2023 Washington Natural Gas
Energy Efficiency Annual Conservation Plan

November 15, 2022

All forward-looking statements contained in this document are based on underlying assumptions (many of which are based, in turn, upon further assumptions). These statements are subject to a variety of risks, uncertainties, and other factors. Most of these factors are beyond our control and may have a significant effect on our operations, results of operations, financial condition, or cash flows, which could cause actual results to differ materially from those anticipated in our statements.

Such risks, uncertainties, and other factors include, among others, those in our 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 on our website at avistacorp.com.

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This natural gas *Annual Conservation Plan* (*ACP*) is intended to be a continuous planning process for Avista's natural gas Energy Efficiency Program. The company is committed to maintaining and enhancing meaningful stakeholder 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 2021 natural gas *Integrated Resource Plan* (*IRP*), the Washington natural gas conservation potential for 2023 is estimated to be 1,209,884 therms. Avista has also committed to achieving an additional five percent of conservation, which results in a natural gas conservation target of 1,270,378 therms. The 2023 *ACP*'s expected acquisition is 1,271,767 therms with overall budgeted expenditures estimated to be $10,321,127.

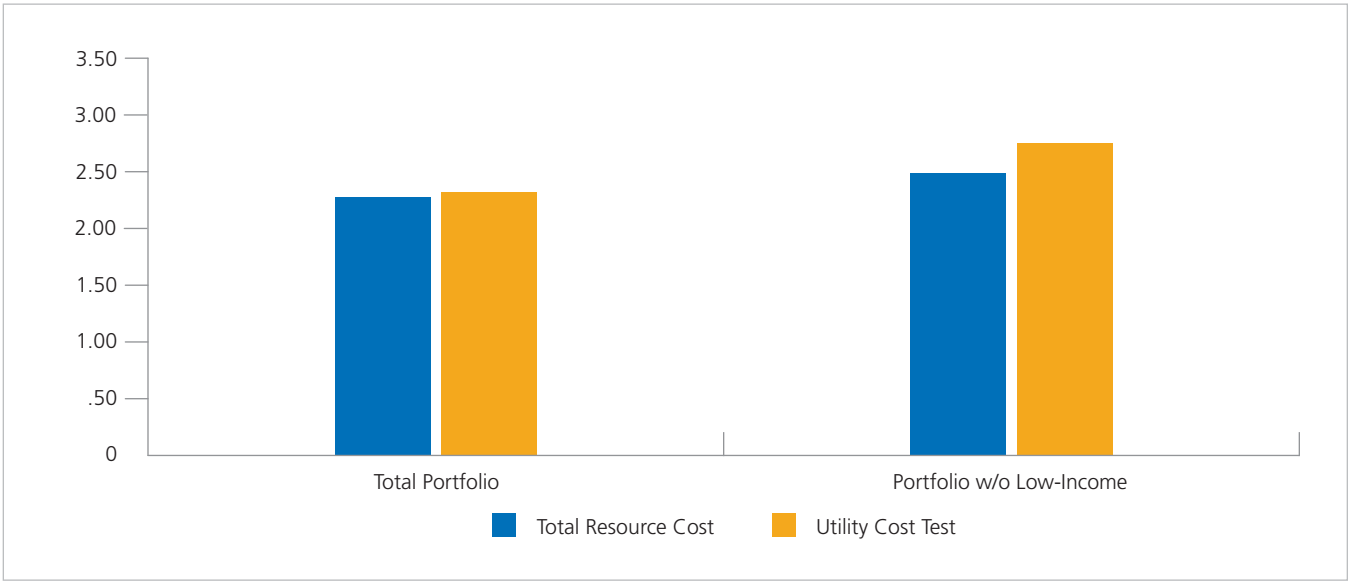
Table 1 illustrates the estimated savings and total budget per sector for 2023, which is in excess of the target amount of 1,270,378 therms.

TABLE 1 – PORTFOLIO SAVINGS AND BUDGET BY SECTOR

Sector	Therms	Budget
Low-Income Programs	24,345	$ 1,716,618
Residential Programs	628,866	$ 4,907,725
Commercial/Industrial Programs	618,556	$ 3,070,256
Program Support Expenses Not Allocated to Program Costs	–	$ 626,528
Total	**1,271,767**	**$ 10,321,127**

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

FIGURE 1 – PORTFOLIO COST-EFFECTIVENESS



	Total Portfolio	Portfolio w/o Low-Income
Total Resource Cost	2.28	2.49
Utility Cost Test	2.31	2.74

Introduction

Pursuant to RCW 80.28.380, the 2023 *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 (with a simple financial payback over one year) and using the most effective mechanism to deliver energy efficiency services to customers. These mechanisms are varied, and include (1) prescriptive programs or standard offers such as high-efficiency appliance rebates, (2) site-specific or customized analyses at customer premises, (3) market transformational or regional efforts with other utilities, (4) low-income weatherization services through local Community Action Partnership (CAP) agencies, (5) low-cost/no-cost advice through a multi-channel communication effort, and (6) support for cost-effective appliance standards and building codes.

This *ACP* is intended to represent a continuous planning process. Avista is committed to maintaining and enhancing meaningful stakeholder involvement within this process. Over the course of the following year, revisions and updates to the plan are to be expected as part of adaptively managing the energy efficiency portfolio.

Avista's programs are delivered across a full spectrum of customers, virtually all of whom have the opportunity to participate – and a great number having benefited already. All customers, including non-participants, indirectly benefit through enhanced cost efficiencies as a result of this portfolio approach.

The business planning process builds on the electric and natural gas *IRP* and Conservation Potential Assessment (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:

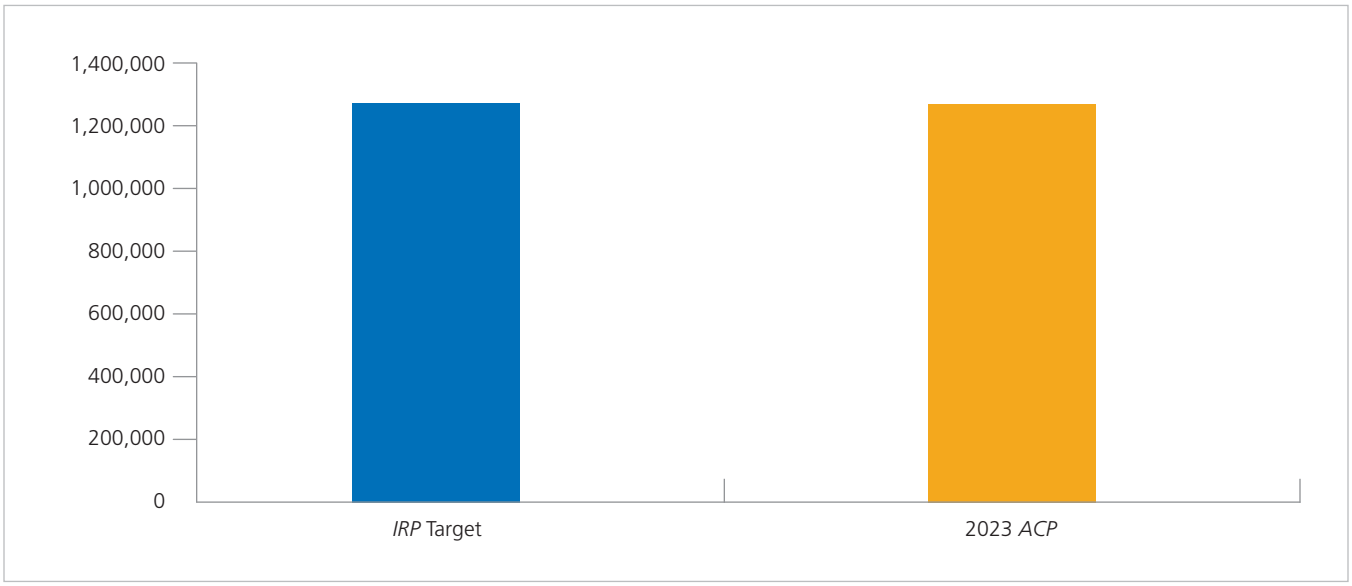
- Defining the necessary labor complement
- Establishment of an annual budget
- Review of and modification to the Evaluation, Measurement, and Verification (EM&V) plan
- Identification of outreach requirements
- Organization of a marketable customer-facing portfolio

The budgetary projections established within the 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. The tariff rider surcharges are periodically adjusted with the objective of moving these balances toward zero.

2023 Natural Gas IRP Target

Avista based its 2023 natural gas target on the most recent approved *IRP*. For 2023, the achievable economic potential identified in the study was 1,209,884 therms (1,270,378 when including the 5% decoupling commitment), which is inclusive of residential, commercial, and industrial segments. The 2023 *ACP*'s expected acquisition is 1,271,767 therms.

FIGURE 2 – 2021 INTEGRATED RESOURCE PLAN VS. 2023 ANNUAL CONSERVATION PLAN (THERMS)



	IRP Target	2023 *ACP*
Therm Savings	1,270,378	1,271,767

Key Impacts

Natural Gas Conservation Target Setting

As part of Avista's planning for its 2023 *ACP*, the company recognizes two significant changes to the way it sets its conservation targets.

Additional Conservation Commitments

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*. Further, Avista agreed to a penalty if it fails to meet its target. The penalty is on a graduated scale as follows:

- $20,000 for incremental conservation between 4.5 and 5.0 percent
- $50,000 for incremental conservation between 3.75 and 4.5 percent
- $75,000 for incremental conservation below 3.5 percent

Avista has included the additional five percent commitment into its target for the 2023 *ACP*. As with the electric program, the company will notify its Energy Efficiency Advisory Group (EEAG) if it is believed that it will not meet its natural gas conservation target for the year.

Conservation Targets for Natural Gas Companies

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. The initial conservation target must take effect by 2022."

TABLE 2 – 10-YEAR NATURAL GAS CONSERVATION POTENTIAL

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Residential	573,146	701,804	564,950	643,329	742,073	908,286	1,090,669	1,221,050	1,342,177	1,443,836
Commercial	387,197	485,631	578,023	663,906	750,659	815,597	854,143	872,289	869,947	857,075
Industrial	22,207	22,450	22,691	22,968	21,622	18,812	16,457	14,376	12,467	10,730
Total Potential	**982,550**	**1,209,884**	**1,165,663**	**1,330,203**	**1,514,353**	**1,742,694**	**1,961,268**	**2,107,714**	**2,224,591**	**2,311,640**

Washington House Bill 1257

Washington State House Bill 1257 was codified into law late in 2019 with active rule-making underway throughout 2020. 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.

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 three key areas of support shown in Table 3.

TABLE 3 – WASHINGTON STATE CLEAN BUILDINGS ACT EARLY ADOPTER INCENTIVES

Service	Start Date	Prior Service
Early-Adopter Incentive	In place	Renewable incentives
Portfolio Manager	In place	Current program offering since January 2009
Energy Efficiency Engineering Services	In place	Current service offered since Avista began energy efficiency programs

Overall 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 4, 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 4 – ENERGY EFFICIENCY BUDGET SUMMARY

	2023 Natural Gas Budget	Supplemental Budget	Non-Supplemental Budget
Total Incentives	$ 8,219,858	$ 0	$ 8,219,858
Administrative Labor	$ 203,599	$ 0	$ 203,599
Direct Benefit to Customer Labor	$ 68,835	$ 0	$ 68,835
Total Non-Labor/Non-Incentive	$ 1,828,835	$ 626,528	$ 1,202,308
Total	**$ 10,321,127**	**$ 626,528**	**$ 9,694,600**

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 5 – PROPORTION OF FUNDS RETURNED TO CUSTOMERS THROUGH DIRECT BENEFITS

	Direct Benefit to Customer
Utility Expenditures Returned to Customers via Direct Benefits	80%

The program-by-program details of the expected incentive expenditures are provided in greater detail in Table 6. 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 6 – CUSTOMER DIRECT INCENTIVE EXPENDITURE DETAIL

Energy Efficiency Program	Direct Incentive Expenditures
Low-Income Programs	
Low-Income	$ 1,313,009
Total Low-Income Incentives	**$ 1,313,009**
Residential Programs	
Residential Prescriptive	$ 2,426,500
Residential Midstream	$ 1,148,091
Multifamily Weatherization	$ 684,000
Total Residential Incentives	**$ 4,258,591**
Commercial/Industrial Programs	
HVAC	$ 599,500
Prescriptive Shell	$ 900,000
Commercial/Industrial Midstream	$ 350,008
Food Service Equipment	$ 105,750
Site-Specific	$ 693,000
Total Commercial/Industrial Incentives	**$ 2,648,258**
Total of All Incentives	**$ 8,219,858**

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 7. 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 7 – NON-INCENTIVE UTILITY EXPENSE DETAIL

Expense Type	Washington Natural Gas Portfolio	Supplemental Budget	Non-Supplemental Budget
Third-Party Non-Incentive Payments	$ 1,070,918	$ 0	$ 1,070,918
Labor	$ 272,434	$ 0	$ 272,434
EM&V	$ 205,314	$ 205,314	$ 0
Memberships	$ 7,000	$ 0	$ 7,000
Customer Outreach	$ 14,000	$ 0	$ 14,000
Training/Travel	$ 700	$ 0	$ 700
Marketing	$ 56,000	$ 0	$ 56,000
Regulatory	$ 350	$ 0	$ 350
Studies and Research	$ 7,000	$ 0	$ 7,000
Scott Morris Center Lease	$ 9,240	$ 0	$ 9,240
Software Implementation	$ 16,100	$ 0	$ 16,100
Conservation Potential Assessment	$ 15,214	$ 15,214	$ 0
General Implementation	$ 21,000	$ 0	$ 21,000
NEEA Market Transformation	$ 406,000	$ 406,000	$ 0
Total	**$ 2,101,270**	**$ 626,528**	**$ 1,474,742**

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.

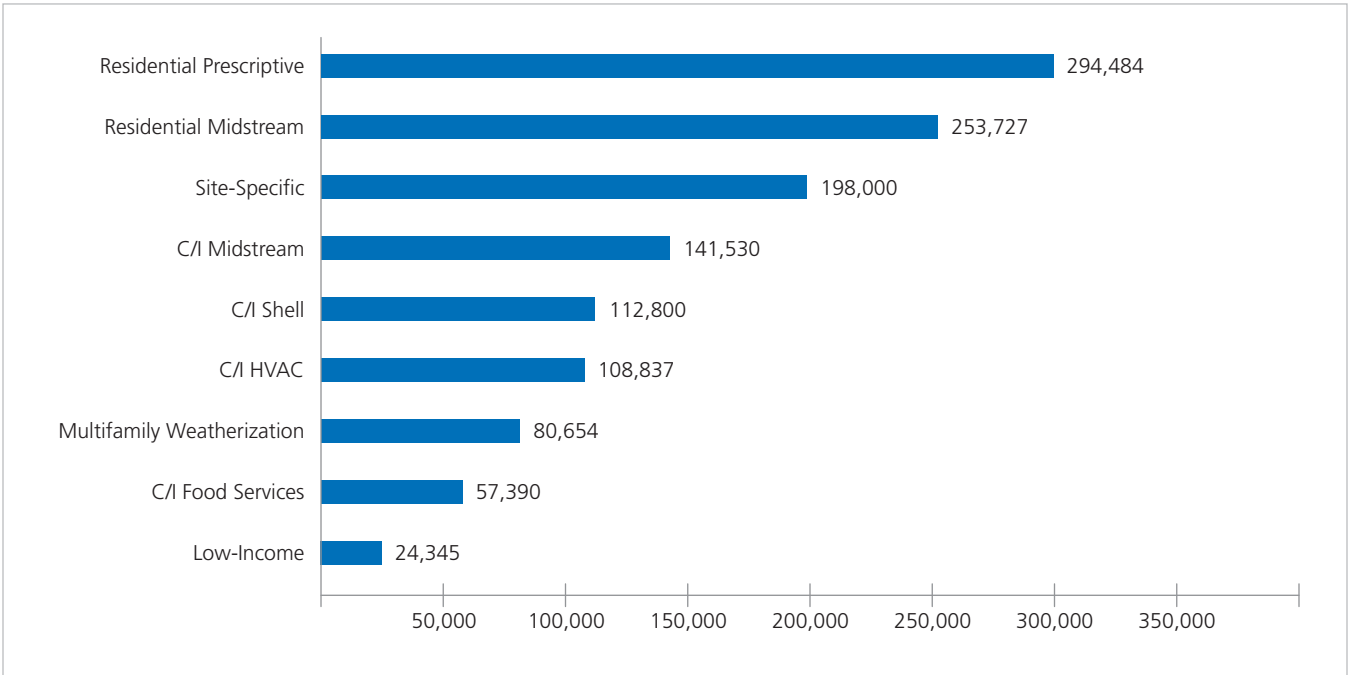
ENERGY EFFICIENCY PORTFOLIO OVERVIEW

ENERGY EFFICIENCY PORTFOLIO OVERVIEW

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

For 2023, the company anticipates savings of approximately 1,271,767 therms from its program offerings. Figure 3 illustrates the major categories from which savings are achieved.

FIGURE 3 – SAVINGS FROM ENERGY EFFICIENCY PROGRAMS (THERMS)



Residential Portfolio Overview

Avista's residential portfolio is composed of several approaches to engage and encourage customers to consider energy efficiency improvements within their homes. Prescriptive rebate programs are the main component of the portfolio, augmented by other interventions – such as the Multifamily Direct Install Program – and supplemented by educational and outreach efforts, e.g. the Residential Home Energy Audit Program. While the audit program is instrumental in identifying the need for weatherization intervention, the associated savings from those efforts are captured within the Residential Shell program.

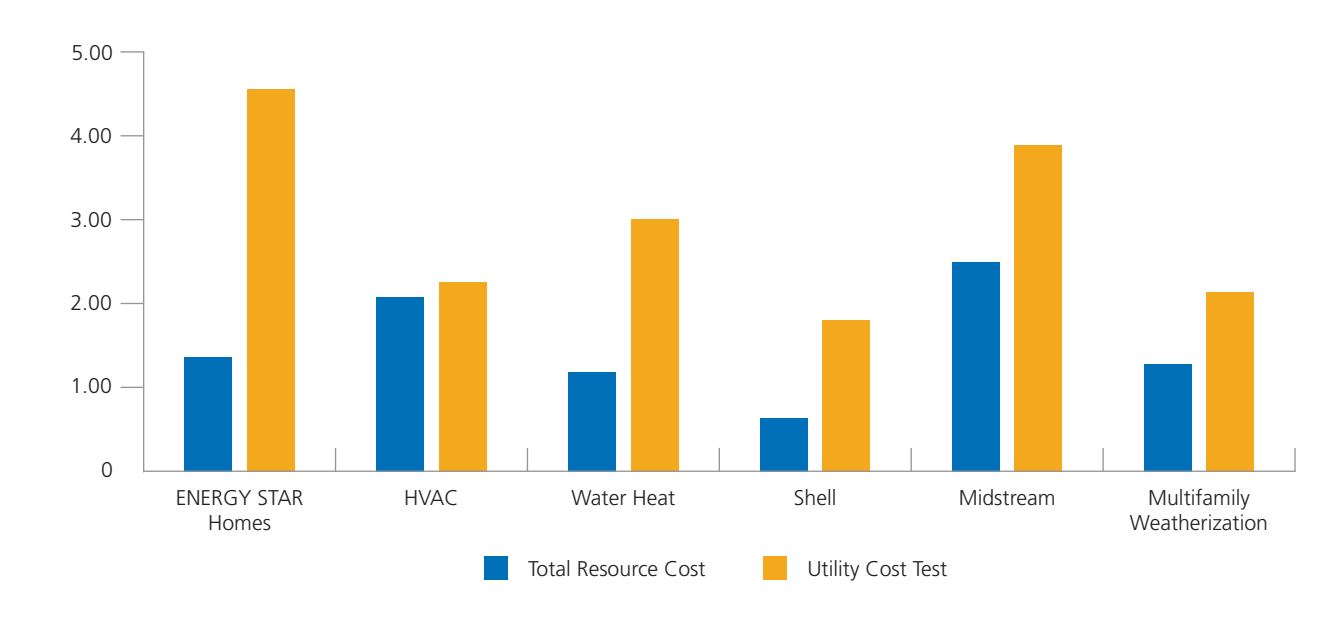
For the 2023 program year, Avista anticipates approximately 721,546 therms to be achieved through residential programs with an expected spend of $5,643,530. Table 8 summarizes the 2023 residential program estimates.

TABLE 8 – RESIDENTIAL PROGRAM OVERVIEW

Residential Programs	Natural Gas Program Savings (therms)	Expected Spend
ENERGY STAR Homes	1,340	$ 6,537
HVAC	231,319	$ 1,846,125
Water Heat	30,853	$ 188,663
Shell	30,973	$ 486,268
Multifamily Weatherization	80,654	$ 711,119
Midstream	253,727	$ 1,669,013
Total Residential	**628,866**	**$ 4,907,725**

The program-by-program cost-effectiveness of the portfolio is graphically represented in Figure 4.

FIGURE 4 – RESIDENTIAL PROGRAMS COST-EFFECTIVENESS



	ENERGY STAR Homes	HVAC	Water Heat	Shell	Midstream	Multifamily Weatherization
Total Resource Cost	1.37	2.08	1.17	0.63	2.49	1.27
Utility Cost Test	4.56	2.24	2.99	1.80	3.88	2.12

Residential Programs

Residential Prescriptive Programs

Prescriptive rebate programs use financial incentives to encourage customers to adopt qualifying energy efficiency measures. Customers must complete installation and apply for a rebate, submitting proper proof of purchase, installation, and/or other documentation to Avista. Prior to 2022, Avista required that this information be submitted within 90 days of purchase or installation. This timeframe, which was adjusted to 120 days in 2022, will continue in 2023. The extended timeline allows additional flexibility for customers. Customers can submit prescriptive residential rebate applications and supporting documentation in hard copy or online at myavista.com.

Residential prescriptive programs are designed to provide rebates to single-family homes up to a fourplex. For multifamily residences (fiveplex or larger), owners and developers may choose to treat the entire complex with an efficiency improvement through the Commercial Site-Specific Program or single units with the multifamily program prescriptive approach.

Prescriptive programs have a strong presence and coordination with regional efforts such as those offered by NEEA. There are currently significant regional efforts active in the markets for consumer electronics, ductless heat pumps, windows, and standard improvements for new water heating technologies for heat pumps. Avista has offered local rebates in support of many NEEA market transformation ventures and will continue to do so where opportunities for the application of these programs are cost-effective options.

Prescriptive measures do not require a pre-installation contract and offer a fixed incentive amount for eligible measures. Measures offered through prescriptive programs are evaluated 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.

During 2023, Avista will launch a midstream program with the assistance of our third-party developer and implementer, Energy Solutions. Program measures are still being finalized but will include high efficiency equipment for space and water heating. Midstream programs target market transformation by helping influence distributors to stock and sell more energy-efficient equipment. Rebates will be provided and energy savings documented at the distribution level. This change is intended to capture energy savings more effectively than a process that relies on the customer to submit documentation. The effort is also intended to encourage distributors to stock energy efficient equipment and educate their customers about the benefits of this equipment. Avista will work closely with Energy Solutions and our internal communications team to effectively market this program.

Residential ENERGY STAR 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 Manager

Michele Drake

TABLE 9 – RESIDENTIAL ENERGY STAR HOMES PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		1,340
Incentives	$	6,000
Non-Incentive Utility Costs	$	537
Total Costs	$	6,537
Cost-Effectiveness		
Total Resource Cost		1.37
Utility Cost Test		4.56

Program Eligibility and Incentives

Eligibility includes all Washington residential natural gas customers (Rate Schedule 101) who purchase a certified ENERGY STAR or ENERGY STAR with NEEM+ manufactured home.

TABLE 10 – RESIDENTIAL ENERGY STAR HOMES PROGRAM MEASURES AND INCENTIVES

	Projected Participation	Per-Unit Therm Savings	Incentive
ENERGY STAR Homes	20 Unit	112	$ 600

Incentive Revisions

Beginning in 2023, the prescriptive program will recognize the efficiency distinction between homes branded as ENERGY STAR and ENERGY STAR with NEEM+. The NEEM+ certification criteria includes additional efficiency measures such as programmable thermostats, improved windows, building wrap, and window flashing. The new measure is 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 2023.

The current customer descriptions of the programs with primary requirements are available on the ECO-Rated Manufactured Homes Rebate form at myavista.com.

Residential HVAC Program

Program Description

The HVAC Program encourages residential customers to select high-efficiency solutions when making energy upgrades to their homes. This prescriptive rebate approach issues payment to the customer after the measure has been installed by a licensed contractor. 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 by using the rebate as a sales tool for their services. Utility website promotion, vendor training, retail location visits, and presentations at various customer events throughout the year are some of the other communication methods that encourage program participation. Avista will continue to offer traditional prescriptive rebates for all HVAC equipment in early 2023. Later in the year, most rebates for HVAC equipment will transition to the Midstream Program.

Program Manager

Michele Drake

TABLE 11 – RESIDENTIAL HVAC PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		231,319
Incentives	$	1,771,500
Non-Incentive Utility Costs	$	74,625
Total Costs	$	1,846,125
Cost-Effectiveness		
Total Resource Cost		2.08
Utility Cost Test		2.24

Program Eligibility and Incentives

In 2023, Avista will remove usage as an eligibility requirement for HVAC measures. This change removes barriers and ensures equitable access to efficiency rebates among all customers. Following this change, eligibility will apply to all Avista residential natural gas customers (Rate Schedule 101) who install qualified HVAC measures.

TABLE 12 – RESIDENTIAL HVAC PROGRAM MEASURES AND INCENTIVES

	Projected Participation	Per-Unit Therm Savings	Incentive
Smart Thermostat – DIY	1,000 Units	$ 26.64	$ 150
Smart Thermostat – Contractor-Installed	1,000 Units	$ 26.64	$ 200
Natural Gas Furnace 95% (single-stage)	2,000 Units	$ 87.00	$ 700
Natural Gas Boiler 95% AFUE	20 Units	$ 112.40	$ 450
High-Efficiency Wall Furnace (AFUE 90%)	10 Units	$ 81.66	$ 450
Natural Gas Furnace 95% (multi-stage)	10 Units	$ 97.00	$ 800

Incentive Revisions

Because of the increase in conservation potential, Avista has proposed a significant increase to the rebates for its Connected Smart Thermostat. For 2023, the rebate amount will increase from $125 to $150 for self-installed thermostats and $150 to $200 for contractor-installed thermostats.

In mid-2022, based on feedback from customers and distributors regarding a lack of availability of certain boilers, Avista revised the required AFUE for boilers from 96% to 95%. This required efficiency level will continue in 2023.

TABLE 13 – RESIDENTIAL HVAC PROGRAM INCENTIVE REVISIONS

Measure Description	2022	2023
Smart Thermostat – DIY	$ 125	$ 150
Smart Thermostat – Contractor-Installed	$ 150	$ 200

For 2023, incentive measures for the Residential HVAC Program will transition to the Midstream Program. This transition will include high-efficiency furnaces and boilers.

Residential Water Heat Program

Program Description

This program is intended to incentivize customers who are purchasing water heaters to choose a high-efficiency and/or tankless water heater. Efficiencies for water-heating equipment are verified according to the third-party Air-Conditioning, Heating, and Refrigeration Institute (AHRI). Avista will continue existing rebates for residential water heat in early 2023. Later in 2023, the residential water heat rebates will transition to the Midstream Program.

Program Manager

Michele Drake

TABLE 14 – RESIDENTIAL WATER HEAT PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		30,853
Incentives	$	178,500
Non-Incentive Utility Costs	$	10,163
Total Costs	$	188,663
Cost-Effectiveness		
Total Resource Cost		1.17
Utility Cost Test		2.99

Program Eligibility

Eligibility includes all Avista Washington residential natural gas customers (Rate Schedule 101) who purchase qualified water heating equipment.

TABLE 15 – RESIDENTIAL WATER HEAT PROGRAM MEASURES AND INCENTIVES

	Projected Participation		Per-Unit Therm Savings	Incentive	
Tankless Water Heaters (0.93+)	300	Units	85	$	500
High-Efficiency Water Heaters (<= 55)(.65 or greater)	85	Units	22	$	100
Tankless Water Heaters (0.82+)	50	Units	70	$	400

Incentive Revisions

For 2023, incentive measures for the Residential Water Heat Program will transition to the Midstream Program.

Residential Shell Program

Program Description

The Residential Shell Program encourages residential 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 Manager

Michele Drake

TABLE 16 – RESIDENTIAL SHELL PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		30,973
Incentives	$	470,500
Non-Incentive Utility Costs	$	15,768
Total Costs	$	486,268
Cost-Effectiveness		
Total Resource Cost		0.63
Utility Cost Test		1.80

Program Eligibility

Beginning in 2023, envelope measures will not require minimum usage as a prerequisite for program participation. Following this change, eligibility will apply to all Avista Washington residential natural gas customers (Rate Schedule 101) who install qualified materials and meet all program requirements for installation. This change, along with increased tiers and new measures for self-install windows and storm windows, will remove barriers for customer participation.

TABLE 17 – RESIDENTIAL SHELL PROGRAM MEASURES AND INCENTIVES

	Projected Participation		Per-Unit Therm Savings	Incentive
Door R2.5-R5 HZ2 (ENERGY STAR-Rated or Insulated R5)	300	Unit	27.30	$ 100.00
Wall Insulation	5,000	Sq. Ft.	0.05	$ 1.50
Attic <R11-R49/R38	20,000	Sq. Ft.	0.06	$ 1.50
Floor <R11-R19	5,000	Sq. Ft.	0.02	$ 1.00
Floor <R11 to R30	2,000	Sq. Ft.	0.03	$ 1.50
Windows	20,000	Sq. Ft.	0.38	$ 10.00
Windows – DIY	30,000	Sq. Ft.	0.38	$ 5.00
Storm Windows	5,000	Sq. Ft.	0.21	$ 5.00
Storm Windows – DIY	5,000	Sq. Ft.	0.21	$ 4.00

Incentive Revisions

Avista has modified the incentives, incentive structure, and installation options for 2023. The additional DIY installation options for some measures, tiered options for insulation, and increases in rebate amounts are aimed at removing barriers and further promoting the importance of adequate shell measures in homes.

TABLE 18 – RESIDENTIAL SHELL PROGRAM INCENTIVE REVISIONS

Measure Description	2022	2023
Wall Insulation	$ 0.75	$ 1.50
Attic <R11-R49/R38	$ 0.75	$ 1.50
Floor <R11-R19	$ 0.75	$ 1.00
Floor <R11 to R30	$ 0.75	$ 1.50
Windows	$ 4.00	$ 10.00
Windows – DIY	NA	$ 5.00
Storm Windows	$ 3.00	$ 5.00
Storm Windows – DIY	NA	$ 4.00

Multifamily Weatherization

Program Description

After previous efforts to include small homes in this program resulted in customer confusion, the program will return to focusing on multifamily properties in 2023. For multifamily residences (fiveplex or larger), owners and developers may choose to treat the entire complex with an efficiency improvement through the Commercial Site-Specific Program or single units with the multifamily program prescriptive approach. This program includes line voltage thermostats, which are not considered a weatherization measure. However, these thermostats allow customers to have more control over their heating usage and are therefore included as an offering within this program.

Program Manager

Michele Drake

TABLE 19 – MULTIFAMILY WEATHERIZATION PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		80,654
Incentives	$	684,000
Non-Incentive Utility Costs	$	27,119
Total Costs	$	711,119
Cost-Effectiveness		
Total Resource Cost		1.27
Utility Cost Test		2.12

Program Eligibility

Eligibility includes all Avista Washington residential natural gas customers (Rate Schedule 101) who own multifamily properties of five units or more or have a landlord's permission and install qualified equipment.

TABLE 20 – MULTIFAMILY WEATHERIZATION PROGRAM MEASURES AND INCENTIVES

	Projected Participation		Per-Unit Therm Savings	Incentive
Furnace 95% (Single-Stage)	600	Unit	65.25	$ 700.00
High-Efficiency Water Heater (<= 55)(.65 or greater)	600	Unit	21.80	$ 100.00
Smart Thermostat Natural Gas – DIY	250	Unit	26.64	$ 125.00
Smart Thermostat Natural Gas – Contractor-Installed	250	Unit	26.64	$ 150.00
Tankless Water Heater (0.93+)	35	Unit	76.50	$ 500.00
Attic <R11-R49/R38	10,000	Sq. Ft.	0.03	$ 1.50
Floor R0-R19	1,500	Sq. Ft.	0.04	$ 1.00
Floor R0 to R30	2,500	Sq. Ft.	0.06	$ 1.50
Windows – Single/Double to U22	5,000	Sq. Ft.	0.95	$ 10.00
Windows – Single/Double to U30 – DIY	5,000	Sq. Ft.	0.83	$ 5.00
Storm Windows – Single/Double to U22	1,000	Sq. Ft.	0.84	$ 10.00
Storm Windows – Single/Double to U22 – DIY	2,500	Sq. Ft.	0.84	$ 5.00

Incentive Revisions

Incentives have been modified to follow the increases in the Residential Prescriptive Program.

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 multiple community action agencies under an annual contract. The funding allows for considerable flexibility for the agencies to deliver a variety of applicable measures to each individual low-income client's home.

Program Manager

Renee Coelho

TABLE 21 – LOW-INCOME PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		24,345
Incentives	$	1,313,009
Non-Incentive Utility Costs	$	9,707
Total Costs	$	1,322,716
Cost-Effectiveness		
Total Resource Cost		1.00
Utility Cost Test		0.31

Avista partners with seven Community Action Partner (CAP) agencies and one Tribal Housing Authority to deliver energy efficiency programs to income-eligible customers. The agencies 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 $3 million, which covers the cost of energy efficiency work; any needed health, safety, or repair improvements; agency administration, and program support. Currently, Avista's Low-Income Program is budgeted at $3 million; however, the overall budget is estimated at nearly $4.5 million 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 a part of a pending multi-party settlement, the funding for low-income is set to increase to $4 million for 2023. 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. The agencies received a 2-year agreement, beginning in 2022, that align with the company's biennial conservation plan. This budget timeframe allows the agencies to pull funding from a future year's allocation to continue serving Avista customers in advance of the new contract. Because other funding sources run on a fiscal year, utility funding is often calculated on a calendar year and then utilized later in the year. This change in funding availability allows for continuous use of utility funds and a regular cadence for utility billing throughout the year, rather than concentrating the expenses after the midway point on a calendar.

Table 22 shows the budgeted funding allocation by agency and counties served.

TABLE 22 – LOW-INCOME PROGRAM FUNDING BY CAP AGENCY

CAP Agency	County	Funding
Spokane Neighborhood Action Partners (SNAP)	Spokane	$ 1,950,000
Rural Resources Community Action	Ferry, Lincoln, Pend Oreille, Stevens	$ 250,000
Community Action Center	Whitman	$ 210,000
Opportunities Industrialization Council	Adams, Grant	$ 110,000
Spokane Indian Housing Authority	Stevens County	$ 30,000
Community Action Council of Lewis, Mason & Thurston Counties	Klickitat, Skamania	$ 40,000
Benton Franklin County Community Action	Franklin	$ 30,000
Community Action Partnership	Asotin	$ 360,000
Set aside/TBD		$ 20,000
Total		**$ 3,000,000**

The agencies are authorized to use 10 percent of their contract for administration cost reimbursement and 20 percent toward program support reimbursement. Avista also permits them to use up to 30 percent of the contract to fund health, safety, and home repairs. This spending is at the agency's discretion and offers flexibility in preparing a home to accommodate the efficiency improvement and preserve the longevity of the installed measures.

The program will continue to fully fund many energy efficiency natural gas improvements. These include utility-approved measures as well as those contained on the Deemed Measure Priority List (DMPL) in the Washington State Department of Commerce's *Weatherization Manual*, July 2021 edition. A list of 2023 approved measures can be found in Table 23.

TABLE 23 – LOW-INCOME APPROVED MEASURES AND DIRECT CUSTOMER BENEFITS

	Projected Participation		Per-Unit Therm Savings	Funding	Direct Benefit to Customer
Air Infiltration – Natural Gas	50	Sq. Ft.	16.09	Fully Fund	$ 979.20
ENERGY STAR-Rated Doors	200	Units	12.32	Fully Fund	$ 704.40
Windows	5,000	Sq. Ft.	0.31	Fully Fund	$ 30.74
High-Efficiency Natural Gas Furnace	200	Units	73.55	Fully Fund	$ 3,612.67
Water Heater	20	Units	7.74	Fully Fund	$ 2,515.62
Attic Insulation	70,000	Sq. Ft.	0.04	Fully Fund	$ 1.87
Duct Insulation	500	Sq. Ft.	0.17	Fully Fund	$ 2.92
Floor Insulation	10,000	Sq. Ft.	0.05	Fully Fund	$ 2.67
Wall Insulation	10,000	Sq. Ft.	0.06	Fully Fund	$ 2.12
Duct Sealing	15	Units	20.17	Fully Fund	$ 793.95
Health & Human Safety	1	Unit	1.00	Fully Fund	$ 0.10
Tankless Water Heater	5	Units	66.50	Fully Fund	$ 573.00
High-Efficiency Boiler	2	Units	20.17	Fully Fund	$ 793.95

Measures that are not cost-effective are rebated at the amount of the company's avoided cost of the measure. In this case, the 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. A list of 2023 fully funded and qualified rebate measures can be found in Table 23. At the time of this writing, all the measures will be funded for 2023. Note that the benefit amount represents the historic fully funded value that customers received as part of their participation in the Low-Income Program.

Agencies are encouraged to work with Avista when opportunities for energy efficiency are identified that are not on either the approved (fully funded) or the rebate list.

In 2023, Avista will add storm windows, smart thermostats, and door sweeps to the list of approved measures. Per-unit Therm savings values and direct customer benefit assumptions will be calculated in late 2022.

Commercial/Industrial Portfolio Overview

The commercial/industrial energy efficiency market is served through a combination of prescriptive and site-specific offerings. Any measure not offered through a prescriptive program is automatically eligible for treatment through the Site-Specific Program, subject to the criteria for participation in that program. Prescriptive 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 RTF 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.

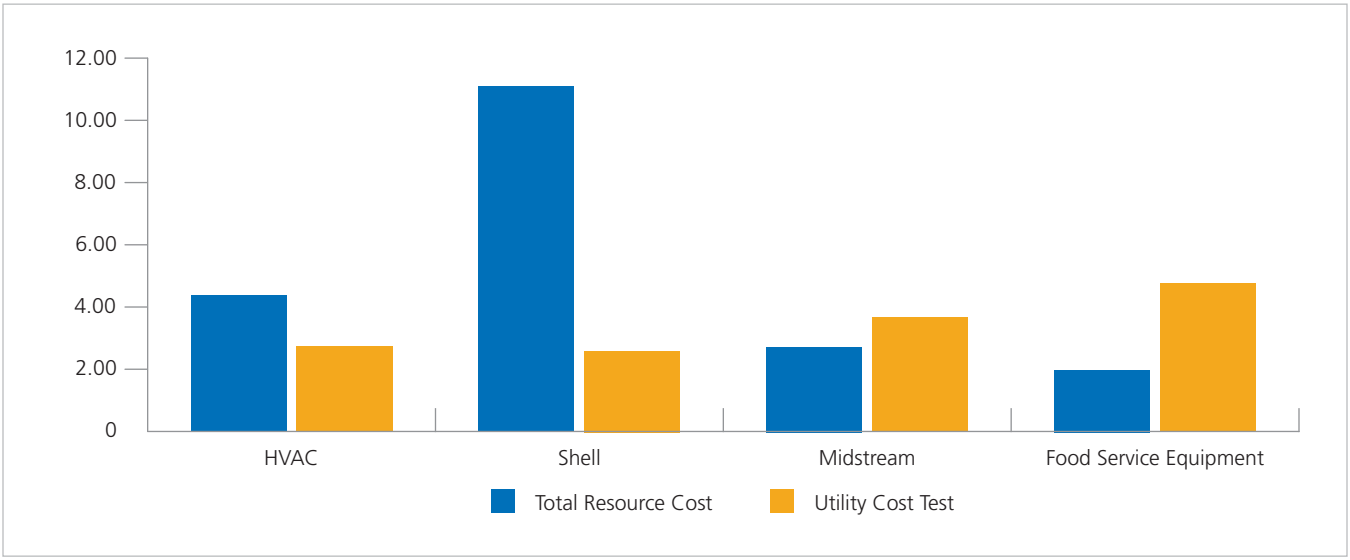
Avista anticipates approximately 618,566 therms to be achieved through commercial/industrial programs with an expected spend of $3,070,256. Table 24 summarizes the 2022 commercial/industrial program estimates.

TABLE 24 – COMMERCIAL/INDUSTRIAL PROGRAM OVERVIEW

Commercial/Industrial Programs	Natural Gas Program Savings (Therms)	Expected Spend
HVAC	108,837	$ 630,432
Shell	112,800	$ 940,978
Food Service Equipment	57,390	$ 115,706
Site-Specific	198,000	$ 748,173
Midstream	141,530	$ 634,968
Total Commercial/Industrial	**618,556**	**$ 3,070,256**

Quantifiable non-energy benefits are included in the Total Resource Cost (TRC) calculation, including but not limited to reductions in maintenance, water, sewer, and non-utility energy costs. All assigned and allocated non-incentive utility costs have been incorporated into the cost-effectiveness calculation. Figure 5 identifies the TRC and Utility Cost Test (UCT) cost-effectiveness for the Commercial/Industrial Prescriptive Program.

FIGURE 5 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE PROGRAMS COST-EFFECTIVENESS



	HVAC	Shell	Midstream	Food Service Equipment
Total Resource Cost	4.25	11.18	2.68	1.99
Utility Cost Test	2.72	2.42	3.72	4.78

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. Table 25 identifies the cost-effectiveness for the Site-Specific Program.

TABLE 25 – COMMERCIAL/INDUSTRIAL SITE-SPECIFIC PROGRAM COST-EFFECTIVENESS

	Site-Specific
Total Resource Cost	5.90
Utility Cost Test	4.09

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 their 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.

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.

Program Manager

Lorri Kirstein

TABLE 26 – COMMERCIAL/INDUSTRIAL SITE-SPECIFIC PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		198,000
Incentives	$	693,000
Non-Incentive Utility Costs	$	55,173
Total Costs	$	748,173
Cost-Effectiveness		
Total Resource Cost		5.90
Utility Cost Test		4.09

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 27 – COMMERCIAL/INDUSTRIAL SITE-SPECIFIC MEASURES AND INCENTIVES

	Estimated Therm Savings	Incentives
Site-Specific Programs	198,000	$ 748,173

Commercial/Industrial Business Partner Program

The Business Partner Program (BPP) is an outreach effort designed to target Avista's rural 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 provides a free energy efficiency assessment, along with awareness about other services such as billing options 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. To further support the BPP, the company approved a partnership with Community Energy Efficiency Program (CEEP) for financial assistance. The CEEP funding is used to assist rural small business customers with financing the coordination and installation of identified energy efficiency measures (e.g. lighting retrofits) that may have been identified during an energy assessment. With customers participating in these energy assessments, understanding their utility bill, and seeing the results of energy efficiency improvements, this program provides a comprehensive approach to serving hard-to-reach customers.

Commercial/Industrial Prescriptive HVAC Program

Program Description

The Prescriptive Natural Gas HVAC Program encourages customers to select highly efficient natural gas heating equipment solutions for their business. Installing highly efficient equipment helps lower operating costs and save energy. The prescriptive rebate approach issues payment to the customer after the measure has been installed. Commercial customers who heat with Avista natural gas are eligible for this program.

Program Manager

Greta Zink

TABLE 28 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE HVAC PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		108,837
Incentives	$	599,500
Non-Incentive Utility Costs	$	30,932
Total Costs	$	630,432
Cost-Effectiveness		
Total Resource Cost		4.25
Utility Cost Test		2.72

Program Implementation

Customers must submit a completed rebate form, invoices, and an AHRI certificate within 90 days after the installation has been completed. Each rebate will be qualified and processed within iEnergy with the current-year calculator. 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. 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 29 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE HVAC PROGRAM MEASURES AND INCENTIVES

	Projected Participation		Per-Unit Therm Savings	Incentive	
Natural Gas Boiler <300 kBtu .85-.89 AFUE	2,000	Units	1.77	$	5
Natural Gas Boiler <300 kBtu .90+ AFUE	3,500	Units	2.87	$	9
Multistage Furnace <225 kBtu .90-.95 AFUE	2,000	Units	3.67	$	11
Multistage Furnace <225 kBtu .95+ AFUE	2,000	Units	4.22	$	13
Single-stage Furnace <225 kBtu .90-.95 AFUE	3,000	Units	2.87	$	5
Single-stage Furnace <225 kBtu .95+ AFUE	3,000	Units	3.67	$	11
Unit Heater	110	Units	194-583	$	600-1,800

Incentive Revisions

No revisions are being made to this program. Equipment in this program will be offered in the Midstream Program sometime in 2023, but details have not been finalized at this time.

Commercial/Industrial Prescriptive Shell 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. This 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.

Program Manager

Greta Zink

TABLE 30 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE SHELL PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		112,800
Incentives	$	900,000
Non-Incentive Utility Costs	$	40,978
Total Costs	$	940,978
Cost-Effectiveness		
Total Resource Cost		11.18
Utility Cost Test		2.42

Program Implementation

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 31 – 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	120,000 Sq. Ft.	0.09	$ 1.50
Less than R11 Attic Insulation (E/G) to R45+ Attic Insulation	120,000 Sq. Ft.	0.13	$ 1.50
Less than R11 Roof Insulation (E/G) to R30+ Roof Insulation	120,000 Sq. Ft.	0.12	$ 1.50
Less than R4 Wall Insulation (E/G) to R11-R18 Wall Insulation	120,000 Sq. Ft.	0.24	$ 1.50
Less than R4 Wall Insulation (E/G) to R19+ Wall Insulation	120,000 Sq. Ft.	0.36	$ 1.50

Incentive Revisions

TABLE 32 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE SHELL PROGRAM INCENTIVE REVISIONS

Commercial Insulation	2022	2023
Wall R4 to R11-R18	0.60 per Sq. Ft.	1.00 per Sq. Ft.
Wall R4 to R19 or greater	0.65 per Sq. Ft.	1.25 per Sq. Ft.
Attic R11 to R30-R44	0.75 per Sq. Ft.	1.00 per Sq. Ft.
Attic R11 to R45 or greater	0.85 per Sq. Ft.	1.25 per Sq. Ft.
Roof R11 to R30 or greater	0.60 per Sq. Ft.	1.00 per Sq. Ft.

Commercial/Industrial Prescriptive Food Services Program

Program Description

The Commercial Food Service Equipment Program offers incentives for customers who purchase or replace food service equipment with qualified ENERGY STAR equipment. Energy-efficient equipment helps customers save money on energy costs. This prescriptive rebate approach issues payment to the customer after the measure has been installed. Commercial customers who use an Avista fuel to operate the equipment are eligible for this program.

Program Manager

Greta Zink

TABLE 33 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE FOOD SERVICES PROGRAM METRICS

Projected Program Metrics		
Overall Therm Savings		57,390
Incentives	$	105,750
Non-Incentive Utility Costs	$	9,956
Total Costs	$	115,706
Cost-Effectiveness		
Total Resource Cost		1.99
Utility Cost Test		4.78

Program Implementation

Customers must submit a completed rebate form and invoices 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 34 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE FOOD SERVICES PROGRAM MEASURES AND INCENTIVES

	Projected Participation	Per-Unit Therm Savings	Incentive
0.81 to 1 GPM Natural Gas Pre-rinse Sprayer	5 Units	16.81	$ 50
3 pan Natural Gas Steamer	5 Units	586.22	$ 1,300
4 pan Natural Gas Steamer	5 Units	779.91	$ 1,700
5 pan Natural Gas Steamer	5 Units	973.63	$ 2,200
6 pan Natural Gas Steamer	5 Units	1,167.36	$ 2,600
10 or larger pan Natural Gas Steamer	5 Units	3,043.24	$ 3,200
Efficient Natural Gas Combination Oven (>= 16 pan and <= 20 pan)	5 Units	500.00	$ 1,000
Efficient Natural Gas Combination Oven (>= 6 pan and <= 15 pan)	5 Units	403.00	$ 1,000
Efficient Convection Oven (full-size)	5 Units	450.00	$ 700
High-Efficiency Natural Gas Convection Oven, 40% Efficiency or better	5 Units	323.00	$ 700
Natural Gas Rack Oven	10 Units	1,034.00	$ 2,000
ENERGY STAR 50% Efficiency Natural Gas Fryer	5 Units	505.00	$ 1,000
High-Efficiency Natural Gas Griddle, 40% Efficiency or better	10 Units	88.00	$ 250
High-temp Natural Gas Hot Water Dishwasher	10 Units	102.82	$ 300
Low-temp Natural Gas Hot Water Dishwasher	10 Units	140.10	$ 300

Incentive Revisions

No revisions are being made to this program. Equipment on this form will be offered in the Midstream Program sometime in 2023, but the mix of measures to be offered has not been finalized at this time.

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 2023, 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 2023 local portfolio developed within this plan. NEEA provided Avista with a savings forecast of 571,840 therms derived from codes and standards savings related to residential new construction. These savings are included in this plan on an informational basis and it is to be determined whether the therm savings will be realized for 2023 at the end of the period.

PILOT PROJECTS AND NEW PROGRAM OFFERINGS

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.

Residential Home Energy Audit Pilot Program

Program Description

The Home Energy Audit Pilot 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 energy inspector, direct installation measures to encourage customer interest, marketing efforts to drive customers to the program, and ongoing work with trade allies to ensure that customer demand can be met. Avista's website also communicates program requirements and highlights opportunities for customers.

Program Implementation

Taking advantage of previous Home Energy Audit Program experience and aligning with industry best practices, Avista launched a pilot Home Energy Audit Program in 2019. Audits were performed on 61 homes during the pilot period ending in early 2020. Approval from both Washington and Idaho to expand to full program status was received late in the first quarter of 2020. As a result, Avista proceeded to implement the program and created an RFP to recruit contract auditors. The RFP was not issued, however, due to the suspension of the program resulting from the COVID-19 pandemic. Avista plans to proceed with the full program in 2023.

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.

Washington State Clean Buildings Act Early Adopter Incentives

Program Description

Washington State House Bill 1257 was codified into law in late 2019 with active rule-making underway throughout 2020. It 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.

The law also includes provisions for incentives to early adopters whose buildings' 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.

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 that include benchmarking their buildings through the 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 three key areas of support in Table 35.

TABLE 35 – WASHINGTON STATE CLEAN BUILDINGS ACT EARLY ADOPTER INCENTIVES

Service	Start Date	Prior Service
Early-Adopter Incentive	In place	Renewable incentives
Portfolio Manager	In place	Current program offering since January 2009
Energy Efficiency Engineering Services	In place	Current service offered since Avista began energy efficiency programs

Avista preparations completed, identified, or underway:

1. Actively participate in Department of Commerce rule-making meetings
2. Actively participate in HB1257 utility working group meetings
3. Provide information and gain customer feedback at Spokane Building Owners & Managers Association (BOMA), Washington Association of Maintenance and Operation Administrators (WAMOA), and other industry meetings
4. Identified affected buildings in service area
    - initial search with internal GIS tools
    - work with Department of Commerce
5. Identified current Portfolio Manager customers affected by the law
6. Determine potential additional program offerings to help customers meet targets

7. Completed outreach and communications materials
    - target known affected customers through account executives
    - provide broader awareness with reference materials on website
8. Payment process and procedures created that include the following
    - set up proper internal accounting
    - develop reporting tools and process

The goal of this pilot is to further explore ways to encourage customers to comply with the law before it goes into effect. Through earlier participation in these programs, customers will experience fewer disruptions in their operations and avoid unwanted penalties for not complying with HB 1257.

AeroBarrier Pilot Program

Program Description

Reducing air leaks in a new-construction home results in sustainable benefits with increased comfort, reduced energy usage, and lower energy bills. Many builders recognize and promote this, but there are several value-based builders who choose not to meet air-seal code requirements. Avista is targeting all builders for this pilot and will track the demographics of each builder to determine the value and future potential for this program. Avista has categorized builders into the following groups.

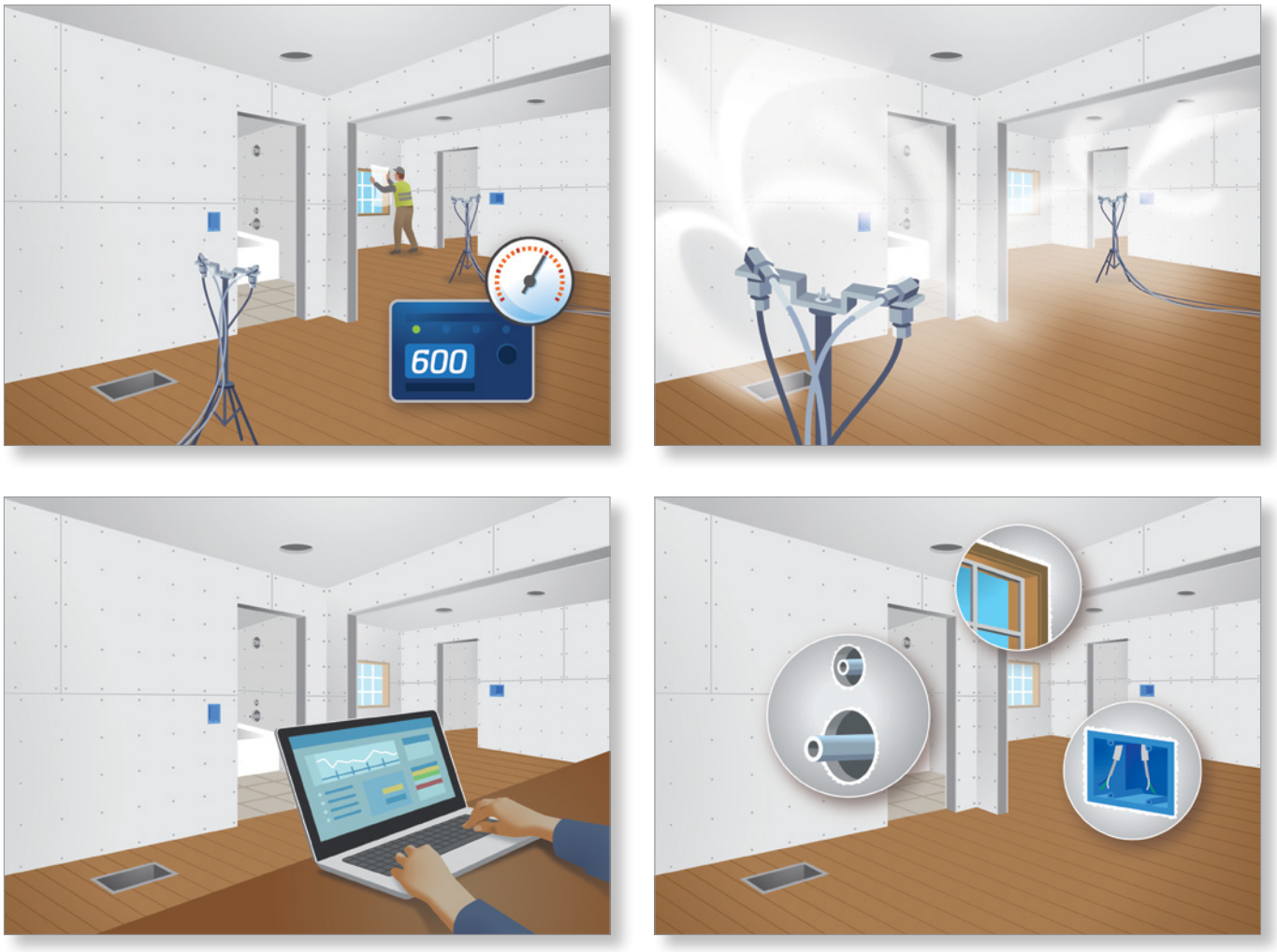
TABLE 36 – AEROBARRIER PILOT PROGRAM NEW CONSTRUCTION BUILDER GROUPS

Group	Type	Characteristics
1	Ready for NetZero	Consistently build to ENERGY STAR and NetZero standards
		Builder team familiar with how to achieve good results
		Typical air tightness targets are between 1.5 & 2.5 ACH(50)
2	Performance builders	Regularly build to above code air tightness
		Select members on builder team knowledgeable about air testing
		Typical air tightness targets are between 2.0 & 3.0 ACH(50)
3	Code minimum	Prescriptive path home builders
		Often struggle to pass air tightness testing to meet code
		Typical air tightness levels +5.0 ACH(50)*

* ACH= air changes per hour (a measure of air tightness in buildings)

The air-seal pilot program exclusively incentivizes the air-sealing method using the AeroBarrier product. This product differs from traditional air sealing practices that use spray foam, caulk, gaskets, and tape because AeroBarrier manufactures their acrylic sealant from technology invented and proven by the U.S. Department of Energy (DOE) over 20 years ago. The product is applied using sprayers throughout the home while the home is under pressure, which delivers consistent results (shown in Figure 6).

FIGURE 6 – AEROBARRIER PILOT PROGRAM APPLICATION PROCESS



The pilot was launched in April 2021 to provide home builders with an incentive to seal new homes with AeroBarrier's product to reduce air leaks. It is intended to evaluate the cost-effectiveness of this air-sealing method on up to 300 homes, which, as a result, is expected to run for a one-year term.

Program Implementation

A comprehensive list of new home builders was created from publicly available historical building permit applications and internal trade ally lists. Marketing materials to bring awareness of this new pilot program were then mailed or emailed to this list. In addition, Avista promoted the pilot to the Spokane Area Home Builder's Association at monthly meetings and provided leave-behind reference materials for this group to have on hand. Website content was also created and added to myavista.com for awareness and reference.

Program Eligibility

Eligibility for the pilot rebate includes builders of residential single-family new-construction homes that use an Avista fuel for space heating in Washington and Idaho. Customers who meet the eligibility requirements will receive a $100 per ACH(50) reduction from the pre-seal value or state building code level (whichever is less) per 1,000 square feet subject to customers providing the required documents to Avista (either mailed or submitted electronically). However, online rebate processing is not within the scope of the pilot until further review by Avista's technology team. For the pilot, Avista will include a 50 percent adder to aid in removing the market barrier. Incentives will be capped at the total project cost.

TABLE 37 – AEROBARRIER PILOT PROGRAM INCENTIVE CALCULATION EXAMPLES

Location	Pre-ACH @ 50 Pascals	Post-ACH @ 50 Pascals	Incentive amount based on code of 5ACH(50) baseline ($100 + 50% added = $150 incentive/ACH(50) reduced per 1,000 ft sq.
Site 1 2500 Sq. Ft.	3.2	1.5	3.2 – 1.5 = 1.7 | 1.7 * $150 = $255
			$255 *2.500 = $637.50
Site 2 2500 Sq. Ft.	7.4	2.4	5 (code) – 2.4 = 2.6 | 2.6 * $150 = $390 | $390 * 2.500 = $975
Site 3 2500 Sq. Ft.	4.9	0.4	4.9 - 0.44 = 4.56 | 4.56 * $150 = $684
			$684 * 2.500 = $1,710

Energy Use Index Retrofit Pilot

The Energy Use Index Retrofit Pilot will encourage customers to use their energy more efficiently. The pilot will use a pay-for-performance approach with the goal of achieving 50 percent of the customer's previous energy use. The facility must retrofit at least 25 percent of its square footage and provide a way to accurately measure performance at a sub-panel. Limited to five customers, this pilot is modeled on the recently completed EUI New Construction Pilot and can play a part in the satisfaction of HB 1257 for buildings smaller than the law currently targets. A primary goal of this pilot is to identify whether performance-based incentives can encourage deep energy savings.

Smart Buildings Center Tool Lending Pilot

The Tool Lending Pilot will be a two-year program allowing tool lending to Avista customers from a public space in the eco-district. The library of tools will include the company's current stock of energy efficiency-related equipment, as well as some newer technologies that provide more insight into energy use. In addition to shipping the tools and training materials to customers who are not in the immediate area, the pilot will include training. Work is underway to make this an extension of the NEEC program in order to take advantage of the work that has already been done in the Northwest and limit the cost to Avista while offering a more robust tool set. Avista is hoping to learn whether customers value this service as part of their energy management efforts. Throughout the pilot period, Avista will track the number of customers who participate in the program.

On-Bill Repayment/Financing Program

Program Description

For almost four decades Avista has supported energy efficiency financing solutions throughout its service territory, with the last program ending in 2016. While the company no longer offers On-Bill Repayment/Financing (OBR) programs, it was asked to review offering a new OBR program in 2021 for its Washington residential and small business customers. The request was made as part of the settlement stipulation in Avista's 2019 Washington General Rate Case and is shown here:

> *On-Bill Repayment/Financing Program – Avista will provide a proposal for the Energy Efficiency Advisory Group (EEAG) for on-bill repayment/financing programs for residential and small business customers (Schedules 01, 11, and 101). Avista will incorporate feedback from the EEAG in the final program designs by January 2, 2021. If Avista and the EEAG reach an agreement on program terms and design, the company will file the programs with the commission such that the programs are implemented by September 30, 2021. Based on the outcome of discussions with the EEAG, the company may file small business and residential programs together or individually with the commission. The company will file a status report with the commission if agreement is not reached with the EEAG for programs offered to the enumerated customer classes by September 30, 2021. Development costs associated with this program will be recoverable from customers and means of recovery will be addressed in a future GRC.*

Avista is currently researching options that will meet these requirements to best serve customers.

TABLE 38 – ON-BILL REPAYMENT/FINANCING PROGRAM PRIOR LOAN PROGRAM EXPERIENCE

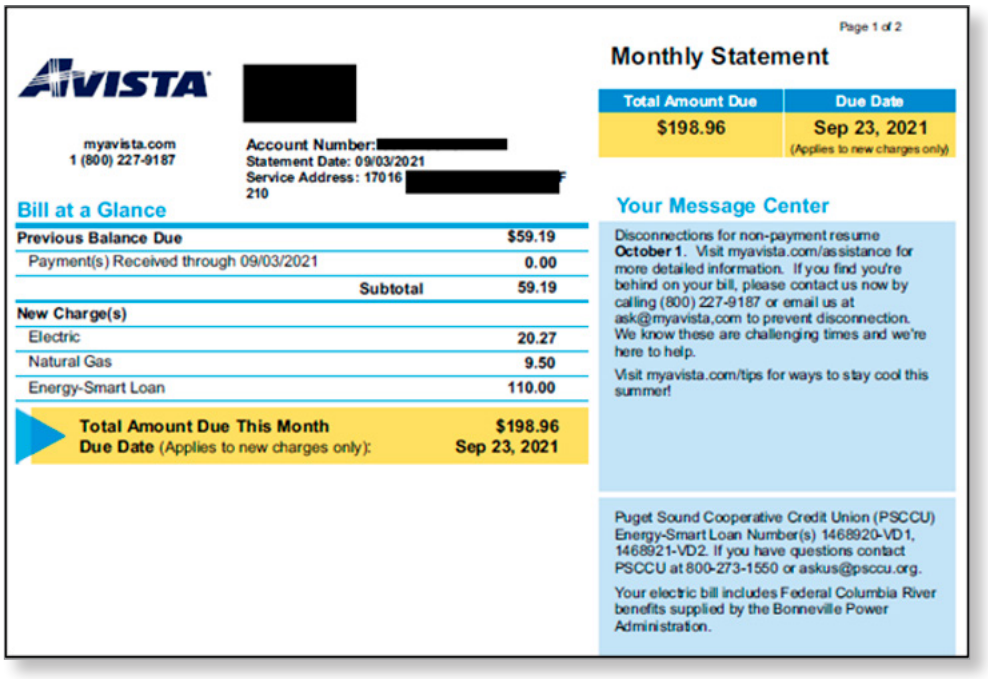
Program	OBR	Duration	Eligible Customers	Lender
Loan in Lieu of Rebate	Yes	state inception – 2016	OR – Residential	Avista
Energy Efficiency Credit Enhancement	No	2010 – 2014	WA – Residential & C/I	third-party
Easy Pay	Yes	mid to late 1990s	ID & WA – Residential	third-party
Products & Services	Yes	mid to late 1990s	ID & WA – Residential	third-party
Switch Saver	Yes	late 1980s-mid 90s	ID & WA – Residential	third-party

As a result of the request, Avista issued an RFP for a lending solution at the end of 2020, and with assistance from the EEAG, reviewed various OBR program solutions from bid respondents. After careful consideration and evaluation, Avista selected Puget Sound Cooperative Credit Union (PSCCU) as a partner to deliver a flexible funding solution for customers' energy efficiency projects. OBR was available as of October 1, 2021.

Program benefits are twofold: PSCCU offers Energy-Smart Loans for energy-efficient projects to homeowners and business owners in Washington State. Their personalized underwriting practices and low interest rates allow participants to 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 their Avista bill until 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 7 – ON-BILL REPAYMENT/FINANCING PROGRAM BILL EXAMPLE



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AVISTA

[redacted]

myavista.com
1 (800) 227-9187

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

Monthly Statement

Total Amount Due	Due Date
$198.96	Sep 23, 2021 (Applies to new charges only)

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 39 – ON-BILL REPAYMENT/FINANCING PROGRAM RATES AND TERMS

Loan amount	$1,000 - $30,000 residential	$5,000 - $65,000 small business
Interest rate	Up to 5.00%	Up to 5.00%
Term	Up to 15 or 20 years	Up to 15 years
Recording fee	$225 UCC filing fee*	Vary*
Example	$12,000 loan at 5%, 180 payments of $95 each	

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

Energy-Smart Loans through Avista's On-Bill Repayment Program are not intended for customers who qualify for Avista's Low-Income Weatherization Program administered through partner community action agencies. Processes to assure income-qualified customers are educated and directed to the agencies will be implemented at program launch. Income-qualified customers may apply for the Energy-Smart Loan and participate in the OBR program if they choose.

Program Implementation

Avista's technical teams worked closely with our partner lender, PSCCU, to develop the integration specifications needed to support the accurate, timely, and secure sharing of information for billing and payment processing.

The key to delivering on the objectives of this program are Avista's trade allies, who will help market and deliver the program. In addition, multi-channel marketing efforts help drive customers to the 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.

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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 NWPCC's 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). Since the TRC and UCT tests are the basis for optimizing the portfolio (for reasons previously explained), 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 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 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).

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 TRC costs. These 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 stakeholders 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 Manua*l (*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 2023, Avista will engage with a single EM&V vendor for both its residential and commercial/industrial program segments.

In order to align the performance of Avista's low-income conservation programs with other energy burden reduction goals set out in the Clean Energy Transformation Act (CETA) and in this *ACP*, Avista intends to start measuring and reporting metrics related to energy burden reduction. The primary goal is to measure the true energy burden reduction resulting from Avista's programs, specifically for high-burden households. A secondary goal is to diagnose issues with program operations, design, marketing, or access for high-burden households. The exact mechanism for including energy burden metrics in the EM&V process is yet to be determined but would include integrated equity-aware program evaluations, as well as separate energy burden assessments and potential studies.

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 responsibly 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 stakeholders as conversations around cost-effectiveness arise.

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.

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 2023 to better address energy efficiency for customers. These modifications include revising demand response language, adding technical resources for grant writing for energy efficiency projects, and removing expired language. The proposed revisions are included in Appendix C to this plan.

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 2023 *ACP* represents program efforts by Avista in order to achieve its expected eligible acquisition savings for the second year of the 2022-23 biennium. For additional supporting information please see the corresponding appendices:

- Appendix A – 2023 Energy Efficiency Evaluation, Measurement, and Verification Annual Plan
- Appendix B – Cost Effectiveness Methodology
- Appendix C – Washington DSM Tariff Schedules
- Appendix D – Natural Gas Program Summary

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GLOSSARY OF TERMS

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Advisory Group: Avista's group of external stakeholders who comment about the company's energy efficiency activities.

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

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.

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 rural 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 energy assistance program 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: a community designated by the Washington Department of Health.

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 stakeholders.

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.

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

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

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/Financing (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's 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.

8760: Total number of hours in a year.

APPENDICES AND SUPPLEMENTS

APPENDIX A – 2023 ENERGY EFFICIENCY EVALUATION, MEASUREMENT, AND VERIFICATION ANNUAL PLAN

Background

Avista's 2023 *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 2023 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. This document also provides the projected 2023 EM&V budget.

Overview

Avista's 2023 *EM&V Annual Plan* identifies evaluation activities intended to be performed on the 2023 energy efficiency portfolio. The scope of this plan is 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 that 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 2023 will contribute to the biennial savings acquisition for EIA compliance, which will complete its seventh biennium at the end of 2023.[1]
- A final evaluation of the electric programs deployed during 2023 will be initiated prior to the end of 2023 in order to meet the June 1, 2024, 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 2023 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. Additional evaluation will include customer surveys, tracking databases, marketing materials, and quality assurance documents.
- A process evaluation report will be delivered as part of the 2023 *Energy Efficiency Annual Conservation Report*, which addresses program considerations for that program year.

External EM&V Budget for Evaluations

For 2022-23, the total budget for external evaluation is estimated to be $1,019,464 on a total system basis. The following table identifies evaluation activities and allocations that are anticipated for 2023. The Washington and Idaho expenses include evaluation activities for both electric and natural gas fuel types.

TABLE 1 – EVALUATION ACTIVITIES AND ALLOCATIONS

Individual Evaluations	Evaluation Type	Contractor	Budget (System)	WA Expense	ID Expense
2022-23 Electric and Natural Gas Portfolio	Impact	ADM	$ 899,464	$ 629,625	$ 269,839
Electric and Natural Gas DSM Operations (or components of)	Process	ADM	$ 120,000	$ 84,000	$ 36,000
Total Budget for Individual Evaluations			**$ 1,019,464**	**$ 713,625**	**$ 305,839**

Overall 2023 EM&V Budget

The table below captures the individual evaluations specifically identified in the previous table in aggregate, and augments them with the associated expenses related to participate in and fund the activities of the Regional Technical Forum (RTF).

TABLE 2 – AGGREGATE OF INDIVIDUAL EVALUATIONS

Activity	Budget (WA/ID system)	Total budget	WA expense	ID expense
Individual Evaluations Previously Specified	$ 509,732	$ 509,732	$ 356,812.40	$ 152,919.60
Regional Technical Forum Dues	$ 105,000	$ 105,000	$ 73,500	$ 31,500
Total	**$ 614,732**	**$ 614,732**	**$ 430,312**	**$ 184,420**
Expected Total DSM Budget (WA/ID)	$ 53,763,640		$ 39,902,461	$ 13,861,179
EM&V as a % of Total DSM Budget	1%		1%	1%

Summary of Individual Evaluations

Provided below is a summary of each of the external evaluation activities anticipated to occur in 2023. 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.

2022-23 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 (2022-23) 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.

2023 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 2023 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 2022-23 that includes details on methodology, approach, and deliverables. Avista has provided this plan in Appendix A.

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 standardized[2] 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 test (PAC).
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

The following table summarizes Avista's approach to calculating the four basic cost-effectiveness tests. The categorization and nomenclature have been worded so as to provide clarity regarding each cost and benefit component. 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 natural 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, and so on.

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 CAP agencies 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 analysis, 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 the 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 Community Action Program (CAP) agencies, 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 CAP agency 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 CAP agency funds.

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

The administrative reimbursement permitted to the CAP agency is considered to be a component of the measure cost. This amount reimburses the CAP for back-office costs that would, in a typical trade ally bid, be incorporated into the project invoice. For 2023, the admin reimbursement is 30 percent for Washington and 15 percent for Idaho.

APPENDIX C – WASHINGTON DSM TARIFF SCHEDULES

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AVISTA CORPORATION
dba Avista Utilities

SCHEDULE 190
NATURAL GAS EFFICIENCY PROGRAMS
WASHINGTON

1. AVAILABILITY

The services described herein are available to qualifying residential, commercial, and industrial, retail natural gas distribution customers of Avista Corporation for the purpose of promoting the efficient use of natural gas. Customers receiving natural gas distribution service provided under special contract and/or customers receiving natural gas services not specified under Tariff Schedule 191 (Natural Gas Efficiency Rider Adjustment) are not eligible for services contained in this schedule unless specifically stated in such contract or other service agreement. The Company may provide partial funding for the installation of natural gas efficiency measures and may provide other services to customers for the purpose of identification and implementation of cost-effective natural gas efficiency measures as described in this schedule. Facilities-based services are available to owners of facilities, and also may be provided to tenants who have obtained appropriate owner consent.

Assistance provided under this schedule is limited to end uses where natural gas is or would be the energy source and to measures which increase the efficient use of natural gas. Assistance may take the form of monetary incentives or non-monetary incentives, as further defined within this tariff. The acquisition of resources is cost-effective as defined by a Utility Cost Test (UCT) as a portfolio. Customer participation under this schedule shall be based on eligibility requirements contained herein. (C)

2. ELIGIBLE CUSTOMER SEGMENTS

All customers in all customer segments to whom this tariff is available are eligible for participation in natural gas efficiency programs developed in compliance with this tariff. The broad availability of this tariff does not preclude the Company from targeting measures, markets and customer segments as part of an overall effort to increase the cost-effectiveness and access to the benefits of natural gas efficiency.

3. MEASURES

Only natural gas efficiency measures with verifiable energy savings are eligible for assistance. Measure eligibility may not necessarily apply to all customer segments. Final determination of applicable measures will be made by the Company.

Market transformation ventures will be considered eligible for funding to the extent that they improve the adoption of natural gas efficiency measures that are not fully accepted in the marketplace. These market transformation efforts may include efforts funded through regional alliances or other similar opportunities.

Issued December 7, 2015 Effective January 7, 2016

Issued by Avista Corporation
By Kelly Norwood, Vice President, State and Federal Regulation

Kelly Norwood

AVISTA CORPORATION
dba Avista Utilities

SCHEDULE 190 - continued

4. FUNDING AND NONMONETARY ASSISTANCE

4.1 Funding

The Company shall offer incentives for projects based upon the incremental capital cost associated with the energy efficiency of the project. Energy savings are calculated using the current energy rates.

The Company shall pay an incentive up to a maximum of the incremental measure cost. The Company shall make adjustments to the percent of incremental cost paid to attempt to obtain the greatest energy savings at the lowest cost.

Low income measures that have a Total Resource Cost (TRC) of 1.0 or higher are incentivized at 100% of the project cost. For measures that have a TRC of less than 1, the project is incentivized at an amount equal to the present value of avoided cost.

Incentives for efficiency measures within the following categories shall not exceed 100% of the project cost:

4.1.1 Energy efficiency programs delivered by community action agencies contracted by the Company to serve Low Income or vulnerable customer segments including agency administrative fees and health and human safety measures;

4.1.2 Low-cost natural gas efficiency measures with demonstrable energy savings (e.g. rooftop unit service);

4.1.3 Programs or services supporting or enhancing local, regional or national natural gas efficiency market transformation efforts.

4.1.4 Prescriptive programs are guided by the typical application of that measure in accordance with the previously defined incentive structure. Incentive levels for these programs are based on market conditions at the time of the program design and are not dependent on actual project cost relative to incentive caps. Incentives shall not exceed project costs.

4.1.5 Effective October 1, 2021, pending Commission approval, On-Bill Repayment (OBR) Program interest rate buydowns for qualifying natural gas efficiency measure financing as provided through the Company's partner lender. (N)

4.1.6 Incentives for customers designated as part of a vulnerable population or highly impacted community pursuant to RCW 19.405.020. Funding is limited to 100% of the project costs for installation and use of energy efficiency equipment. Equipment or repairs related to the health and safety of the customer or community is also allowed under this section. (N)

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By Patrick Ehrbar, Director of Regulatory Affairs

AVISTA CORPORATION
dba Avista Utilities

SCHEDULE 190 - continued

Avista Corporation will actively pursue natural gas efficiency opportunities that may not fit within the prescribed services described in this tariff. In these circumstances the customer and Avista Corporation will enter into a site specific services agreement.

4.2 Non-Monetary Assistance

Non-monetary assistance is service that does not involve the granting of direct monetary incentives to the customer. This type of assistance is available across all applicable segments. This assistance may be provided in various ways that include, but are not limited to, the following:

4.2.1. **Educational**, training or informational activities that enhance resource efficiency. This may include technology or customer-segment specific seminars, literature, trade-show booths, advertising or other approaches to increasing the awareness and adoption of resource efficient measures and behaviors.

4.2.2. **Financial** activities intended to reduce or eliminate the financial barriers to the adoption of resource efficiency measures. This may include programs intended to reduce the payment rate for resource efficiency measures, direct provision of leased or loaned funds or other approaches to financial issues by better than existing market terms and conditions.

4.2.3. **Product samples** may be provided directly to the customer when resource efficient products may be available to the utility at significantly reduced cost as a result of cooperative buying or similar opportunities.

4.2.4. **Technical Assistance** may consist of engineering, training, workforce development, financial, grant writing or other analysis provided to the customer by or under the direction of, Avista Corporation staff. This may take the form of design reviews, product demonstrations, third-party bid evaluations, facility audits, measurement and evaluation analysis, staff augmentation services or other forms of technical assistance that addresses the cost-effectiveness, improvement of energy efficiency services, technical applicability or end-use characteristics of customer alternatives. (N) (N) (N) (N)

Issued November 15, 2022 Effective January 1, 2023

Issued by Avista Corporation
By Patrick Ehrbar, Director of Regulatory Affairs

AVISTA CORPORATION
dba Avista Utilities

SCHEDULE 190 - continued

5. BUDGET & REPORTING (M)

The natural gas efficiency programs defined within this tariff will be funded by surcharges levied within Schedule 191. The Company will manage these programs to obtain resources that are cost-effective from a Total Resource Cost perspective and achievable through utility intervention. Schedule 191 will be reviewed periodically and revised as necessary to provide adequate funding for natural gas efficiency efforts.

6. GENERAL RULES AND PROVISIONS (D)

Service under this schedule is subject to the General Rules and Provisions contained in this tariff and is limited to facilities receiving natural gas service from the Company.

All installations and equipment must comply with all local code and permit requirements applicable and be properly inspected, if required, by appropriate agencies. The Company may establish specifications regarding any natural gas efficiency measures and modifications to be effected under this schedule and may conduct inspections to insure that such specifications are met.

Issued June 26, 2013 Effective August 15, 2013

Issued by Avista Corporation
By By Kelly Norwood, Vice President, State and Federal Regulation

APPENDIX D – NATURAL GAS PROGRAM SUMMARY

Program	Therm Savings	Estimated Budget
Low-Income Programs		
Low-Income Programs	24,345	$ 1,716,618
Low-Income Programs Total	**24,345**	**$ 1,716,618**
Residential Programs		
Prescriptive	294,484	$ 2,527,593
Midstream	253,727	$ 1,669,013
Multifamily Weatherization	80,654	$ 711,119
Residential Programs Total	**628,866**	**$ 4,907,725**
Commercial/Industrial Programs		
HVAC	108,837	$ 630,432
Shell	112,800	$ 940,978
Food Service Equipment	57,390	$ 115,706
Site-Specific	198,000	$ 748,173
Midstream	141,530	$ 634,968
Commercial/Industrial Programs Total	**618,556**	**$ 3,070,256**
Other Program and Administrative		
NEEA, CPA, EM&V	–	$ 626,528
Total Other Program and Administrative	**–**	**$ 626,528**
Total Natural Gas Budget	**1,271,767**	**$ 10,321,127**


THE WASHINGTON WATER POWER CO.
UPPER FALLS POWER PLANT