1,606,541** | |

[1] Peak Demand is the peak performance of each respective program and not combined performance on the actual system peak hour.

[2] Oregon administrator costs are negative due to account adjustments. Amount charged to the Oregon rider was reversed and charged to the Idaho rider.

[3] Savings are preliminary estimates provided by NEEA. Final savings for 2023 will be provided by NEEA April 2024.