



2024 Washington Natural Gas Energy Efficiency Annual Conservation Plan

November 1, 2023

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Such risks, uncertainties, and other factors include, among others, those contained within the company's most recent annual report on Form 10-K, or quarterly report on Form 10-Q, filed with the Securities and Exchange Commission. Those reports are available at avistacorp.com.

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EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

This natural gas *Annual Conservation Plan (ACP)* is intended to represent a planning process for Avista’s natural gas Energy Efficiency Program. The company is committed to maintaining and enhancing meaningful non-company party involvement within this process. Over the course of the coming year, revisions and updates to the plan are to be expected as part of adaptively managing the energy efficiency portfolio. Based on the 2022 Conservation Potential Assessment (CPA), including low-income, the natural gas savings potential is estimated to be 942,239 therms. Avista has also committed to achieving an additional five percent of conservation, which results in a natural gas conservation target of 989,363 therms. The 2024 *ACP*’s expected acquisition matches the conservation target, with overall budgeted expenditures estimated to be \$9,549,869.

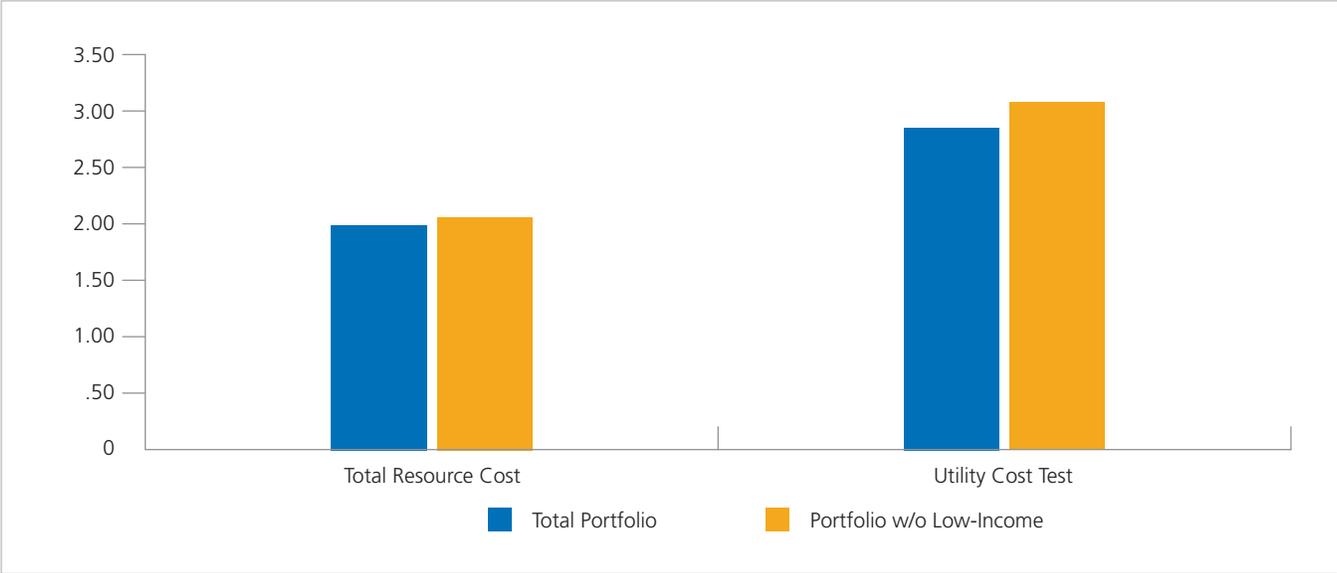
Table 1 illustrates the estimated savings and total budget per sector for 2024.

TABLE 1 – PORTFOLIO SAVINGS AND BUDGET BY SECTOR

Sector	Therms	Budget
Low-Income Programs	6,091	\$ 929,540
Residential Programs	432,356	\$ 4,877,645
Commercial/Industrial Programs	514,483	\$ 2,796,828
NEEA Savings	36,432	\$ 406,000
Program Support Expenses Not Allocated to Program Costs	–	\$ 539,855
Total	989,363	\$ 9,549,869

Cost-effectiveness is a key indicator of Avista’s Energy Efficiency Program portfolio performance, and while the company pursues all cost-effective measures, it also retains flexibility in its program portfolio so that meaningful energy efficiency can be achieved by all customers. Avista’s program portfolio includes a segment designed to serve low-income customers, providing a higher level of benefit (incentive) to these more vulnerable populations. See Figure 1 for a summary of cost effectiveness for Avista’s natural gas program portfolio.

FIGURE 1 – PORTFOLIO COST-EFFECTIVENESS



	Total Portfolio	Portfolio w/o Low-Income
Total Resource Cost	2.00	2.85
Utility Cost Test	2.05	3.07

Introduction

Pursuant to RCW 80.28.380, the 2024 *ACP* outlines Avista's conservation offerings and its approach to energy efficiency, as well as details on verifying and reporting savings. The company's plan is established to acquire all conservation measures that are available and cost-effective. Avista accomplishes this by offering financial incentives for energy-saving measures, while using the most effective mechanism to deliver energy efficiency services to customers. These mechanisms are varied, and include prescriptive programs or standard offers such as high-efficiency appliance rebates; site-specific or customized analyses at customer premises; midstream incentives, which go directly to HVAC and hot water heating equipment distributors; regional market transformation efforts in partnership with other utilities; programs to encourage and incentivize efficient behaviors; provision of low-income weatherization services through local community action agencies; a multi-channel communication effort; and support for cost-effective appliance standards and building codes.

As with the electric *ACP*, Avista's natural gas *ACP* represents a planning process that relies on meaningful and extensive engagement from Avista's Energy Efficiency Advisory Group (EEAG) as well as its Equity Advisory Group (EAG). Avista consults with its advisory groups multiple times over the course of a year – seeking input and guidance on best practices for new programs, as well as advice on possible changes to existing programs and services – to adaptively manage its program portfolio in a nimble way that reflects changing market conditions.

The business planning process builds on the electric and natural gas *IRP* and *CPA* processes – overall resource planning, completed every two years, which integrates energy efficiency and generation resources into a preferred resource scenario. It is the purpose of the business plan to create an operational strategy for reaching the aggregate targets identified within the *IRP* in a manner that is cost-effective and with due consideration to all aspects of customer value.

The annual planning process also leads to the identification of infrastructure and support needs such as:

- ◆ Defining the necessary labor complement
- ◆ Establishment of an annual budget
- ◆ Review of and modification to the Evaluation, Measurement, and Verification (EM&V) plan
- ◆ Identification of outreach requirements
- ◆ Organization of a marketable customer-facing portfolio

The budgetary projections established in this plan are applied in a separate mid-year process to revise the conservation tariff rider funding mechanisms contained within the Schedule 191 natural gas tariffs, if needed. The tariff rider surcharges are periodically adjusted with the objective of moving these balances toward zero.

2024 Natural Gas IRP Target

Avista based its 2024 natural gas target on the most recent approved *IRP*. For 2024, the achievable economic potential identified in the study was 942,249 therms (989,361 when including the five percent decoupling commitment), which is inclusive of residential, commercial, and industrial segments.

Key Impacts

Conservation Target Setting for Natural Gas

Avista, along with other Washington utilities offering natural gas service, will be required to establish a two-year natural gas target that includes the effect of greenhouse gas emissions. Per RCW 80.28.380, “Each gas company must identify and acquire all conservation measures that are available and cost-effective. Each company must establish an acquisition target every two years and must demonstrate that the target will result in the acquisition of all resources identified as available and cost-effective. The cost-effectiveness analysis required by this section must include the costs of greenhouse gas emissions established in RCW 80.28.395. The targets must be based on a conservation potential assessment prepared by an independent third party and approved by the commission. Conservation targets must be approved by order by the commission.”

TABLE 2 – 10-YEAR NATURAL GAS CONSERVATION POTENTIAL

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Residential	295,957	470,308	553,376	633,806	721,475	851,062	874,313	843,883	781,107	688,891
Commercial	626,431	1,301,857	1,940,136	2,643,274	3,381,480	4,162,491	4,970,895	5,775,508	6,595,446	7,392,077
Industrial	19,861	40,045	60,305	80,830	101,293	121,697	142,004	162,077	181,802	201,051
Total Potential	942,249	1,812,211	2,553,817	3,357,911	4,204,248	5,135,249	5,987,212	6,781,467	7,558,355	8,282,019

On March 25, 2020, the Washington Utilities and Transportation Commission issued Final Order No. 09 of Dockets UE-190334, UG-190335, and UE-190222 (Consolidated) that resulted in new requirements on how Avista sets its target for natural gas conservation. With Avista’s continuation of its natural gas decoupling mechanism, the company committed to achieving an additional five percent above the natural gas conservation target required by its natural gas *Integrated Resource Plan*.

Avista has included the additional five percent commitment into its target for the 2024 *ACP*. As with the electric program, the company will notify its EEAG if savings forecasts do not indicate that the annual natural gas conservation target will be met.

Energy Efficiency Budget Projections

Avista is committed to achieving all cost-effective energy efficiency measures and to maximize the value of the portfolio without budgetary constraints. This process assumes that prudently incurred expenditures will be fully recoverable through the conservation tariff rider, and that revisions in the tariff rider surcharge will be sufficiently timely to maintain a materially neutral tariff rider balance. The overall budget projection is summarized in Table 3, which includes elements of the energy efficiency budget that have been designated as supplemental to indicate that they are unrelated to the current-year operations and are not included in the cost-effectiveness calculation. These supplemental costs include the funding associated with regional programs like Northwest Energy Efficiency Alliance (NEEA) and the cost to perform CPA studies and EM&V.

TABLE 3 – ENERGY EFFICIENCY BUDGET SUMMARY

	2024 Natural Gas Budget	Supplemental Budget	Non-Supplemental Budget
Total Incentives	\$ 6,094,285	\$ 0	\$ 6,094,285
Administrative Labor	\$ 251,404	\$ 0	\$ 251,404
Direct Benefit to Customer Labor	\$ 885,347	\$ 0	\$ 885,347
Total Non-Labor/Non-Incentive	\$ 1,912,132	\$ 539,855	\$ 1,372,278
NEEA	\$ 406,000	\$ 406,000	\$ 0
Total	\$ 9,549,869	\$ 945,855	\$ 8,604,014

Avista continues to track the proportion of total utility expenditures returned to customers in the form of direct incentives and benefits as a metric to guide the company toward improved administrative efficiencies. The amount included in the direct benefit figure includes not only the incentives paid to customers through funds for energy efficiency programs, but also the engineering time spent on customized projects for energy efficiency participants. While labor costs are generally not included as a direct customer benefit, the inclusion of the engineering team in an energy efficiency project provides the customer with access to a valuable resource for identifying and implementing energy-saving measures at their home or business.

TABLE 4 – PROPORTION OF FUNDS RETURNED TO CUSTOMERS THROUGH DIRECT BENEFITS

	Direct Benefit to Customer
Utility Expenditures Returned to Customers via Direct Benefits	72%

The program-by-program details of the expected incentive expenditures are provided in greater detail in Table 5. The direct incentive expenditures represent the estimated incentives that will be paid to customers directly or indirectly for participation in energy efficiency programs. The overall level of expense is correlated to the program's throughput and energy acquisition. The amounts are subject to change based on customer participation.

TABLE 5 – CUSTOMER DIRECT INCENTIVE EXPENDITURE DETAIL

Energy Efficiency Program	Direct Incentive Expenditures
Low-Income Programs	
Low-Income	\$ 440,678
Deferred Maintenance	\$ 300,000
Total Low-Income Incentives	\$ 740,678
Residential Programs	
Residential Prescriptive	\$ 1,664,885
Residential Midstream	\$ 1,369,991
Multifamily (New Offerings)	\$ 66,365
On-Bill Repayment	\$ 206,000
Home Energy Audit	\$ 107,111
Total Residential Incentives	\$ 3,414,352
Commercial/Industrial Programs	
Prescriptive Shell	\$ 116,989
Commercial Midstream	\$ 1,166,325
Site-Specific	\$ 463,464
Pay for Performance	\$ 193,179
Clean Buildings Accelerator	\$ 0
Total Commercial/Industrial Incentives	\$ 1,939,955
Total of All Incentives	\$ 6,094,985

The non-incentive expenses, including both non-supplemental and supplemental expenditures, are detailed to a lower level of aggregation and broken out by portfolio in Table 6. These expenses are allocated by the percentage of value provided by each program. The policy regarding assigning costs is based on the source of the requirement or justification for the expense – and the portfolio benefiting from the outcome of that expense.

TABLE 6 – NON-INCENTIVE UTILITY EXPENSE DETAIL

Expense Type	Washington Natural Gas Portfolio	Supplemental Budget	Non-Supplemental Budget
Third-Party Non-Incentive Payments	\$ 2,124,618	\$ 0	\$ 2,124,618
Labor	\$ 246,749	\$ 0	\$ 246,749
EM&V	\$ 384,782	\$ 384,782	\$ 0
Memberships	\$ 24,572	\$ 0	\$ 24,572
Customer Outreach	\$ 12,192	\$ 0	\$ 12,192
Training/Travel	\$ 610	\$ 0	\$ 610
Marketing	\$ 48,368	\$ 0	\$ 48,368
Regulatory	\$ 610	\$ 0	\$ 610
Studies and Research	\$ 7,000	\$ 0	\$ 7,000
Software Implementation	\$ 14,021	\$ 0	\$ 14,021
Conservation Potential Assessment	\$ 155,073	\$ 155,073	\$ 0
General Implementation	\$ 30,289	\$ 0	\$ 30,289
NEEA Market Transformation	\$ 406,000	\$ 406,000	\$ 0
Total	\$ 3,454,884	\$ 945,855	\$ 2,509,029

Projections of expected labor requirements by job classification are made by managers within the energy efficiency team, and labor overheads are applied. Labor is allocated to programs based on the weighted value of benefits the program brings to the overall portfolio.

ENERGY EFFICIENCY PORTFOLIO OVERVIEW

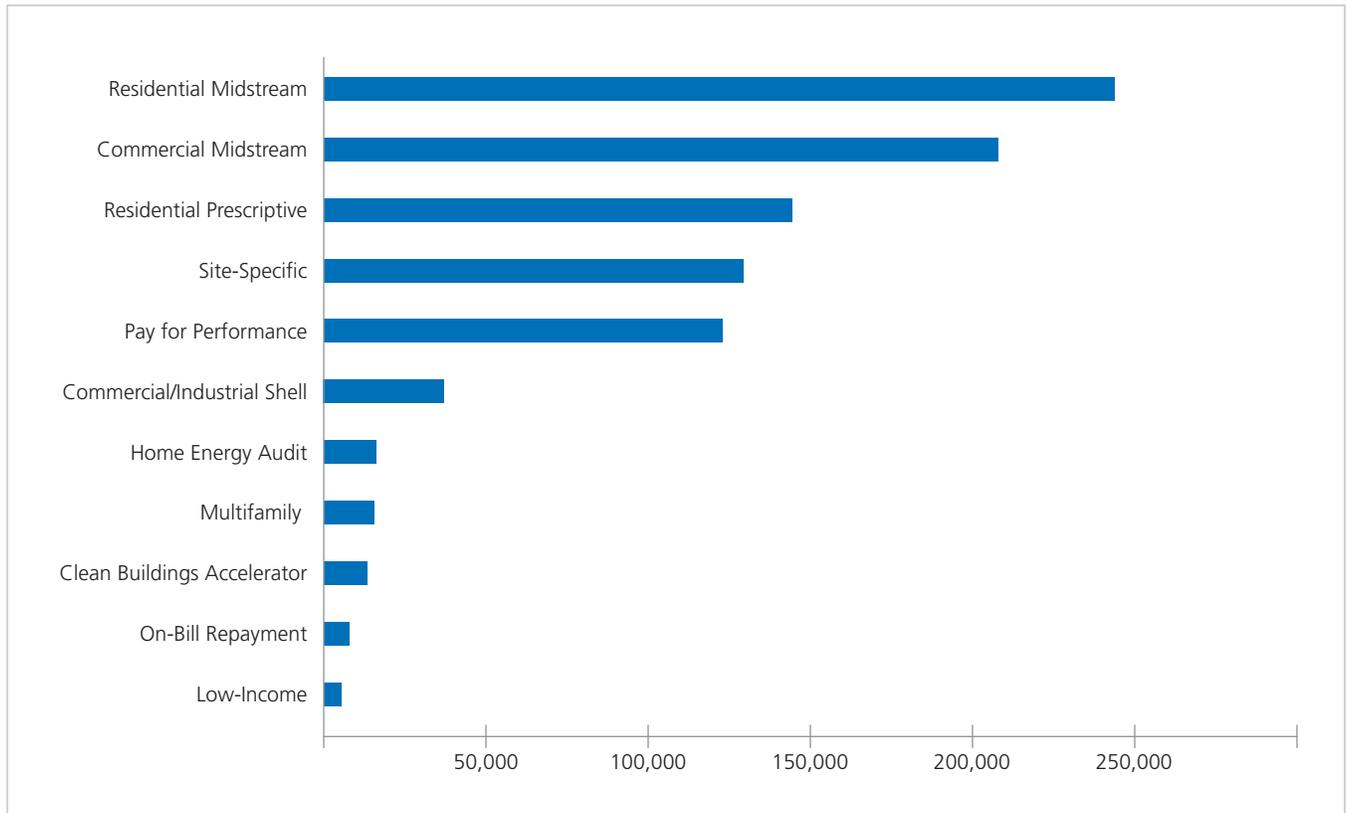


ENERGY EFFICIENCY PORTFOLIO OVERVIEW

Avista's energy efficiency portfolio is composed of residential, low-income, and commercial/industrial programs.

For 2024, the company anticipates savings of approximately 952,929 therms from its program offerings. Figure 2 illustrates the major categories from which savings are achieved.

FIGURE 2 – SAVINGS FROM ENERGY EFFICIENCY PROGRAMS (THERMS)



Residential Portfolio Overview

Avista’s residential portfolio comprises several approaches to engage and encourage customers to make energy efficiency improvements in their home. While prescriptive rebate programs have long been the main component of the portfolio, residential HVAC and water heating measures transitioned to the Midstream Program, which launched in 2023. Details of the Midstream Program are discussed on page 13.

Prescriptive measures remain for shell measures, thermostats, and ENERGY STAR Manufactured Homes. The On-Bill Repayment Program provides customers access to a simple and convenient financing option at an affordable interest rate. These programs are supplemented by educational and outreach efforts, including a Residential Home Energy Audit Program. While the audit program is instrumental in identifying the need for weatherization, the associated savings from those efforts are captured within the Residential Shell Program.

For the 2024 program year, Avista anticipates approximately 432,356 therms to be achieved through residential programs with an expected spend of \$4,877,645. Table 7 summarizes 2024 residential program savings and budget estimates.

TABLE 7 – RESIDENTIAL PROGRAM OVERVIEW

Residential Programs	Natural Gas Program Savings (Therms)	Expected Spend
Midstream	245,266	\$ 1,957,130
Residential Prescriptive	144,975	\$ 2,378,407
Multifamily (New Offerings)	16,591	\$ 94,807
On-Bill Repayment	8,788	\$ 294,286
Home Energy Audit	16,736	\$ 153,016
Total Residential	432,356	\$ 4,877,645

Residential Programs

Residential Prescriptive Programs

Prescriptive measures offer a simple pathway to encourage customers to adopt qualifying efficiency measures. Prescriptive programs do not require a pre-installation contract, instead offering a fixed incentive amount for eligible measures. Measures offered through prescriptive programs are evaluated based on the typical application of that measure by program participants. Prescriptive measures are generally limited to those that are low-cost, offer relatively homogenous performance across the spectrum of likely applications, and would not significantly benefit from a more customized approach. Specific plans for Avista’s prescriptive programs are enumerated in this section.

TABLE 8 – RESIDENTIAL PRESCRIPTIVE PROGRAM METRICS

Projected Program Metrics	
Overall Therm Savings	144,975
Incentives	\$ 1,664,885
Non-Incentive Utility Costs	\$ 713,522
Total Costs	\$ 2,378,407
Cost-Effectiveness	
Total Resource Cost	0.71
Utility Cost Test	2.02

Program Manager

Michele Drake

Residential ENERGY STAR Manufactured Homes Program

Program Description

The ENERGY STAR Certified Manufactured Homes Program is intended to encourage those who are purchasing a new manufactured home to invest in an energy efficient product. The ENERGY STAR designation allows buyers to easily identify manufactured homes that are holistically more energy efficient than standard construction. As code requirements have become more rigorous and builder practices have become more efficient, the ENERGY STAR program has modified its guidelines to ensure that certified manufactured homes represent a meaningful improvement over non-certified manufactured homes. ENERGY STAR has partnered with NEEM (Northwest Energy Efficient Manufactured Housing Program) to provide independent, third-party certification of manufactured homes. NEEM's process includes inspections at manufacturing plants to ensure homes are being built to specification.

Program Eligibility

Eligibility includes all Washington residential natural gas customers who purchase a certified ENERGY STAR or ENERGY STAR with NEEM+ manufactured home.

Incentive Revisions

Beginning in 2024, the prescriptive program will recognize additional efficiency distinction between homes, including those branded as ENERGY STAR and ENERGY STAR with NEEM+. The NEEM+ certification criteria include additional efficiency measures such as programmable thermostats, improved windows, building wrap, and window flashing. The new incentive levels are intended to motivate customers to choose the highest efficiency manufactured home available.

Projected participation, per-unit therm savings, and incentive amounts for this new measure will be developed in late 2023.

Residential Thermostat Program

Program Description

All Avista residential customers who utilize natural gas as a primary heat source and install qualified equipment are eligible for thermostat rebates. Both single family homes and multifamily residences are eligible for rebates for contractor or self-installed smart thermostats. Multifamily homes are eligible for line voltage thermostat rebates.

Incentive Revisions

Avista will provide a qualified product list for smart thermostats in 2024. The product list is intended to reduce customer confusion over smart thermostats, and specifically which smart thermostats qualify for the program.

Residential Shell Program

Program Description

Residential shell rebates encourage customers to improve their home's shell or exterior envelope with upgrades to windows, storm windows, and insulation. Energy efficiency marketing efforts build considerable awareness of opportunities in the home and drive customers to the website for rebate information. Vendors generate participation in the program using rebates as a sales tool for their services. Utility website promotion, vendor training, and presentations at various customer events throughout the year are some of the other communication methods that encourage program participation.

Program Eligibility

Eligibility for rebates will apply to all Avista Washington residential natural gas customers who install qualified materials and meet all requirements for installation.

Incentive Revisions

The modified incentive amounts, incentive structure, and installation options established in 2023 will continue in 2024. In a continuing effort to remove barriers to participation, Avista has added additional DIY installation options for some measures, tiered options for insulation, and increase rebate amounts.

Midstream Incentive Program

Program Description

The Midstream Program was launched in 2023 and includes measures that were previously part of several other programs. Working directly with its implementation partner, Energy Solutions, Avista has transitioned residential and commercial HVAC and water heating, and food service measures to a midstream incentive model.

Common barriers to participation in traditional downstream rebate programs include a lack of customer awareness of rebate programs; participation barriers such as language and technology knowledge; and distributors' tendency to stock low-cost, low-efficiency units due to the high cost of energy-efficient equipment. Customers who requested high-efficiency equipment often had to wait weeks for the equipment, an undesirable situation for a home or business without functioning equipment. By focusing efforts on distributors directly, Avista's program leverages distributors' recognized Influence over contractors and specific equipment sales. Distributors work with contractors to submit claims for Avista customers. Claims are paid promptly and additional savings are garnered for Avista without relying on customers to submit paperwork to the utility. Equitable access is improved for customers, who may receive an incentive without having to complete any paperwork or have background knowledge of the rebate program.

The food service program is a national model that's familiar to many large commercial chains yet also includes local distributors.

Program Manager

Michele Drake

TABLE 9 – MIDSTREAM RESIDENTIAL PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		244,641
Incentives	\$	1,369,991
Non-Incentive Utility Costs	\$	587,139
Total Costs	\$	1,957,130

TABLE 10 – MIDSTREAM COMMERCIAL PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		208,272
Incentives	\$	1,166,325
Non-Incentive Utility Costs	\$	499,853
Total Costs	\$	1,666,178

Program Eligibility

Commercial and residential customers are eligible for the program if they have Avista electric and/or natural gas, and install qualifying equipment through a participating contractor. Partner Energy Solutions engages in outreach and education for distributors, who utilize a software system to enter and track claims. Avista has provided basic data to Energy Solutions to enable verification of customer eligibility primarily at the time of claim submittal. Equipment utilized for industrial processes is not part of the Midstream Program.

Incentive Revisions

The Midstream Program for HVAC and water heating will continue in 2024 without major changes to program details or incentives. Avista will continue to evaluate HVAC and water heating measures offered through the program and will revise program offerings or incentives as necessary.

Within the food service area of the program, Avista plans to update program requirements for several measures and add new measures – including electric induction cooktops, natural gas cooktops, holding bins, soup wells, natural gas rotisseries and radiant conveyor toasters. Avista will also increase the size of ultra-low temperature freezers that are part of the program, adding models over 29 cubic feet to accommodate the largest models with the biggest potential for savings.

Multifamily Weatherization Program – New Offerings

Program Description

After years of implementing a successful Multifamily Direct Install Program, Avista plans to sunset the program in its current form and focus on developing new multifamily opportunities. Avista is in the process of developing an RFP for multifamily program offerings and plans to select a multifamily solutions provider or provider in late 2024. Some opportunities Avista may consider through this RFP process include strategic energy management, fulfillment of any remaining direct install opportunities, and multifamily weatherization offerings.

Program Manager

Greta Zink

TABLE 11 – MULTIFAMILY WEATHERIZATION PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		16,591
Incentives	\$	66,365
Non-Incentive Utility Costs	\$	28,442
Total Costs	\$	94,807
Cost-Effectiveness		
Total Resource Cost		1.90
Utility Cost Test		3.07

Residential Home Energy Audit Program

Program Description

The Home Energy Audit Program is designed to educate and drive customer engagement around conservation and promote other Avista energy efficiency and renewable-energy programs. Energy savings are captured for direct-installation measures. Additional energy savings have been observed during the pilot as a result of program participants implementing recommended efficiency measures. Some of these measures qualify for Avista rebates, and savings are captured through those programs.

Key to the success of this program is providing customers with a home assessment from a knowledgeable and qualified home inspector with energy auditor credentials, direct installation measures such as pipe wrap and LEDs, and energy efficiency education that includes increasing awareness of Avista’s rebate programs, products and services. Avista’s website also communicates program requirements and highlights opportunities for customers.

TABLE 12 – RESIDENTIAL HOME ENERGY AUDIT PROGRAM METRICS

Projected Program Metrics	
Overall Therm Savings	16,736
Incentives	\$ 107,111
Non-Incentive Utility Costs	\$ 45,905
Total Costs	\$ 153,016

Program Implementation

Taking advantage of previous Home Energy Audit Program experience and aligning with industry best practices, Avista conducted a pilot Home Energy Audit Program in 2019. In early 2020, Avista gained support to expand the pilot to the full program from the Energy-Efficiency Advisory Group and commission staff for both Washington and Idaho. The pilot was suspended due to the pandemic, and no audits were conducted in 2020 or 2021. The program resumed in June 2022, and 350 audit jobs were completed across both Washington and Idaho in the first twelve months. Based on experience from the pilot, Avista expected about 200-300 audits per year. However, customer demand for the program has modified this estimate upward to an expected 500 audits per year. Avista will continue with the full program in 2024.

Program Eligibility

This program is applicable to residential customers who use Avista energy as their primary heating source in Washington and Idaho.

Program Measures and Incentives

With an audit, the customer receives a comprehensive and detailed *Home Energy Assessment Report* that includes energy savings measures targeted to the specific home, as well as direct installation and leave-behind materials.

On-Bill Repayment Program

Program Description

In October 2021, Avista partnered with Puget Sound Cooperative Credit Union (PSCCU) to launch a new On-Bill Repayment (OBR) Program to provide a funding solution for Washington State customers who implement energy efficiency projects.

PSCCU offers Energy-Smart Loans for energy-efficient projects to home and business owners in Washington State, along with personalized underwriting practices and low interest rates. Participants reap immediate benefits from energy efficiency upgrades. Paying the loan back on their Avista bill further provides participants with the ease and convenience of one less bill to manage.

Customers' Energy-Smart Loan installments are billed monthly as a line item on the Avista bill until either the term of the loan is completed or Avista is otherwise instructed by PSCCU to remove the loan from the bill. Extra principal payments or early loan payoffs are made directly to PSCCU.

FIGURE 3 – ON-BILL REPAYMENT PROGRAM BILL EXAMPLE

Page 1 of 2

AVISTA
myavista.com
1 (800) 227-9187

Account Number: [REDACTED]
Statement Date: 09/03/2021
Service Address: 17016 [REDACTED]
210

Monthly Statement	
Total Amount Due	Due Date
\$198.96	Sep 23, 2021 <small>(Applies to new charges only)</small>

Bill at a Glance

Previous Balance Due	\$59.19
Payment(s) Received through 09/03/2021	0.00
Subtotal	59.19
New Charge(s)	
Electric	20.27
Natural Gas	9.50
Energy-Smart Loan	110.00
Total Amount Due This Month	\$198.96
Due Date (Applies to new charges only):	Sep 23, 2021

Your Message Center

Disconnections for non-payment resume **October 1**. Visit myavista.com/assistance for more detailed information. If you find you're behind on your bill, please contact us now by calling (800) 227-9187 or email us at ask@myavista.com to prevent disconnection. We know these are challenging times and we're here to help. Visit myavista.com/tips for ways to stay cool this summer!

Puget Sound Cooperative Credit Union (PSCCU)
Energy-Smart Loan Number(s) 1468920-VD1,
1468921-VD2. If you have questions contact
PSCCU at 800-273-1550 or askus@psccu.org.
Your electric bill includes Federal Columbia River
benefits supplied by the Bonneville Power
Administration.

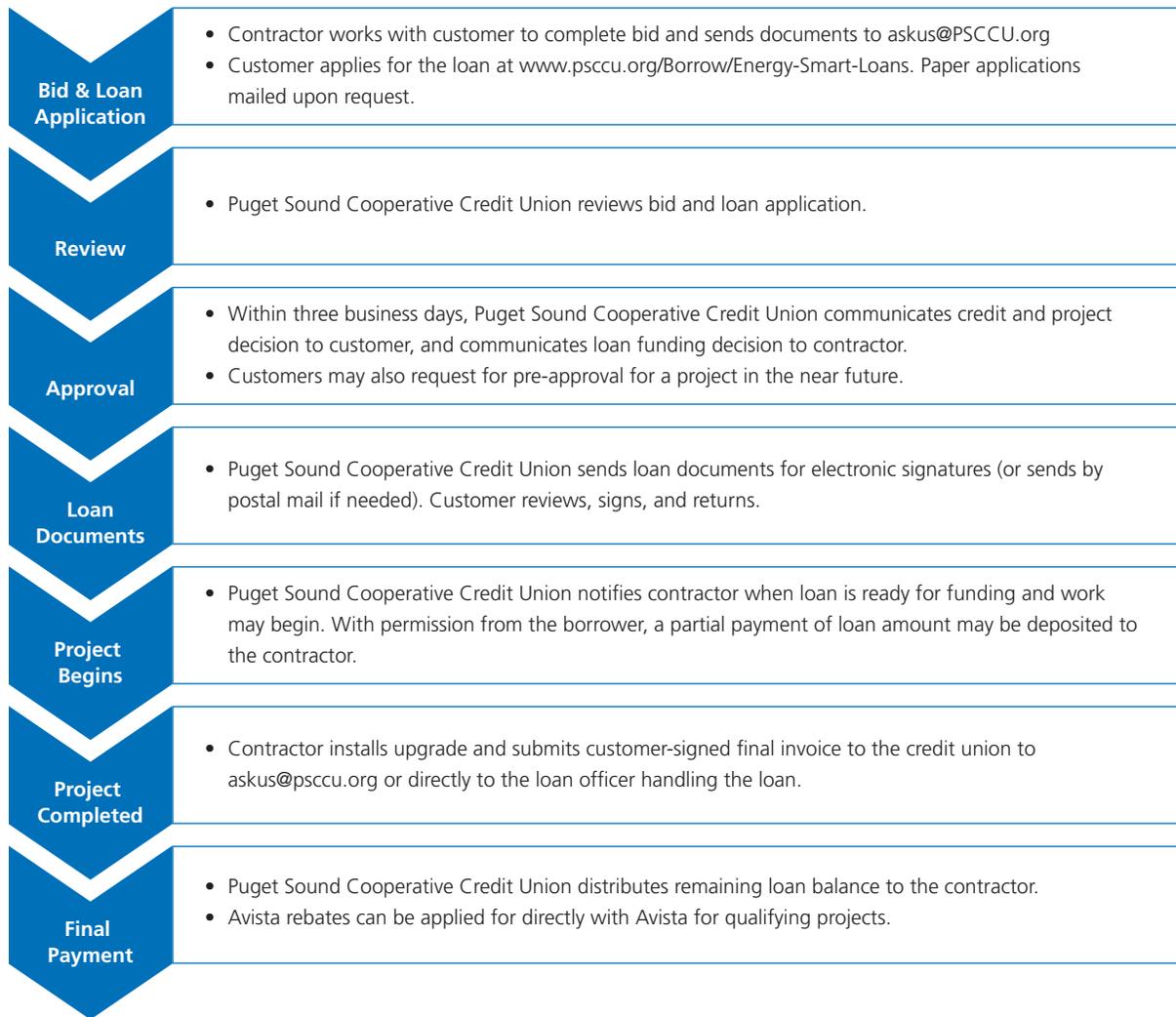
PSCCU favorable interest rates are further lowered by Avista subsidies to allow more customers access to energy efficiency project funding.

TABLE 13 – ON-BILL REPAYMENT PROGRAM RATES AND TERMS

Loan Amount	\$1,000 - \$30,000 Residential	\$5,000 - \$65,000 Small Business
Interest rate	Up to 6.50% APR	Up to 6.50% APR
Term	Up to 15 years	Up to 15 years
Recording fee	\$445 UCC filing fee*	Varies*
Example	\$15,000 loan at 6.5%, 180 payments of \$130.67 each	

*Fees can be paid up front or added to the loan at the borrower's discretion.

FIGURE 4 – ON-BILL REPAYMENT CUSTOMER PARTICIPATION JOURNEY



Energy-Smart Loans through Avista’s OBR Program are intended for customers who need assistance for upfront capital for the purchase of energy efficiency equipment and related labor. This customer segment includes both income-qualified and non-income qualified residential customers. Processes to ensure income-qualified customers are directed to CAAs are in place. Income-qualified customers may apply for an Energy-Smart Loan and participate in the OBR program if they choose to do so after all other options have been shared with them.

TABLE 14 – ON-BILL REPAYMENT PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		8,788
Incentives	\$	206,000
Non-Incentive Utility Costs	\$	88,286
Total Costs	\$	294,286

Program Implementation

During the last two months of 2021 and first half of 2022, participation in the OBR program included 81 residential customers across Washington State. In 2023, participation increased as more customers and trade allies became aware of the program and as bank interest rates rose. In September of 2023, due to rising interest rates across all PSCCU Energy-Smart Loans, Avista had to raise the interest rate for loans on the OBR program to 6.5%. This rate remains competitive and is not expected to increase in 2024.

The program remains open to small business customers in Washington, but it has not garnered their participation. Currently all participants are residential customers.

Avista recognizes the key to the program’s success is Avista’s trade allies, who will help promote and deliver the program. Multi-channel Avista marketing efforts will also drive customers to the OBR program.

Program Eligibility

Residential and small business customers in owner-occupied buildings may be eligible for OBR; funded measures must be fueled by Avista. An eligible projects list created by Avista and supported by Washington State’s Clean Energy Fund program guidelines is maintained on both Avista’s and PSCCU’s websites; customers can use it as a reference when considering this funding solution for their project.



Low-Income Portfolio Overview

Low-Income Program

Program Description

Avista’s natural gas low-income energy efficiency programs (e.g., weatherization) are offered in a cooperative effort with eight CAAs – including one Tribal Housing Authority – under a bi-annual contract. Funding allows the agencies considerable flexibility to deliver a variety of applicable measures to each individual low-income client’s home.

Program Manager

Renee Zimmerman

TABLE 15 – LOW-INCOME PROGRAM METRICS

Projected Program Metrics	
Overall Therm Savings	6,091
Incentives	\$ 440,678
Non-Incentive Utility Costs	\$ 188,862
Total Costs	\$ 629,540
Cost-Effectiveness	
Total Resource Cost	0.99
Utility Cost Test	0.36

CAAs are the primary point of customer contacts for Avista’s low-income programs. CAAs qualify the customers, generate referrals (often from their bill assistance offerings), and have access to a variety of funding sources available to best meet customers’ home energy needs.

The agencies serving Avista’s Washington service territory receive an aggregate annual funding amount of \$4.25 million, which covers the cost of energy efficiency work; any needed health, safety, or repair improvements; agency administration, and program support between natural gas and electric programs.¹ The difference is based on the intent to serve more customers, consider different programming approaches, increase cost-effectiveness, and meet other requirements from the Clean Energy Implementation Plan. Avista does not require an agency to serve a certain number of homes heated by natural gas or electricity. Homes with priority exhibit high energy use, high energy burden, or other characteristics of eligibility (e.g., senior, disabled, Native American). While funds are allocated to specific agencies in this plan, Avista remains flexible to meet incremental needs within the communities being served.

1) As part of the General Rate Case Settlement Agreement in Docket Nos. UE-140188 and UG-140189, the company agree to increase low income funding to \$4.35 million in 2024. Avista has built into its plan a level of expense for the low-income program to approximate the increased funding.

The budgets listed below are agency annual allocations. Each agency enters a two-year funding agreement with Avista, in alignment with the company’s biennial conservation planning process. The two-year contract structure allows agencies the flexibility to pull funding from a future year’s allocation to continue serving Avista customers in advance of a new contract. This funding structure allows for continuous use of utility funds and a regular cadence for utility billing throughout the year, rather than concentrating the expenses at a particular time in any given year.

Table 16 shows the 2024 budgeted funding allocation by agency, as well as by counties served.

TABLE 16 – LOW-INCOME PROGRAM FUNDING BY COMMUNITY ACTION AGENCY

Agency	County	Funding
Spokane Neighborhood Action Partners (SNAP)	Spokane	\$ 2,762,500
Rural Resources Community Action	Ferry, Lincoln, Pend Oreille, Stevens	\$ 354,166.67
Community Action Center	Whitman	\$ 297,500
Opportunities Industrialization Council	Adams, Grant	\$ 155,833.33
Spokane Indian Housing Authority	Stevens County	\$ 42,500
Community Action Council of Lewis, Mason & Thurston Counties	Klickitat, Skamania	\$ 56,666.67
Benton Franklin County Community Action	Franklin	\$ 42,500
Community Action Partnership	Asotin	\$ 510,000
Set aside/TBD		\$ 28,333.33
Total		\$ 4,250,000

The agencies are authorized to use 30 percent of their contract for administration cost reimbursement. Avista also allows for up to 30 percent of the contract to fund health, safety, and home repairs that enable efficiency upgrades. This spending is at the agency’s discretion and offers flexibility in preparing a home to accommodate the improvement and preserve the longevity of the installed measures.

Avista fully funds a substantial list of energy efficiency natural gas measures. The list includes all measures on the Deemed Measure Priority List (DMPL) in the Washington State Department of Commerce’s *Weatherization Manual, July 2022* edition, as well as additional utility-approved measures.

TABLE 17 – LOW-INCOME APPROVED MEASURES AND DIRECT CUSTOMER BENEFITS

	Projected Participation	Per-Unit Therm Savings	Funding	Direct Benefit to Customer
Air Infiltration – Natural Gas	33 Sq. Ft.	16.09	Fully Fund	\$ 979.20
ENERGY STAR-Rated Doors	134 Units	12.32	Fully Fund	\$ 704.40
ENERGY STAR-Rated Windows (u-factor .29)	3,344 Sq. Ft.	0.31	Fully Fund	\$ 30.74
Storm Windows (low-e rated)	Units		Fully Fund	
High-Efficiency Natural Gas Furnace	Units	73.55	Fully Fund	\$ 3,612.67
Water Heater	Units	7.74	Fully Fund	\$ 2,515.62
Attic Insulation	46,815 Sq. Ft.	0.04	Fully Fund	\$ 1.87
Duct Insulation	344 Sq. Ft.	0.17	Fully Fund	\$ 2.92
Floor Insulation	6,688 Sq. Ft.	0.05	Fully Fund	\$ 2.67
Wall Insulation	6,688 Sq. Ft.	0.06	Fully Fund	\$ 2.12
Duct Sealing	10 Units	20.17	Fully Fund	\$ 793.95
Health & Human Safety	1 Unit	1.00	Fully Fund	\$ 0.10
Tankless Water Heater	Units	66.50	Fully Fund	\$ 573.00
High-Efficiency Boiler	Units	20.17	Fully Fund	\$ 793.95
Door Sweep	Units		Fully Fund	
Smart Thermostat	Units		Fully Fund	

Measures that are not on the approved measure list are evaluated by Avista for full funding on a case-by-case basis. If Avista cannot cover the cost in full of a particular measure, agencies may choose to use their health, safety, and repair allocation toward covering the full cost of the rebated measure, if they do not have other funding sources to make up the difference. Note that the benefit amount represents the historic fully-funded value that customers received as part of their participation in the Low-Income Program.

Commercial/Industrial Portfolio Overview

The commercial/industrial energy efficiency market is served through a combination of prescriptive and site-specific offerings, as well as through midstream and clean buildings accelerator programs. Any measure not offered through a prescriptive or midstream program is automatically eligible for treatment through the Site-Specific Program, subject to the criteria for participation in that program. Prescriptive or midstream paths for the commercial/industrial market are preferred for measures that are relatively homogeneous in scope and uniform in their energy efficiency characteristics.

Prescriptive paths do not require pre-project contracting – as the Site-Specific Program does – thus lending themselves to streamlined administrative and marketing efforts. Incentives are established for these prescriptive programs following Avista’s guidelines and standard operating procedures. Actual costs and savings are tracked, reported, and available to the third-party impact evaluator. Many, but not all, of the prescriptive measures use Regional Technical Forum’s (RTF) Unit Energy Savings (UES).

When the prescriptive path is not available, Avista offers commercial/industrial customers the opportunity to propose any energy efficiency project with documentable energy savings for technical review and potential incentive through the Site-Specific Program. Multifamily residential developments may also be treated through the Site-Specific Program when all or a large number of the residences and common areas are treated. The determination of incentive eligibility is based on projects’ individual characteristics as they apply to the company’s guidelines and standard operating procedures.

Avista anticipates approximately 514,482 therms to be achieved through commercial/industrial programs, with an expected spend of \$2,798,683. Table 18 summarizes the 2024 commercial/industrial program estimates.

TABLE 18 – COMMERCIAL/INDUSTRIAL PROGRAM OVERVIEW

Commercial/Industrial Programs	Natural Gas Program Savings (Therms)	Expected Spend
Shell	37,810	\$ 167,127
Site-Specific	129,896	\$ 662,092
Midstream	209,078	\$ 1,666,178
Pay for Performance	123,634	\$ 275,970
Clean Buildings Accelerator	14,065	\$ 25,461
Total Commercial/Industrial	514,483	\$ 2,796,828

Commercial/Industrial Programs

Commercial/Industrial Site-Specific Program

Program Description

The Site-Specific Program is a major component in Avista’s commercial/industrial portfolio. Customers receive technical assistance and incentives in accordance with Schedule 190. The company’s program approach strives for a flexible response to energy efficiency projects that have demonstrable therm savings within program criteria. Most site-specific therm savings are composed of custom projects that do not fit the prescriptive path, including appliances, compressed air, HVAC, industrial process, motors, shell measures, and lighting. The Site-Specific Program is available to all commercial/industrial retail natural gas customers. It typically brings in the largest portion of savings to the overall energy efficiency portfolio.

Avista’s Site-Specific Program has historically been one of the largest and frequently one of the more cost-effective programs. Any measure with documentable and verifiable energy savings that is not otherwise covered by a prescriptive program is eligible for the Site-Specific Program. The all-encompassing nature of the program has led to the participation of a number of projects that would not otherwise have been incorporated within the portfolio.

Program marketing relies heavily on Avista’s account executive infrastructure, as well as commercial/industrial energy efficiency outreach, which includes print advertising, customer newsletters, customer meetings, and vendor engagement. While account executives have actively managed accounts, they’re also available to any customer based on geographic location or industry and serve as the liaison for all energy needs. Part of each account executive’s effort is expended on coordinating the customer involvement in both the site-specific and prescriptive energy efficiency programs. The program delivery and engineering teams perform additional outreach to customer groups and support program marketing, as well as serve their functions within the program implementation process.

Program Manager

Lorri Kirstein

TABLE 19 – COMMERCIAL/INDUSTRIAL SITE-SPECIFIC PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		129,896
Incentives	\$	463,464
Non-Incentive Utility Costs	\$	198,628
Total Costs	\$	662,092
Cost-Effectiveness		
Total Resource Cost		3.63
Utility Cost Test		2.84

Program Implementation

This program will offer an incentive for any qualifying natural gas energy-saving measure up to the incremental efficiency measure cost that has a simple payback which is less than the life of the measure being installed. Avista will adjust the percent of incremental cost paid to attempt to obtain the greatest energy savings at the lowest cost. A cap of 70 percent of the incremental cost and a 15-year measure simple payback based on energy cost savings is used unless a business need to increase either parameter is articulated. Site-Specific Program savings can be difficult to predict due to the large nature of the projects and the long sales cycles. General economy shifts may also affect customer willingness to fund efficiency improvements. Increases in process, eligibility complexity, customer costs to participate beyond the capital investment, and costs for post-measurement activities are kept in mind and managed in order to continue to successfully engage customers.

Key to the success of the program are the direct incentives to encourage customer interest, marketing efforts, account executives whose input and assistance can drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. The Avista website and the trade ally network are used to communicate program requirements, incentives, and forms.

TABLE 20 – COMMERCIAL/INDUSTRIAL SITE-SPECIFIC MEASURES AND INCENTIVES

	Estimated Therm Savings	Incentives
Site-Specific Programs	129,896	\$ 463,464

Commercial/Industrial Business Partner Program

The Business Partner Program (BPP) is an outreach effort designed to target Avista’s small business customers by bringing awareness of utility programs and services that can assist in managing their energy bills. When it comes to participating in energy efficiency programs, small businesses are chiefly focused on ways to save money, and often have neither the time nor the capital to make improvements. The BPP provides advice and tools customers can use to educate and empower both business owners and employees to use less energy.

This high-touch initiative increases awareness about services such as billing options, EV information, loan program, and energy efficiency rebates. It also offers trade ally assistance for cost proposals. Once customers are educated about potential improvements, the challenge is to encourage them to act on these enhancements. The BPP provides a comprehensive approach by offering these typically hard-to-reach customers Trade Ally bid assistance, education about understanding their utility bills and billing options offered by Avista, and financial incentives for efficiency measures.

Commercial/Industrial Prescriptive Insulation Program

Program Description

The Commercial Prescriptive Shell Program provides incentives to customers who improve the envelope of their existing buildings by adding insulation, which may make a business more energy-efficient and comfortable.

Program Manager

Greta Zink

TABLE 21 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE SHELL PROGRAM METRICS

Projected Program Metrics	
Overall Therm Savings	37,810
Incentives	\$ 116,989
Non-Incentive Utility Costs	\$ 50,138
Total Costs	\$ 167,127
Cost-Effectiveness	
Total Resource Cost	8.68
Utility Cost Test	2.11

Program Implementation

The commercial insulation prescriptive rebate approach issues payment to the customer after the measure has been installed by a licensed contractor. Commercial customers must have an annual heating footprint for a fuel provided by Avista. Customers must submit a completed rebate form, invoices, and an insulation certificate within 90 days after the installation has been completed. Avista will send an incentive check to the customer or a designee after the project is approved. Rebates will not exceed the total amount on the customer invoice. Each rebate will be qualified and processed within iEnergy with the current-year calculator. This program is promoted by trade allies, Avista account executives, the Avista website, and Avista marketing efforts. The Avista website is also used to communicate program requirements, incentives, and forms.

TABLE 22 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE SHELL PROGRAM MEASURES AND INCENTIVES

	Projected Participation	Per-Unit Therm Savings	Incentive
Less than R11 Attic Insulation (E/G) to R30-R44 Attic Insulation	61,321 Sq. Ft.	0.09 \$	1.00
Less than R11 Attic Insulation (E/G) to R45+ Attic Insulation	123,937 Sq. Ft.	0.13 \$	1.25
Less than R11 Roof Insulation (E/G) to R30+ Roof Insulation	0 Sq. Ft.	0.12 \$	1.00
Less than R4 Wall Insulation (E/G) to R11-R18 Wall Insulation	0 Sq. Ft.	0.24 \$	1.00
Less than R4 Wall Insulation (E/G) to R19+ Wall Insulation	44,943 Sq. Ft.	0.36 \$	1.25

Commercial/Industrial Pay for Performance Program

Program Description

The Commercial Pay for Performance Program is an incentive program that pays customers for actual energy savings at the meter. Energy savings can come from building retrofits and equipment upgrades as well as from behavioral, operations and maintenance, and retro-commissioning activities.

TABLE 23 – COMMERCIAL/INDUSTRIAL PAY FOR PERFORMANCE PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		123,634
Incentives	\$	193,179
Non-Incentive Utility Costs	\$	82,791
Total Costs	\$	275,970

Program Manager

Greta Zink

Program Implementation

The Pay for Performance Program pays annual incentives for all electricity/natural gas saved, rather than separate incentives for individual measures. Qualifying customers who implement whole-building energy retrofits will receive a set incentive rate for measurable savings that are achieved over the course of three years, with incentive payments made at the end of each year. Incentives are paid at \$0.08 per kWh and \$1.25 per therm.

This program is available for any Avista commercial customer who own or operate buildings with at least 20,000 square feet of heated or cooled space and has consistent and measurable energy usage. Each building must have stable energy use over the past year and be metered separately, preferably with interval meters. To be eligible for this program, savings from planned improvements must be at least 10 percent of the building's baseline kWh or therm consumption. Manufacturing/industrial processes are excluded under this program but may be eligible under the site-specific path. Customers submit a completed rebate form, and Avista establishes a usage baseline, approves the projects, and sends a contract for the project. After improvements are implemented, savings are measured against the baseline, and payments are made annually for three years if savings are met.

Pilot Projects and New Program Offerings

Avista is continuously evaluating new technologies and new approaches for attaining energy conservation. As the company pursues all cost-effective kWh and therms, piloting new programs allows both it and its customers to explore new avenues for obtaining energy savings. Avista is exploring multiple pilot programs for both residential and commercial/industrial customers. The company will also offer two new programs: Small Home Weatherization and Early-Adopter Incentives for the Washington Clean Buildings Act. The progress of these new pilot programs is shared regularly with the advisory group.

Washington State Clean Buildings Act Early Adopter Incentives

Program Description

Washington State House Bill 1257 was codified into law late in 2019. This law requires existing commercial buildings over 50,000 square feet to comply with established performance standards. Compliance requirements for commercial building owners will be phased in starting in 2026, with all commercial buildings over 50,000 square feet complying by 2028. Compliance plans must be operationalized one year prior to compliance deadlines.

The law also includes provisions for incentives to early adopters whose building's baseline energy use exceeds the performance standard target by a certain amount. \$75 million is designated to assist building owners in achieving compliance. Early adopter incentives will be administered by utilities.

Energy Use Intensity (EUI) metrics will be used to determine compliance with the performance standard. It has been determined that the Department of Energy's ENERGY STAR Portfolio Manager Tool will be used to calculate the EUI.

The Department of Commerce is responsible for assuring compliance and determining early adopter incentive fund allocations. They've published recommendations for affected building owners to prepare, including benchmarking their buildings through Portfolio Manager and developing and executing an energy efficiency plan. Utilities in Washington play a vital role in working cooperatively with the Department of Commerce to execute the new law and to support building owners as they navigate the compliance process. Avista has identified the four key areas of support shown in Table 24.

TABLE 24 – COMMERCIAL/INDUSTRIAL WASHINGTON STATE CLEAN BUILDINGS ACT EARLY ADOPTER INCENTIVES

Service	Start Date	Prior Service
Early Adopter Payment Incentive	In place	Avista pays customer and then gets credit against Public Utility Tax
ENERGY STAR Portfolio Manager	In place	Current program offering since January 2009
Energy Efficiency Engineering Services	In place	Current offering in place since Avista began energy efficiency programs
Clean Buildings Accelerator Program	In place	Offered since 2022

The last of these offerings on the list, the Clean Buildings Accelerator program, is a strategic energy management program that educates customers about the law and provides the tools needed for compliance. Participants in the program learn what their building’s compliance targets are, how to use the ENERGY STAR Portfolio Manager application, how to calculate their building’s compliance metric, and how to create an Energy Management Plan and an Operations and Maintenance Program. This is done through a cohort-based approach over a four-month sprint period, one-on-one coaching, building automation review and two quarterly elevation seminars.

Cohort sizes can include up to 10 customers, but Avista’s first two cohorts included only six customers each. Avista will begin a third cohort fall of 2023 that will continue into the second quarter of 2024. Avista will annually review whether to continue offering the program based on customer interest, expansion of Washington State Clean Buildings law, and the activities and guidance of the Department of Commerce.

TABLE 25 – COMMERCIAL/INDUSTRIAL CLEAN BUILDINGS ACCELERATOR PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		14,065
Incentives	\$	0
Non-Incentive Utility Costs	\$	25,461
Total Costs	\$	25,461

Hybrid Heat Pump Pilot

Program Description

Starting in 2024, Avista plans to conduct a pilot program to explore the differences between cold climate heat pumps and hybrid heat pumps, with a focus on learning more about the performance of each type. For the purposes of this pilot, a hybrid heat pump is defined as an electric heat pump with natural gas backup heating. Avista hopes to determine the feasibility of adding these measures to the company’s efficiency programs. The pilot will subsidize the installation costs of 12 heat pumps in total – six cold climate and six hybrid. In addition to the pilot’s primary goals, Avista hopes to learn more about the factors that influence customers (economic, environmental, behavior, emotional) as they consider significant HVAC upgrades. Avista is also interested in learning more about perceived home comfort for each of these systems.

The pilot will span two years in order to allow Avista to collect data over two cooling and two heating seasons. The total budget is expected to be \$500,000.

In addition to this pilot, Avista is also exploring a possible pilot to evaluate natural gas absorption heat pumps. This pilot is in preliminary planning phases but may move forward in the late spring or early summer of 2024. Avista will consult with its advisory group if it intends to move forward with this pilot.

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REGIONAL MARKET TRANSFORMATION



REGIONAL MARKET TRANSFORMATION

Market transformation consists of defined interventions occurring for a finite period of time, utilizing strategically selected approaches to influence the energy market (customer, trade allies, manufacturers or combinations thereof) followed by an exit strategy. Successful market transformations permanently change the trajectory of markets in favor of more cost-effective energy efficiency choices, well beyond the termination of the active intervention.

Electric utilities within the Northwest came together in 1997 to establish and fund a cooperative effort toward sustaining market transformation on a regional basis, with sufficient scale and diversity to deliver a portfolio capable of providing a cost-effective electric-efficiency resource.

That organization, NEEA, is currently in its sixth funding cycle for 2020-24. Avista has been an active participant and funder of this collaborative effort since its inception. NEEA's successful residential lighting efforts – and many other ventures – are difficult to replicate. Nevertheless, there is little doubt that there are cost-effective opportunities that can only be achieved, or that are best achieved, through a regionally cooperative effort.

For 2024, Avista's Washington portion of NEEA's natural gas budget is expected to be approximately \$406,000. NEEA funding requirements are incorporated within the budget but are supplementary expenditures outside of the scope of the current year's local portfolio. NEEA's portfolio has not been incorporated within either the acquisition projection or the cost-effectiveness of the 2024 local portfolio developed within this plan. NEEA provided Avista with a savings forecast range between 3,300-68,000 therms derived from codes and standards savings related to residential new construction. This unusually wide range is due to uncertainty in how the 2022 Washington State Building Code, which will go into effect sometime in 2024, will impact natural gas savings. For planning purposes, Avista chose to use the midpoint of this forecast range to estimate 2024 projected natural gas savings due to NEEA programs.

AVISTA-SPECIFIC METHODOLOGIES AND ANALYTICAL PRACTICES



AVISTA-SPECIFIC METHODOLOGIES AND ANALYTICAL PRACTICES

Over time, Avista has evolved in its approach to calculating the various metrics applied within the planning effort to meet the needs of its portfolio and regulation. Care has been taken to ensure that these approaches are consistent with the intent of the Northwest Power and Conservation Council's (NWPCC) methodologies for the analysis of energy efficiency. Avista completes an *Annual Conservation Report (ACR)* in the spring of each year, based on a retrospective review of actual results from the prior year. This process includes the calculation of each of the four basic standard practice tests (summarized in Appendix B – Summarization of Cost Effectiveness Methodology). Because the total resource cost (TRC) test and utility cost test (UCT) are the basis for optimizing the portfolio, the explanation of Avista's methodologies, for planning purposes, focus on these two tests.

The calculation of portfolio cost-effectiveness excludes costs that are unrelated to the local energy efficiency portfolio in that particular year. Those excluded costs, termed "supplemental" costs in Avista's calculations, include:

- ◆ The funding associated with regional programs (NEEA)
- ◆ The cost to perform CPAs
- ◆ Costs related to EM&V

Individual measures are aggregated into programs composed of similar measures. At the program level, non-incentive portfolio costs are allocated based on direct assignment to the extent possible, and costs are allocated based on a program's share of portfolio-avoided cost-value acquisition when direct assignment is not possible. The result is a program-level TRC test and UCT cost-effectiveness analysis that incorporates these allocated costs.

Since the costs and benefits associated with the adoption of a measure may accrue over time, it is necessary to establish a discount rate. Future costs and benefits are discounted to the present value and compared for cost-effectiveness purposes. Generally, energy and non-energy benefits (NEBs) accrue over the measure life and costs are incurred up front.

The calculation of the TRC test benefits, to be consistent with NWPCC methodologies, includes an assessment of non-energy impacts (both benefits and costs) accruing to the customer. These impacts most frequently include maintenance cost, water, and sewer savings, and – in the case of the low-income program – inclusion of the cost of providing base-case end-use equipment as part of a fully funded measure as well as the value of health and human safety funding (on a dollar-for-dollar basis). Starting in 2024, the modified TRC test will become the primary cost-effectiveness test for natural gas programs in Avista's Washington portfolio.

For the purposes of calculating TRC cost-effectiveness, any funding obtained from outside of Avista's customer population (generally through tax credits or state- or federally-administered programs) is not considered to be a TRC. These costs are regarded as imported funds and, from the perspective of Avista's customer population appropriate to the TRC test, are not costs borne by Avista customers. Co-funding of efficiency measures from state and federal programs for low-income programs applicable to a home that is also being treated with Avista funding is not incorporated within the program cost. This is consistent with permitting tax credits to offset customer incremental cost as described within the *California Standard Practice Manual* description of the TRC test.

Avista's energy efficiency portfolios are built from the bottom up, starting with the identification of prospective efficiency measures based on the most recent CPA and augmented with other specific opportunities as necessary. Since potential assessments are only performed every two years and the inputs are locked many months in advance of filing the *IRP* itself, there is considerable time for movement in these inputs and the development of other opportunities.

Evaluation, Measurement, and Verification

Within its energy efficiency portfolio, Avista incorporates EM&V activities to validate and report verified energy savings related to its energy efficiency measures and programs. EM&V protocols serve to represent the comprehensive analyses and assessments necessary to supply useful information to management and non-company parties that adequately identify the acquisition of energy efficiencies attributable to Avista's conservation programs, as well as potential process improvements necessary to improve operations both internally and for customers. EM&V includes impact evaluation and process evaluation. Taken as a whole, EM&V is analogous with other industry standard terms such as portfolio evaluation and program evaluation.

To support planning and reporting requirements, several guiding EM&V documents are maintained and published. This includes the EM&V framework, an annual EM&V plan, and EM&V contributions within other energy efficiency and Avista corporate publications. Program-specific EM&V plans are created, as necessary, to inform and benefit the energy efficiency activities. These documents are reviewed and updated regularly, reflecting improvements to processes and protocols.

EM&V efforts will also be applied to evaluating emerging technologies and applications being considered for inclusion in the company's energy efficiency portfolio. In the electric portfolio, Avista may spend up to 10 percent of its conservation budget on programs whose savings impact have not yet been measured if the overall portfolio of conservation passes the applicable cost-effectiveness test. These programs may include educational, behavior change, and other types of investigatory or pilot projects. Specific activities can include product and application document reviews, development of formal evaluation plans, field studies, data collection, statistical analysis, and solicitation of user feedback.

Because of the benefits to customers and to Avista, Avista actively participates in regional energy efficiency activities. The company has a voting role on the Regional Technical Forum (RTF), a critical advisory committee to the NWPCC. The RTF oversees standardization of energy savings and measurement processes for electric applications in the Pacific Northwest. This knowledge base provides energy efficiency data, metrics, non-energy benefits, and references suitable for inclusion in Avista's *Technical Reference Manual (TRM)* relating to acquisition planning and reporting. In addition, the company engages with other Northwest utilities and the NEEA in various pilot projects or subcommittee evaluations. Portions of the energy efficiency savings acquired through the NEEA's programs within the region are attributable to Avista's portfolio.

Avista's commitment to the critical role of EM&V is supported by the company's continued focus on the development of best practices for its processes and reporting. The International Performance Measurement and Verification Protocol serves as the basis of measurement and verification plans developed and applied to Avista programs. In addition, the compilation of EM&V protocols released under the U.S. Department of Energy's Uniform Methods Project will be considered and applied where applicable to support the consistency and credibility of reported results. Verification of a statistically significant number of projects is often extrapolated to perform impact analysis on complete programs, within reasonable standards of rigor and degree of conservatism. This process serves to ensure that Avista will manage its energy efficiency portfolio in a manner consistent with both utility and public interests.

For 2024, Avista will issue an RFP during the fourth quarter of 2023 to identify a single EM&V vendor for all residential and commercial programs for the 2024-2025 biennium.

Cost-Effectiveness Metrics, Methodology, and Objectives

Avista's planning approach aims to maximize cost-effective conservation acquired by analyzing the cost-effectiveness of each segment (residential, low-income, and commercial/industrial), as well as the ways in which measures within programs contribute to the cost-effectiveness of that segment and eventually the individual portfolios. Non-energy impacts (NEIs) are a common topic of discussion in many energy-evaluation circles and Avista has made impactful changes to the inclusion of NEIs (see the section on non-energy impacts). Avista is appreciative of the valuable work the RTF has done to quantify NEIs for the region and where values have not been identified, Avista will look to the RTF to supplement values. The company views these efforts as an iterative process and expects that more discovery will take place in the future.

As with other utilities in the region, Avista actively participates in RTF meetings and provides measure-level data back to the RTF to further refine their estimates. Avista acknowledges that it has the responsibility to use the best available data no matter the source; at times, that comes from internal estimates. Avista will continue to work with members from the RTF to identify measures or technologies that may have gaps in data and provide information where needed. These efforts further refine the RTF measures and form UES values that are more specific to Avista's service territory.

The company maintains an active involvement in the regional energy efficiency community and is committed to acknowledging and addressing new energy efficiency developments as they are presented. Avista will continue to work with interested persons as conversations around cost-effectiveness arise.

For 2024, Avista will continue engagement with its third-party partner DNV (formerly DNV-GL) to pursue NEIs related to energy efficiency measures for natural gas transport customers.

Energy Efficiency at Power Production Facilities

As per the company's *BCP* conditions, Avista continues to review the feasibility of pursuing cost-effective conservation in the form of reductions in electric power consumption resulting from increases in the efficiency of energy use at electric power production facilities it owns in whole or in part. Avista meets with its generation engineering team on an annual basis to discuss potential projects that may lead to energy efficiency at facilities it manages or owns. While the generation team is focused primarily on providing safe and reliable power, they understand the benefit of efficiency and how those levels contribute to the regional clean energy goal. Avista will continue to work with its generation team to identify potential projects in the next biennium.

For the 2024-2025 biennium, Avista is considering replacement of the HVAC system at Cabinet Gorge Dam. Avista's energy efficiency team is providing technical assistance to the asset management team and will calculate potential energy savings from various upgrade options to help inform the team's decision. A project timeline has not yet been established.

Schedule 190 – Energy Efficiency Programs

Avista's natural gas energy efficiency operations are governed by Schedule 190 tariff requirements. These tariffs (attached within Appendix C) detail the eligibility and allowable funding that the company provides for energy efficiency measures. Though the tariff allows for considerable flexibility in how programs are designed and delivered – and accommodates a degree of flexibility around incentives for prescriptive programs subject to reasonable justification – there remains the occasional need to modify the tariff to meet current and future market conditions and opportunities.

Avista is proposing slight modifications to its tariff rider language for 2024. The proposed revisions are included in Appendix C to the *BCP*.

Schedule 191 – Demand Side Management Rate Adjustment

Avista evaluates the need for revisions to its Schedule 191 – Demand Side Management Rate Adjustment tariff on an annual basis with revisions occurring each June 1. For electric Schedule 91, WAC 480-100-130(2) requires the utility to file on or before June 1 every year to true up the rider balance with an August 1 effective date. At this time, Avista evaluates the balances within the natural gas tariff to determine whether an adjustment is required.

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CONCLUSION AND CONTACT INFORMATION



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This 2024 ACP represents program efforts by Avista in order to achieve its expected eligible acquisition savings for the first year of the 2024-25 biennium. For additional supporting information please see the corresponding appendices:

- ◆ Appendix A – 2024 Energy Efficiency Evaluation, Measurement, and Verification Annual Plan
- ◆ Appendix B – Cost Effectiveness Methodology
- ◆ Appendix C – Natural Gas Program Summary

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GLOSSARY OF TERMS



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Active Energy Management (AEM): The implementation of continuous building monitoring to improve building performance in real time.

adder: An additional amount, typically a percentage, added to a quantification of conservation savings, risks, and/or benefits.

adjusted market baseline: Based on the RTF guidelines, represents a measurement between the energy efficient measure and the standard efficiency case that is characterized by current market practice or the minimum requirements of applicable codes or standards, whichever is more efficient. When applying an adjusted market baseline, no net-to-gross factor would be applied since the resultant unit energy savings amount would represent the applicable savings to the grid.

Advanced Metering Infrastructure (AMI): Systems that measure, collect and analyze energy usage, from advanced devices such as electricity meters, natural gas meters and/or water meters through various communication media on request or on a predetermined schedule.

advisory group: Avista's group of external interested persons and efficiency program experts who advise on the company's planned energy efficiency activities, as well as activities under consideration.

Air-Conditioning, Heating, and Refrigeration Institute (AHRI): The trade association representing manufacturers of HVACR and water heating equipment within the global industry.

aMW: The amount of energy that would be generated by one megawatt of capacity operating continuously for one full year. Equals 8,760 MWhs of energy.

American National Standards Institute (ANSI): A source for information on national, regional, and international standards and conformity assessment issues.

American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE): Devoted to the advancement of indoor-environment-control technology in the heating, ventilation, and air conditioning (HVAC) industry, ASHRAE's mission is "to advance technology to serve humanity and promote a sustainable world."

Annual Conservation Plan (ACP): An Avista-prepared resource document that outlines Avista's conservation offerings, its approach to energy efficiency, and details on verifying and reporting savings.

Annual Conservation Report (ACR): An Avista-prepared resource document that summarizes its annual energy efficiency achievements.

Annual Fuel Utilization Efficiency (AFUE): A measurement on how efficient an appliance is in converting the energy in its fuel to heat over the course of a typical year.

avoided cost: An investment guideline, describing the value of conservation and generation resource investments in terms of the cost of more expensive resources that would otherwise have to be acquired.

baseline: Conditions, including energy consumption, which would have occurred without implementation of the subject energy efficiency activity. Baseline conditions are sometimes referred to as “business-as-usual” conditions.

baseline efficiency: The energy use of the baseline equipment, process, or practice that is being replaced by a more efficient approach to providing the same energy service. It is used to determine the energy savings obtained by the more efficient approach.

baseline period: The period of time selected as representative of facility operations before the energy efficiency activity takes place.

Biennial Conservation Plan (BCP): An Avista-prepared resource document that outlines Avista’s conservation offerings, its approach to energy efficiency, and details on verifying and reporting savings for a two-year period.

Building Owners & Managers Association (BOMA): An international federation of U.S. local associations and global affiliates that represents the owners, managers, service providers, and other property professionals of all commercial building types.

Business Partner Program (BPP): An outreach effort designed to raise awareness of utility programs and services that can assist small business customers in managing their energy bills.

British Thermal Unit (Btu): The amount of heat energy necessary to raise the temperature of one pound of water one degree Fahrenheit (3,413 Btu are equal to one kilowatt-hour).

busbar: The physical electrical connection between the generator and transmission system. Load on the system is typically measured at busbar.

capacity: The maximum power that a machine or system can produce or carry under specified conditions. The capacity of generating equipment is generally expressed in kilowatts or megawatts. In terms of transmission lines, capacity refers to the maximum load a line is capable of carrying under specified conditions.

Clean Energy Implementation Plan (CEIP): Introduced within a subsection of the Clean Energy Transformation Act, a CEIP must describe the utility’s plan for making progress toward meeting the clean energy transformation standards while it continues to pursue all cost-effective, reliable, and feasible conservation and efficiency resources.

Clean Energy Transformation Act (CETA): Signed into law in 2019, the Clean Energy Transformation Act requires electric utilities to supply their Washington customers with 100 percent renewable or non-emitting electricity with no provision for offsets.

Community Action Partnership (CAP): General term for Community Action Programs, Community Action Agencies, and Community Action Centers that provide services such as low-income weatherization through federal and state agencies and other funding sources (e.g. utility constitutions).

Community Energy Efficiency Program (CEEP): Created by the Washington State Legislature in 2009, CEEP encourages homeowners and small businesses across the state to make energy efficiency retrofits and upgrades.

conservation: According to the Northwest Power Act, any reduction in electric power consumption as a result of increases in the efficiency of energy use, production or distribution.

Conservation Potential Assessment (CPA): An analysis of the amount of conservation available in a defined area. Provides savings amounts associated with energy efficiency measures to input into the company's Integrated Resource Planning (IRP) process.

cost-effective: According to the Northwest Power Act, a cost-effective measure or resource must be forecast to be reliable and available within the time it is needed, and to meet or reduce electrical power demand of consumers at an estimated incremental system cost no greater than that of the least-costly, similarly reliable and available alternative or combination of alternatives.

customer/customer classes: A category(ies) of customer(s) defined by provisions found in tariff(s) published by the entity providing service, approved by the PUC. Examples of customer classes are residential, commercial, industrial, agricultural, local distribution company, core and non-core.

decoupling: In conventional utility regulation, utilities make money based on how much energy they sell. A utility's rates are set based largely on an estimation of costs of providing service over a certain set time period, with an allowed profit margin, divided by a forecasted amount of unit sales over the same time period. If the actual sales turn out to be as forecasted, the utility will recover all of its fixed costs and its set profit margin. If the actual sales exceed the forecast, the utility will earn extra profit.

deemed savings: Primarily referenced as unit energy savings, an estimate of an energy savings for a single unit of an installed energy efficiency measure that (a) has been developed from data sources and analytical methods that are widely considered acceptable for the measure and purpose, and (b) is applicable to the situation being evaluated.

demand: The load that is drawn from the source of supply over a specified interval of time (in kilowatts, kilovolt-amperes, or amperes). Also, the rate at which natural gas is delivered to or by a system, part of a system or piece of equipment, expressed in cubic feet, therms, Btu or multiples thereof, for a designated period of time such as during a 24-hour day.

Demand Response (DR): A voluntary and temporary change in consumers' use of electricity when the power system is stressed.

Demand Side Management (DSM): The process of helping customers use energy more efficiently. Used interchangeably with energy efficiency and conservation, although conservation technically means using less, while DSM and energy efficiency means using less while still having the same useful output of function.

Direct Load Control (DLC): The means by which a utility can signal a customer's appliance to stop operations in order to reduce the demand for electricity. Such rationing generally involves a financial incentive for the affected customer.

discount rate: The rate used in a formula to convert future costs or benefits to their present value.

distribution: The transfer of electricity from the transmission network to the consumer. Distribution systems generally include the equipment to transfer power from the substation to the customer's meter.

Distributed Generation (DG): An approach that employs a variety of small-scale technologies to both produce and store electricity close to the end users of power.

Effective Useful Life (EUL): Sometimes referred to as measure life and often used to describe persistence. EUL is an estimate of the duration of savings from a measure.

end-use: A term referring to the final use of energy; it often refers to the specific energy services (for example, space heating), or the type of energy-consuming equipment (for example, motors).

energy assistance advisory group: An ongoing advisory group to monitor and explore ways to improve Avista's Low-Income Rate Assistance Program (LIRAP).

Energy Efficiency Advisory Group (EEAG): A group which advises investor-owned utilities on the development of integrated resource plans and conservation programs.

energy efficiency measure: Refers to either an individual project conducted or technology implemented to reduce the consumption of energy at the same or an improved level of service. Often referred to as simply a "measure."

Energy Independence Act (EIA): Requires electric utilities serving at least 25,000 retail customers to use renewable energy and energy conservation.

Energy Use Intensity (EUI): A metric – energy per square foot per year – that expresses a building's energy use as a function of its size or other characteristics.

evaluation: The performance of a wide range of assessment studies and activities aimed at determining the effects of a program (and/or portfolio) and understanding or documenting program performance, program or program-related markets and market operations, program-induced changes in energy efficiency markets, levels of demand or energy savings, or program cost-effectiveness. Market assessment, monitoring and evaluation, and verification are aspects of evaluation.

Evaluation, Measurement, and Verification (EM&V): Catch-all term for evaluation activities at the measure, project, program and/or portfolio level; can include impact, process, market and/or planning activities. EM&V is distinguishable from Measurement and Verification (M&V) defined later.

ex-ante savings estimate: Forecasted savings value used for program planning or savings estimates for a measure; Latin for “beforehand.”

ex-post evaluated estimated savings: Savings estimates reported by an independent, third-party evaluator after the energy impact evaluation has been completed. If only the term “ex-post savings” is used, it will be assumed that it is referring to the ex-post evaluation estimate, the most common usage; from Latin for “from something done afterward.”

external evaluators (AKA third party evaluators): Independent professional efficiency person or entity retained to conduct EM&V activities. Consideration will be made for those who are Certified Measurement and Verification Professionals (CMVPs) through the Association of Energy Engineers (AEE) and the Efficiency Evaluation Organization (EVO).

free rider: A common term in the energy efficiency industry meaning a program participant who would have installed the efficient product or changed a behavior regardless of any program incentive or education received. Free riders can be total, partial, or deferred.

generation: The act or process of producing electricity from other forms of energy.

Green Motors Practices Group (GMPG): A nonprofit corporation governed by electric motor service center executives and advisors whose goal is the continual improvement of the electric motor repair industry.

gross savings: The change in energy consumption and/or demand that results from energy efficiency programs, codes and standards, and naturally-occurring adoption which have a long-lasting savings effect, regardless of why they were enacted.

heating degree days: A measure of the amount of heat needed in a building over a fixed period of time, usually a year. Heating degree days per day are calculated by subtracting from a fixed temperature the average temperature over the day. Historically, the fixed temperature has been set at 65 degrees Fahrenheit, the outdoor temperature below which heat was typically needed. As an example, a day with an average temperature of 45 degrees Fahrenheit would have 20 heating degree days, assuming a base of 65 degrees Fahrenheit.

Heating Seasonal Performance Factor (HSPF): Defined as the ratio of heat output over the heating season to the amount of electricity used in air source or ductless heat pump equipment.

Heating, Ventilation, and Air Conditioning (HVAC): Sometimes referred to as climate control, the HVAC is particularly important in the design of medium to large industrial and office buildings where humidity and temperature must all be closely regulated whilst maintaining safe and healthy conditions within.

highly impacted community: designated by the Washington Department of Health, any census tract with an overall ranking of 9 or 10 on the Environmental Health Disparities map, or any census tract with tribal lands.

impact evaluation: Determination of the program-specific, directly or indirectly induced changes (e.g., energy and/or demand usage) attributable to an energy efficiency program.

implementer: Avista employees whose responsibilities are directly related to operations and administration of energy efficiency programs and activities, and who may have energy savings targets as part of their employee goals or incentives.

incremental cost: The difference between the cost of baseline equipment or services and the cost of alternative energy-efficient equipment or services.

Integrated Resource Plan (IRP): An IRP is a comprehensive evaluation of future electric or natural gas resource plans. The IRP must evaluate the full range of resource alternatives to provide adequate and reliable service to a customer's needs at the lowest possible risk-adjusted system cost. These plans are filed with the state public utility commissions on a periodic basis.

Integrated Resource Plan Technical Advisory Committee (IRP TAC): Advisory committee for the IRP process that includes internal and external participants.

International Performance Measurement and Verification Protocol (IPMVP): A guidance document with a framework and definitions describing the four M&V approaches; a product of the Energy Valuation Organization (www.evo-world.org).

Investor-Owned Utility (IOU): A utility that is organized under state law as a corporation to provide electric power service and earn a profit for its stockholders.

Kilowatt (kW): The electrical unit of power that equals 1,000 watts.

Kilowatt-hour (kWh): A basic unit of electrical energy that equals one kilowatt of power applied for one hour.

Kilo British Thermal Unit (kBtu): Btu, which stands for British thermal units, measures heat energy. Each Btu equals the amount of heat needed to raise one pound of water one degree Fahrenheit; the prefix kilo- stands for 1,000, which means that a kBtu equals 1,000 Btu.

Levelized Cost of Energy (LCOE): The present value of a resource's cost (including capital, financing, and operating costs) converted into a stream of equal annual payments. This stream of payments can be converted to a unit cost of energy by dividing them by the number of kilowatt-hours produced or saved by the resource in associated years. By levelizing costs, resources with different lifetimes and generating capabilities can be compared.

line losses: The amount of electricity lost or assumed lost when transmitting over transmission or distribution lines. This is the difference between the quantity of electricity generated and the quantity delivered at some point in the electric system.

Low-Income Home Energy Assistance Program (LIHEAP): Federal energy assistance program, available to qualifying households based on income, usually distributed by community action agencies or partnerships.

Low-Income Rate Assistance Program (LIRAP): LIRAP provides funding (collected from Avista's tariff rider) to CAP agencies for distribution to Avista customers who are least able to afford their utility bill.

market effect evaluation: An evaluation of the change in the structure or functioning of a market, or the behavior of participants in a market, that results from one or more program efforts. Typically, the resultant market or behavior change leads to an increase in the adoption of energy-efficient products, services, or practices.

measure (also Energy Efficiency Measure or "EEM"): Installation of a single piece of equipment, subsystem or system, or single modification of equipment, subsystem, system, or operation at an end-use energy consumer facility, for the purpose of reducing energy and/or demand (and, hence, energy and/or demand costs) at a comparable level of service.

measure life: See Effective Useful Life (EUL).

Measurement and Verification (M&V): A subset of program impact evaluation that is associated with the documentation of energy savings at individual sites or projects, using one or more methods that can involve measurements, engineering calculations, statistical analyses, and/or computer simulation modeling. M&V approaches are defined in the International Performance Measurement and Verification Protocol (IPMVP available at www.evo-world.org).

Megawatt (MW): The electrical unit of power that equals one million watts or one thousand kilowatts.

Megawatt-hour (MWh): A basic unit of electrical energy that equals one megawatt of power applied for one hour.

Named Community: Represents areas within Avista's service territory that are considered to be a highly impacted community or vulnerable population.

net savings: The change in energy consumption and/or demand that is attributable to an energy efficiency program. This change in energy use and/or demand may include, implicitly or explicitly, consideration of factors such as free drivers, non-net participants (free riders), participant and non-participant spillover, and induced market effects. These factors may be considered in how a baseline is defined and/or in adjustments to gross savings values.

Non-Energy Benefit/Non-Energy Impact (NEB/NEI): The quantifiable non-energy impacts associated with program implementation or participation; also referred to as non-energy benefits (NEBs) or co-benefits. Examples of NEIs include water savings, non-energy consumables and other quantifiable effects. The value is most often positive, but may also be negative (e.g., the cost of additional maintenance associated with a sophisticated, energy-efficient control system).

Northwest Energy Efficiency Alliance (NEEA): A nonprofit organization that works to accelerate energy efficiency in the Pacific Northwest through the adoption of energy-efficient products, services, and practices.

Northwest Power and Conservation Council (NWPCC): An organization that develops and maintains both a regional power plan and a fish and wildlife program to balance the environment and energy needs of the Pacific Northwest.

Outside Air Temperature (OAT): Refers to the temperature of the air around an object, but unaffected by the object.

On-Bill Repayment (OBR): A financing option in which a utility or private lender supplies capital to a customer to fund energy efficiency, renewable energy, or other generation projects. It is repaid through regular payments on an existing utility bill.

portfolio: Collection of all programs conducted by an organization. In the case of Avista, portfolio includes electric and natural gas programs in all customer segments. Portfolio can also be used to refer to a collection of similar programs addressing the market. In this sense of the definition, Avista has an electric portfolio and a natural gas portfolio with programs addressing the various customer segments.

prescriptive: A prescriptive program is a standard offer for incentives for the installation of an energy efficiency measure. Prescriptive programs are generally applied when the measures are employed in relatively similar applications.

process evaluation: A systematic assessment of an energy efficiency program or program component for the purposes of documenting operations at the time of the examination, and identifying and recommending improvements to increase the program's efficiency or effectiveness for acquiring energy resources while maintaining high levels of participant satisfaction.

program: An activity, strategy or course of action undertaken by an implementer. Each program is defined by a unique combination of program strategy, market segment, marketing approach and energy efficiency measure(s) included. Examples are a program to install energy-efficient lighting in commercial buildings and residential weatherization programs.

project: An activity or course of action involving one or multiple energy efficiency measures at a single facility or site.

Regional Technical Forum of the Northwest Power and Conservation Council (RTF): A technical advisory committee to the Northwest Power and Conservation Council established in 1999 to develop standards to verify and evaluate energy efficiency savings.

realization rate: Ratio of ex-ante reported savings to ex-post evaluated estimated savings. When realization rates are reported, they are labeled to indicate whether they refer to comparisons of (1) ex-ante gross reported savings to ex-post gross evaluated savings, or (2) ex-ante net reported savings to ex-post net evaluated savings.

reliability: When used in energy efficiency evaluation, the quality of a measurement process that would produce similar results on (a) repeated observations of the same condition or event, or (b) multiple observations of the same condition or event by different observers. Reliability refers to the likelihood that the observations can be replicated.

reported savings: Savings estimates reported by Avista for an annual (calendar) period. These savings will be based on best available information.

Request for Proposal (RFP): Business document that announces and provides details about a project, as well as solicits bids from potential contractors.

retrofit: To modify an existing generating plant, structure, or process. The modifications are done to improve energy efficiency, reduce environmental impacts, or to otherwise improve the facility.

rigor: The level of expected confidence and precision. The higher the level of rigor, the more confident one is that the results of the evaluation are both accurate and precise, i.e., reliable.

R-value or R-factor (resistance transfer factor): Measures how well a barrier, such as insulation, resists the conductive flow of heat.

schedules 90 and 190: Rate schedules that show energy efficiency programs.

schedules 91 and 191: Rate schedules that are used to fund energy efficiency programs.

sector(s): The economy is divided into four sectors for energy planning. These are the residential, commercial (e.g., retail stores, office and institutional buildings), industrial, and agriculture (e.g. dairy farms, irrigation) sectors.

Site-Specific (SS): A commercial/industrial program offering individualized calculations for incentives upon any electric or natural gas efficiency measure not incorporated into a prescriptive program.

simple payback: The time required before savings from a particular investment offset costs, calculated by investment cost divided by value of savings (in dollars). For example, an investment costing \$100 and resulting in a savings of \$25 each year would be said to have a simple payback of four years. Simple paybacks do not account for future cost escalation, nor other investment opportunities.

spillover: Reductions in energy consumption and/or demand caused by the presence of an energy efficiency program, beyond the program-related gross savings of the participants and without direct financial or technical assistance from the program. There can be participant and/or nonparticipant spillover (sometimes referred to as “free drivers”). Participant spillover is the additional energy savings that occur as a result of the program’s influence when a program participant independently installs incremental energy efficiency measures or applies energy-saving practices after having participated in the energy efficiency program. Non-participant spillover refers to energy savings that occur when a program non-participant installs energy efficiency measures or applies energy savings practices as a result of a program’s influence.

Technical Reference Manual (TRM): An Avista-prepared resource document that contains Avista’s (ex-ante) savings estimates, assumptions, sources for those assumptions, guidelines, and relevant supporting documentation for its natural gas and electricity energy efficiency prescriptive measures. This is populated and vetted by the RTF and third-party evaluators.

Total Resource Cost (TRC): A cost-effectiveness test that assesses the impacts of a portfolio of energy efficiency initiatives regardless of who pays the costs or who receives the benefits. The test compares the present value of costs of efficiency for all members of society (including all costs to participants and program administrators) compared to the present value of all quantifiable benefits, including avoided energy supply and demand costs and non-energy impacts.

transmission: The act or process of long-distance transport of electric energy, generally accomplished by elevating the electric current to high voltages. In the Pacific Northwest, Bonneville operates a majority of the high-voltage, long-distance transmission lines.

Uniform Energy Factor (UEF): A measurement of how efficiently a water heater utilizes its fuel.

Unit Energy Savings (UES): Defines the savings value for an energy efficiency measure.

U-value or U-factor: The measure of a material’s ability to conduct heat, numerically equal to 1 divided by the R-value of the material. Used to measure the rate of heat transfer in windows. The lower the U-factor, the better the window insulates.

uncertainty: The range or interval of doubt surrounding a measured or calculated value within which the true value is expected to fall within some degree of confidence.

Utility Cost Test (UCT): One of the four standard practice tests commonly used to evaluate the cost-effectiveness of DSM programs. The UCT evaluates the cost-effectiveness based upon a program’s ability to minimize overall utility costs. The primary benefit is the avoided cost of energy in comparison to the incentive and non-incentive utility costs.

Variable Frequency Drive (VFD): A type of motor drive used in electro-mechanical drive systems to control AC motor speed and torque by varying motor input frequency and voltage.

verification: An assessment that the program or project has been implemented per the program design. For example, the objectives of measure installation verification are to confirm (a) the installation rate, (b) that the installation meets reasonable quality standards, and (c) that the measures are operating correctly and have the potential to generate the predicted savings. Verification activities are generally conducted during on-site surveys of a sample of projects. Project site inspections, participant phone and mail surveys, and/or implementer and consumer documentation review are typical activities associated with verification. Verification may include one-time or multiple activities over the estimated life of the measures. It may include review of commissioning or retro-commissioning documentation. Verification can also include review and confirmation of evaluation methods used, samples drawn, and calculations used to estimate program savings. Project verification may be performed by the implementation team, but program verification is a function of the third-party evaluator.

vulnerable population: Communities that experience a disproportionate cumulative risk from environmental burdens.

Washington Utilities and Transportation Commission (WUTC): A three-member commission appointed by the governor and confirmed by the state Senate, whose mission is to protect the people of Washington by ensuring that investor-owned utility and transportation services are safe, available, reliable, and fairly priced.

weather normalized: This is an adjustment that is made to actual energy usage, stream-flows, etc., which would have happened if “normal” weather conditions would have taken place.

Weighted Average Cost of Capital (WACC): A calculation of a firm’s cost of capital in which each category of capital is proportionately weighted. All sources of capital, including common stock, preferred stock, bonds, and any other long-term debt, are included in a WACC calculation.

8,760: Total number of hours in a year.

APPENDICES AND SUPPLEMENTS



APPENDIX A – 2024 ENERGY EFFICIENCY EVALUATION, MEASUREMENT, AND VERIFICATION ANNUAL PLAN

Background

Avista's 2024 *Energy Efficiency Evaluation, Measurement, and Verification (EM&V) Annual Plan*, in combination with the *Avista EM&V Framework*, is intended to identify the evaluation, measurement, and verification activities planned to be performed in 2025 in order to adequately inform and assess energy efficiency programs provided by Avista for its customers in Washington and Idaho. This evaluation effort is made not only to verify savings estimates of the program, but also to enhance program design and improve the marketing and delivery of future programs.

Overview

Avista's 2024 EM&V Annual Plan will identify evaluation activities intended to assess the 2024 Energy Efficiency Portfolio. The scope of this plan will be consistent with prior evaluation plans as presented to Avista's Energy Efficiency Advisory Group (EEAG). A comprehensive EM&V overview and definitions are included in *Avista's EM&V Framework*, a companion document to this plan.

A key consideration integrated into this plan is the role of the independent third-party evaluator, which will perform the majority of evaluation planning, tasks, analysis, and external reporting as coordinated by Avista energy efficiency staff.

The following details the key aspects of this plan:

- ◆ Avista continues to pursue a portfolio approach for impact analysis, ensuring a comprehensive annual review of all programs – to the degree necessary – based on the magnitude both of savings and uncertainty of the related unit energy savings (UES) values, and of claimed energy efficiency acquisition relative to the portfolio.
- ◆ Inherent in the impact analysis, a locked UES list identifying a significant number of UES values is available to use through verification rather than fundamental impact analysis; however, this list of UES is reevaluated as part of the company's normal and recurring savings value analysis. Measures will also be updated to reflect the best science from other sources as well, primarily the Regional Technical Forum (RTF).
- ◆ Portfolio impact evaluations will be conducted for all electric and natural gas programs in Washington and Idaho. For programs with a majority of savings or particular aspects of interest, such as a high level of uncertainty, detailed impact evaluations using protocols from the Uniform Methods Project, International Performance Measurement and Verification Protocol (IPMVP), and other industry-standard techniques for determining program-level impacts will be used. Billing analyses will be incorporated as appropriate.
- ◆ Electric energy efficiency acquisition achieved during 2024 will contribute to the biennial savings acquisition for EIA compliance, which will complete its eighth biennium at the end of 2024.¹
- ◆ A final evaluation of the electric programs deployed during 2024 will be initiated prior to the end of 2024 in order to meet the June 1, 2025, filing deadline in Washington.

1) Washington Initiative 937 was approved by voters on November 7, 2006. Codified as RCW 19.285 and WAC 480-109, the energy efficiency aspects of this law became effective on January 1, 2010.

- ◆ The evaluation will provide energy efficiency acquisition results with 90 percent precision with a 10 percent confidence interval. Discrete measures may be represented by reduced precision and wider confidence – such as 80 percent with a 20 percent confidence interval – but must support the required portfolio criteria of 90 percent/10 percent.
- ◆ This planning document will not be construed as pre-approval by the Washington or Idaho Commissions.
- ◆ Evaluation resources will be identified through the development of the 2024 evaluation work plan in conjunction with the independent, third-party evaluator. Primary segments will include:
 - *Residential* – The impact analysis will consider the portfolio of measures provided to residential customers during the program year. Evaluation effort will be focused on measures that contribute significant portfolio savings and allow consolidation and grouping of similar measures to facilitate the evaluation.
 - *Low-Income and Named Communities* – For the impact analysis, billing analysis on the census of measures, including conversions, will be conducted. In addition, a comparison group, possibly consisting of Low-Income Home Energy Assistance Program (LIHEAP) or Low-Income Rate Assistance Program (LIRAP) participants, may be incorporated into the analysis if possible.
 - *Commercial/Industrial* – Interviews of Avista staff and third-party implementers will be conducted, along with customer surveys, tracking databases, marketing materials, and quality assurance documents.
 - *Midstream* – A methodology to evaluate midstream program savings will be developed by the selected EM&V firm.
- ◆ A process evaluation report will be delivered as part of the 2024 Energy Efficiency Annual Conservation Report, which addresses program considerations for that program year.

Summary of Individual Evaluations

Provided below is a summary of each of the external evaluation activities anticipated to occur for the 2024 portfolio. All savings estimates, calculations, assumptions, and recommendations will be the work product of the independent evaluator in conjunction with the respective portfolio impact, process, or market evaluation component. The final evaluation plans will also be included in this plan as an appendix as they become available.

2024-25 Electric and Natural Gas Portfolio Impact Evaluation

Based on the evaluator's work plan, performance data and supporting information may be derived from primary consumption data collected in the field, site audits, phone surveys, billing analysis, and other methods identified to effectively quantify the energy performance of the energy efficiency measure.

Similar to prior evaluations, billing analyses are to be conducted to identify the electric and natural gas impacts of the Low-Income Program based on a census of program participants to estimate savings by state, fuel type, and overall program levels. For this evaluation cycle, savings estimates will be evaluated through a combined approach of billing and engineering analysis, as well as developing net savings estimates by measuring the effects of a comparison group.

If possible, a low-income comparison group study may be used to evaluate this specific program activity. There are two feasible approaches for selecting this comparison group. One method would be to identify nonparticipants from data on Avista customers that receive energy assistance payments such as LIHEAP or LIRAP who have not participated in the Low-Income Program. A second method would be to consider using future program participants. The best approach will be identified as the timeline and available data are considered.

Additional participant phone surveys may be conducted to provide a better understanding of certain topics, such as primary and secondary heating sources, equipment functionality prior to replacement, customer behaviors and take-back effects, participant non-energy benefits, and other building or equipment characteristics.

For commercial/industrial, site and metering visits on prescriptive and site-specific projects will support project verification and gather necessary data to validate energy savings and engineering calculations. Sample sizes for each type of fuel will be based on the combined two-year (2024-25) anticipated project count. Prior evaluations may inform sampling rates to effectively reduce the sample size in measure categories with less uncertainty, and increase the sampling for those measures with greater variation.

2025 Portfolio Process Evaluation

To identify program changes and areas of interest, brief interviews will be employed to gather relevant information. Key participants in the interview process will include Avista staff and, as appropriate, third-party implementation staff and trade allies.

The independent third-party evaluator will review communication and participant materials for critical program documents that have new or updated materials, including program tracking databases and marketing and trade ally materials. The program materials will be evaluated against industry best practices for their adequacy, clarity, and effectiveness. Where appropriate, feedback will be provided to support the development of new or the enhancement of existing program materials.

Participant and nonparticipant surveys will be conducted in 2025 for both residential and commercial/industrial segments and be used to assess differences in customer experiences, effectiveness of programs, and materials available for customers and trade allies. Participant and nonparticipant surveys will focus on the decisions, attitudes, barriers, and behaviors regarding Avista's programs and efficient equipment/measure installations as well as supplement past spillover research.

Third-Party Vendor Evaluation Plan

As part of contractual requirements, the vendor will provide an overall detailed evaluation plan for 2024-25 that includes details on methodology, approach, and deliverables, as well as anticipated costs.

APPENDIX B – COST-EFFECTIVENESS METHODOLOGY

The cost-effectiveness evaluation of Avista's energy efficiency programs has been standardized to a significant degree in order to provide for greater transparency and understanding of the metrics. Avista has brought these standardized² approaches into the evaluation of the cost-effectiveness of its portfolio through a series of specific interpretations, approaches, and policies. The summarization of these key guidelines provides a greater insight into the evaluation and how to interpret the results.

The cost-effectiveness of energy efficiency programs can be viewed from a variety of perspectives, each of which leads to a specific standardized cost-effectiveness test. The below outlines and describes the various perspectives.

1. **Total Resource Cost:** The perspective of the entire customer class of a particular utility. This includes not only what they individually and directly pay for efficiency (through the incremental cost associated with higher efficiency options) but also the utility costs that they will indirectly bear through their utility bill. When looking at the full customer population, incentives are considered to be a transfer between ratepayers and not a cost for the overall ratepayer class. This perspective is represented in the total resource cost (TRC) test. Avista has included a 10 percent conservation credit to the TRC calculation adding a benefit to the overall cost effectiveness.
2. **Utility Cost Test:** If the objective is to minimize the utility bill – without regard to costs borne by the customer outside of that which is paid through the utility bill – then cost-effectiveness simply comes down to a comparison of reduced utility avoided cost and the full cost (incentive and non-incentive cost) of delivering the utility program. This is the utility cost test (UCT), also known as the program administrator cost (PAC) test.
3. **Participant Cost Test:** A participating customer's view of cost-effectiveness is focused upon reduced energy cost (at the customer's retail rate). Avista also includes the value of any non-energy benefits that they may receive. Incentives received by the customer offset the incremental cost associated with the efficiency measure. This is the participant cost test (PCT). Since participation within utility programs is voluntary, it could be asserted that well-informed participating customers are performing their own cost-effectiveness test based on their own circumstances and voluntarily participate only to the extent that it is beneficial for them to do so.
4. **Ratepayer Impact Measure:** Non-participating customers are affected by a utility program solely through the impact on their retail rate. Their usage, since they are non-participants, is unaffected by the program. The impact of energy efficiency programs on the utility rate imposed upon these non-participating customers is the result of the reduced utility energy costs, diminished utility revenues, and the cost associated with the utility program. Since utility retail energy rates exceed the avoided cost under almost all scenarios (peak end-use load and a few other exceptions apply), the non-participant rarely benefits. This is the rate impact measure (RIM), also known as the non-participant test.

2) California Standard Practice Manual: Economic Analysis of Demand Side Program and Projects

Although Avista currently uses the UCT as the primary cost effectiveness test for natural gas efficiency programs, Avista will transition to a modified TRC test, consistent with the council, as its primary cost-effectiveness test in 2024. Starting In 2024, Avista will rely on the modified TRC as its primary cost-effectiveness test for evaluating existing and potential measures and programs, as well as when evaluating cost-effectiveness at the portfolio level. The modified TRC test includes all quantifiable non-energy impacts, a risk adder, and a 10 percent conservation benefit adder. All cost-effectiveness calculations assume a net-to-gross ratio of 1.0, consistent with the council’s methodology.

The following table summarizes Avista’s approach to calculating the four basic cost-effectiveness tests. The categorization and nomenclature provide clarity regarding each cost and benefit component. In addition to TRC and UCT cost tests, Avista also tracks the PCT and the RIM test for its natural gas program portfolio. The two latter tests provide insights into cost impacts for program participants as well as for ratepayers, which are important considerations for Avista’s program designs and evaluations. Please note that some of the values within the table below represent negative values.

TABLE 1 – SUMMARIZATION OF STANDARD PRACTICE TEST BENEFITS AND COSTS

	TRC	UCT	PCT	RIM
Benefit Components				
Avoided Cost of Utility Energy	\$	\$		\$
Value of Non-Utility Energy Savings	\$		\$	
Non-Energy Impacts	\$		\$	
Reduced Retail Cost of Energy			\$	
Cost Components				
Customer Incremental Cost	\$		\$	
Utility Incentive Cost		\$	(\$)	\$
Utility Non-Incentive Cost	\$	\$		\$
Imported Funds (tax credits, federal funding, etc.)	(\$)		(\$)	
Reduced Retail Revenues				\$

A summary of some of the approaches by which Avista measures these values and how they are applied within Avista’s evaluation of cost-effectiveness is contained below.

Avoided cost of utility energy: The avoided cost of electricity and natural gas is based on the results of the most recent *Integrated Resource Plan (IRP)* to include the valuation of several avoided costs that are somewhat unique to energy efficiency (e.g., distribution losses, the monetary cost of carbon, etc.). The cost of electric transmission and distribution (T&D) capacity benefits was adjusted to align with the seventh Power Plan, and a \$26.90 per kW-yr for 20-year levelized cost was used to bring electricity into the Avista balancing area from the mid-C market.

The electric *IRP* provides 20 years of mid-C prices for every hour of the year (8,760 hours) and system capacity benefits for generation and T&D. Different measures have different distribution of their savings of the year, so to properly value the commodity portion for individual measures the 175,200 market prices (8,760 x 20) are multiplied by the individual load shapes yielding 23 different end-use commodity-avoided costs.

To calculate the capacity value, an average of the percentage of savings on January weekdays between 7:00-12:00 and 18:00-23:00 was used to estimate the peak coincidence to be multiplied by that year's generation, transmission, and distribution capacity benefits.

The commodity and capacity benefits are summed for each year and the combined avoided costs are increased to account for avoided line loss rates.

The avoided cost of the natural gas *IRP* produces an annual and winter avoided therm value which an avoided delivery charge is added (represented by the demand portion of Schedule 150) to each.

The application of the avoided cost of energy-to-energy efficiency measures includes all interactive impacts upon the fuel specific to the measure (e.g., interactive impacts upon electric consumption by electric programs) as well as cross-fuel (e.g., interactive impacts upon natural gas usage as a result of an electric program).

Value of non-utility energy: For forms of energy not provided by the utility – such as propane or wood fuel – and for which there is no *IRP* valuation of the avoided cost, all savings are valued based on the customer's retail cost of energy.

Non-energy impacts: Impacts of efficiency measures unrelated to energy usage are incorporated into the appropriate standard practice tests to the extent that they can be reasonably quantified and externally represented to a rational but critical audience. Avista sources its NEIs from regional and national studies, and NEI values are applied with adjustment factors for the company's service territory. NEI values currently range from \$0.08-\$0.00002/kWh.

When Avista pays the full cost of a measure within the low-income portfolio, and includes that full cost as a customer incremental cost, the value of the baseline measure is included as a non-energy benefit as a representation of the end-use service beyond the energy efficiency impact. Those impacts that have been determined to be unquantifiable within reasonable standards of rigor consist of both benefits and costs. For example, Avista has not been able to quantify the value of comfort, preventing the company from valuing the benefit of draft reduction from efficient windows, or the increased productivity due to lighting upgrades.

Reduced retail cost of energy: For the participant test, it is the participating customer's reduced retail cost of energy, and not the utility avoided cost of energy, that is relevant to that perspective.

Customer incremental cost: This represents the additional cost of an efficient measure or behavior above the baseline alternative. To the maximum extent possible the determination of customer incremental cost is based on alternatives that are identical in all aspects other than efficiency. When a clear comparison isn't feasible, an individualized adjustment is made to the extent possible.

Utility incentive cost: Direct financial incentives, or the utility cost of physical products or services distributed to individual customers, are transfer payments between participating and non-participating customers. The provision of program delivery services is not a transfer cost and is not incorporated into the definition of the utility incentive cost.

Utility non-incentive cost: These costs consist of all utility costs that are outside of the previously defined incentive costs. It typically consists of costs associated with the administration of the program such as labor, EM&V, training, outreach, marketing, pilot programs, conservation potential assessments, organizational memberships, etc.

Imported funds: Avista includes the value of imported funds (generally tax credits or governmental co-funding of programs) to be a reduction in the customer incremental cost of the measure for purposes of calculating the TRC test and the participant test. These funds are acquired from entities outside the ratepayer population or the individual participant.

The alternative approach to treating imported funds as an offset to the customer incremental cost is to consider these funds to be a benefit. For the purposes of Avista's cost-effectiveness objective (maximize residual net TRC benefit), there would be no mathematical difference between these two approaches.

Reduced retail revenues: For the purposes of the RIM test, the loss of retail revenue is a cost to the non-participating customer.

The means by which Avista's energy efficiency portfolio is defined for the purposes of evaluation and cost allocation is also an important part of the company's methodology. The various definitions used for the different levels of aggregation are explained below, followed by an explanation of how these are applied in the allocation of costs.

Sub-Measure: A sub-measure is a component of a measure that cannot be coherently offered without aggregating it with other sub-measures. For example, an efficient three-pan fryer couldn't be offered as part of a sensible customer-facing program if the program did not also include two-pan and four-pan fryers. Avista may offer sub-measures that fail cost-effectiveness criteria if the overall measure is cost-effective. This is the only area where Avista permits the bundling of technologies for the purposes of testing offerings against the cost-effectiveness screen. There are relatively few sub-measures meeting the criteria specified above within the portfolio.

Measure: Measures are standalone energy efficiency options. Consequently, measures are generally expected to pass cost-effectiveness requirements barring justifiable exceptions. Exceptions include, but are not necessarily limited to, measures with market transformation value not incorporated into the assessment of the individual measure, significant non-energy benefits that cannot be quantified with reasonable rigor, and cooperative participation in larger regional programs.

Program: Programs consist of one or more related measures. The relation among the measures may be based on technology (e.g., an aggregation of efficient lighting technologies) or market segment (e.g. aggregation of efficient food service measures). The aggregation is generally performed to improve the marketability and/or management of the component measures.

Portfolio: Portfolios are composed of aggregations of programs. The aggregating factor will vary based on the definition of the portfolio. The following portfolios are frequently defined in the course of Avista’s energy efficiency reporting and management:

- *Customer segment portfolio* – An aggregation of programs within a customer segment (e.g., low-income, residential, commercial/industrial).
- *Fuel portfolio* – Aggregating electric or natural gas energy efficiency programs.
- *Regular vs. low-income portfolios* – Separating income-qualified measures delivered through CAAs from the remainder of the portfolio.
- *Jurisdictional portfolio* – Aggregating programs within either the Washington or Idaho jurisdiction.
- *Local or Regional portfolio* – Aggregating all elements of the local energy efficiency portfolio vs. the regional market transformation portfolio.
- *Fuel/Jurisdictional portfolio* – Aggregating all programs within a given fuel and jurisdiction (Washington electric, Washington natural gas, Idaho electric, or the currently suspended Idaho natural gas portfolio).

Overall portfolio: Aggregating all aspects of the Washington and Idaho, electric and natural gas energy efficiency portfolio.

Methodology for Allocation of Energy Efficiency Costs

The Avista methodology for cost allocation builds from the measure or sub-measure analysis to program and ultimately portfolio analysis. At each level of aggregation, those costs that are incremental at that stage are incorporated into the cost-effectiveness analysis. Incremental customer cost and benefits are fully incorporated into measure-level analysis. Utility costs (both labor and non-labor) are currently fully incorporated within the program level of aggregation based on previous advisory group discussions regarding the company’s ability to expand or contract the portfolio to meet the acquisition target. Cost allocations are made based on the expected adjusted Btu acquisition of the program, with adjustments by the relative avoided cost of electricity and natural gas (e.g., a kWh is a highly processed Btu compared with an equivalent natural gas).

Generally little of the non-incentive utility cost (labor and non-labor) is allocated at the measure level, with the exception of programs delivered through a third-party contractor where those costs are truly incremental. Other non-incentive utility costs are allocated at the program level in the belief that the addition or elimination of programs would lead to a change in the scale of the overall portfolio, and that, therefore, these costs are incremental at the program level.

It should be noted that costs not associated with the delivery of local energy efficiency programs within the planned year are excluded from the cost-effectiveness calculations. These are termed “supplemental costs,” and consist of:

- ◆ The funding associated with regional programs (NEEA)
- ◆ Cost to perform conservation potential assessment studies (CPA)
- ◆ Evaluation, Measurement, and Verification engagements (EM&V)
- ◆ Funding of low-income educational outreach programs in Idaho
- ◆ Idaho research funding and similar expenses unrelated to the planned local portfolio

Unit Energy Savings

The quantification of energy savings applicable toward achieving Washington EIA acquisition targets has been an ongoing topic of discussion since the effective date of the requirement. The company plan will create an annual locked Unit Energy Savings (UES) associated with the *Technical Reference Manual (TRM)* that will be updated on an annual basis. The savings will primarily be derived from the Regional Technical Forum (RTF) or previous impact evaluations.

For planning purposes, the business plan has applied the same assumptions regarding UES to the Idaho portfolio as the best current estimate of savings. However, the retrospective *Annual Conservation Report* may displace these assumptions with the results of actual impact evaluations when available and appropriate.

Analytical Methodology Applicable to Low-Income Programs

Avista has developed several analytical methodologies specific to the evaluation needs of the low-income portfolio. These include the (1) accommodation of incentive levels equal to the entire cost of the measure, including the cost of the baseline measure, and (2) the treatment and quantification of the considerable non-energy benefits incorporated within the low-income portfolio. Beyond these two rather significant analytical issues, the treatment of the low-income portfolio is similar to that applied to the other portfolios.

Except for the low-income program, Avista does not typically fully fund the customer incremental cost, and even less frequently funds the full installed cost of an end-use service. For low-income programs delivered with Avista funding in partnership with CAAs, the participating customer may receive full funding of the end-use service. There is a need to appropriately represent this expenditure within the overall energy efficiency expenditure budget, but at the same time it is necessary to recognize that only a portion of this expenditure is dedicated toward energy efficiency. The company does so by recognizing the full expenditure as a cost, but also recognizing that there is a non-energy benefit associated with the provision of base-case end-use services. The full cost less this non-energy benefit is equal to the amount invested in energy efficiency. Thus, the assessment of the cost-effectiveness of the energy efficiency investment is appropriately based upon the value of the energy savings of the efficient measure in comparison to this incremental cost. In situations where a measure might be found cost-effective under one fuel, it will be reimbursed at the full cost for both fuels.

Avista has also defined the expenditure of non-energy health and safety funds as a non-energy benefit (on a dollar-for-dollar basis). This quantification is based on the individual assessment of each of these expenditures by the CAA prior to the improvements being made. This approval process provides reasonable evidence that the improvements are worth, at a minimum, the amount that has been expended upon them through CAA funds.

As a consequence of these two assumptions, the low-income portfolio accrues considerable non-energy benefits.

The administrative reimbursement permitted to the CAA is considered to be a component of the measure cost. This amount reimburses the CAA for back-office costs that would, in a typical trade ally bid, be incorporated into the project invoice. For 2024, the admin reimbursement is 30 percent of the total allocated amount per agency.

APPENDIX C – NATURAL GAS PROGRAM SUMMARY

Program	Therm Savings	Estimated Budget
Low-Income Programs		
Low-Income Programs	6,091	\$ 629,540
Deferred Maintenance	–	\$ 300,000
Low-Income Programs Total	6,091	\$ 929,540
Residential Programs		
Prescriptive	144,975	\$ 2,378,407
Midstream	245,266	\$ 1,957,130
Multifamily (New Offerings)	16,591	\$ 94,807
On-Bill Repayment	8,788	\$ 294,286
Home Energy Audit	16,736	\$ 153,016
Residential Programs Total	432,356	\$ 4,877,645
Commercial/Industrial Programs		
Shell	37,810	\$ 167,127
Site-Specific	129,896	\$ 662,092
Midstream	209,078	\$ 1,666,178
Pay for Performance	123,634	\$ 275,970
Clean Buildings Accelerator	14,065	\$ 25,461
Commercial/Industrial Programs Total	514,483	\$ 2,796,828
Other Program and Administrative		
NEEA, CPA, EM&V	36,432	\$ 945,855
Total Other Program and Administrative	36,432	\$ 945,855
Total Natural Gas Budget	989,363	\$ 9,549,869

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