2024-25 Washington
Energy Efficiency Biennial Conservation Plan

November 1, 2023

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 Avista's control and may have a significant effect on the company's operations, results of operations, financial condition, or cash flows, which could cause actual results to differ materially from those anticipated in its statements.

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

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EXECUTIVE SUMMARY

In compliance with RCW 19.285.040, RCW 80.28.380, and WAC 480-109-120(1), Avista presents its 2024-25 *Biennial Conservation Plan* (*BCP*) for its electric and natural gas energy efficiency programs. In its *BCP*, Avista states its conservation targets and describes how they were developed, as well as its plans to ensure equitable distribution of energy and non-energy benefits through the efficiency-related portions of its Clean Energy Implementation Plan (CEIP). It also includes the company's 2024 Energy Efficiency *Annual Conservation Plans* (*ACP*s) for both electric and natural gas (see Appendix B and C), which provide the details regarding the various program offerings used for achieving these targets and how savings will be defined and presented. Reporting standards and participation from non-company parties are also described.

The Energy Independence Act (EIA) requires that utilities establish a minimum electric acquisition standard for conservation resources for each designated biennium. For the 2024-25 biennium, Avista's EIA target is 63,374 MWh, which represents the overall conservation to be obtained by the company before the additional five percent decoupling threshold[1] of 3,169 MWh. The total utility conservation goal is 66,543 MWh. The utility-specific conservation goal, which removes 15,739 MWh in savings derived from the Northwest Energy Efficiency Alliance (NEEA), is 50,804 MWh. To arrive at the EIA penalty threshold of 47,635 MWh, the five percent decoupling penalty is removed from the utility-specific conservation goal. Energy savings acquisitions attributed to Avista through regional market transformation have been included in the acquisition target; they have been excluded, however, from the EIA penalty threshold.

Table 1 illustrates the company's 2024-25 EIA target, along with its decoupling and NEEA components.

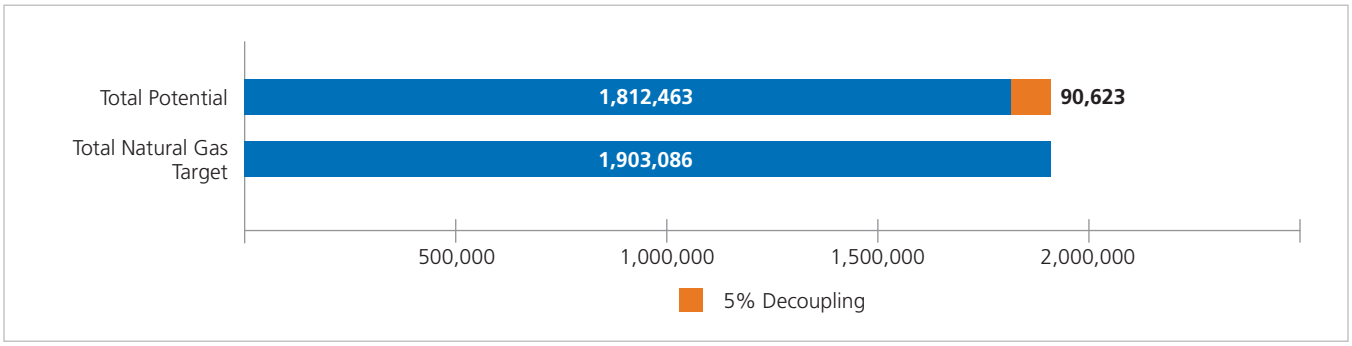
TABLE 1 – BIENNIAL CONSERVATION TARGET – ELECTRIC

2024-25 Biennial Conservation Target (MWh)	
CPA Pro-Rata Share	63,374
EIA Target	**63,374**
Decoupling Threshold	3,169
Total Utility Conservation Goal	**66,543**
Excluded Programs (NEEA)	(15,739)
Utility Specific Conservation Goal	**50,804**
Decoupling Threshold	(3,169)
EIA Penalty Threshold	**47,635**

1) As part of the General Rate Case Settlement Agreement in Docket Nos. UE-140188 and UG-140189, the company agreed, in consideration of receiving a full electric decoupling mechanism, to increase its electric energy conservation achievement by five percent over the conservation target approved by the commission, beginning with the 2016-17 biennial target.

For 2024-25, Avista's natural gas target, as required by RCW 80.28.380, is informed by is informed by the company's 2023 natural gas Conservation Potential Assessment (CPA) and includes an additional five percent conservation adder as a result of agreements within Avista's 2019 Washington General Rate Case (GRC).[2] The CPA found that 1,812,463 therms were available in the biennium, and after adding the five percent decoupling commitment, the total target that represents the overall conservation to be obtained by the company is 1,903,086 therms. Approximately 45 percent of the savings value is estimated to come from residential programs, with the residential high-efficiency furnace being the top measure by a wide margin. Avista has adapted its program accordingly to meet this level of potential in its territory. Figure 1 illustrates the company's 2024-25 natural gas target.

FIGURE 1 – BIENNIAL CONSERVATION TARGET – NATURAL GAS



2) Dockets UE-190334, UG-190335, and UE-190222 (Consolidated).

ENERGY EFFICIENCY REGULATORY FRAMEWORKS

The Energy Independence Act, also known as I-937, mandates that utility companies obtain 15 percent of their electricity from new renewable resources such as solar, wind, and qualifying biomass by 2020 and to undertake all cost-effective energy conservation. In 2007, the Washington Utilities and Transportation Commission (UTC or Commission) adopted WAC 480-109 – Acquisition of Minimum Quantities of Conservation and Renewable Energy – to put RCW 19.285 into force. (References to I-937 and WAC 480-109 are used interchangeably in this *BCP*).

The process of developing the 2024-25 *Biennial Conservation Plan* is consistent with prior Commission orders, specifically its approval, with conditions, of Avista's previous *BCP*s in Docket Nos. UE-100176, UE-111882, UE-132045, UE-152076, UE-171091, UE-190912, and UE-210826. For natural gas, this process is consistent with the requirements provided in RCW 80.28.380 as well as prior UTC approval, with conditions, in Docket No. UG-210827.

For natural gas, the target requirements are provided in RCW 80.28.380 as follows:

> *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.*

The *Biennial Conservation Plan* presented by Avista is in fulfillment of these requirements.

The Clean Energy Transformation Act (CETA), outlines requirements for utilities in Washington to eliminate coal-fired resources from electric power supply by 2025, attain a carbon neutral electric supply by 2030, and achieve 100 percent non-emitting electricity supply by 2045. It also requires utilities to ensure that the benefits of clean energy are equitably distributed to all Washington customers, particularly those who are members of Named Communities and have therefore experienced barriers to equitable participation in company efficiency programs. This *Biennial Conservation Plan*, as well as the electric *Annual Conservation Plan* included as Appendix B, provide details on programs designed to help ensure these benefits are extended to Named Communities, as required by WAC 480-100-610(2) and (3).

THE END-USE EFFICIENCY PLAN

Electric 10-Year Conservation Potential

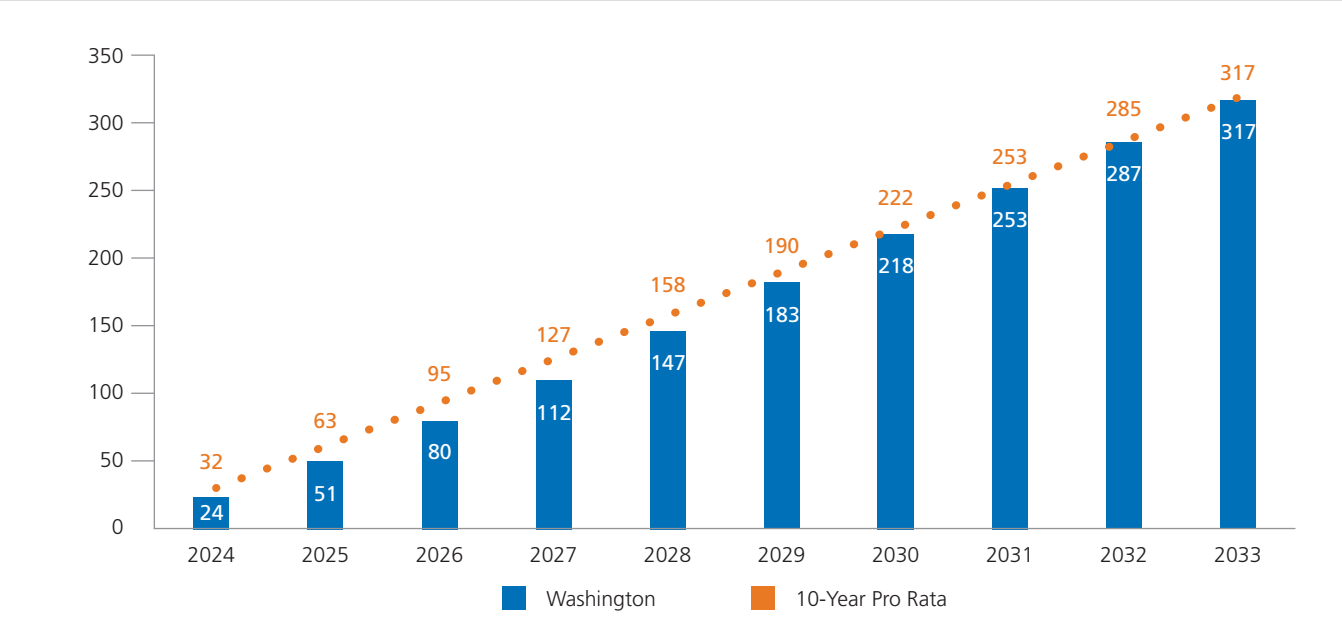
Avista contracted with an independent third-party consultant to assist in developing a CPA as part of its *Integrated Resource Plan* (*IRP*) process. The CPA identifies the 10-year potential for energy efficiency and provides data on resources specific to Avista's service territory for use in the resource selection process and in accordance with the EIA energy efficiency goals. The CPA considers the impacts of existing programs, the influence of known building codes and standards, technology developments and innovations, changes to the economic influences, and energy prices.

The result of this study was the identification of 317,000 MWh of cost-effective conservation over the 10-year period, inclusive of low-income, residential, and commercial/industrial sectors. Figure 2 illustrates the cumulative level of conservation identified in the CPA study and included in Avista's *IRP*.

Energy Efficiency Target Setting for the 2024-25 Biennium

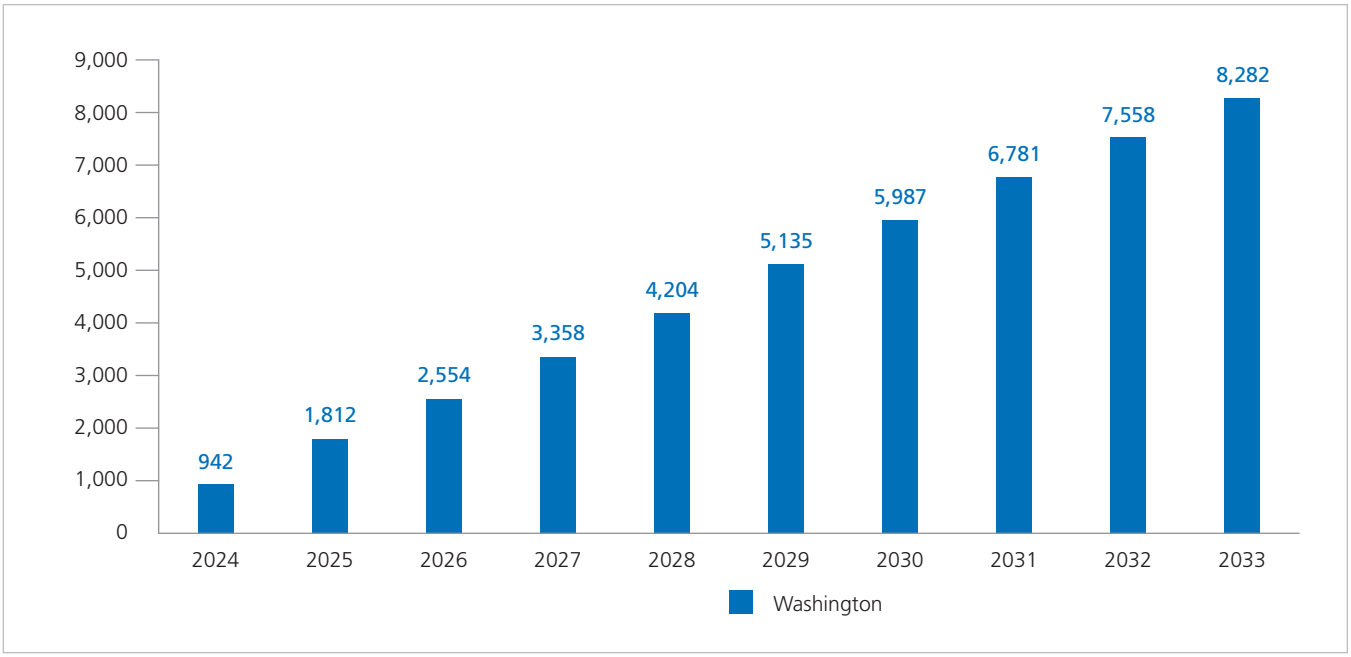
Avista sets its conservation targets consistent with RCW 19.285.040, which requires that the biennial target be no lower than the qualifying utility's pro-rata share of the two-year period of its cost-effective conservation potential for the subsequent 10-year period. The result of this method is a pro-rata conservation amount of 101,566 MWh for the biennium. Avista further adjusts this amount to include an additional five percent commitment related to use of its decoupling mechanism for electric rates. In addition, the target is further adjusted so that NEEA savings are not part of the penalizable goal. The result of these adjustments is a biennial target of 91,054 MWh. Avista has included in its *BCP* an estimated 96,949 MWh of qualifying energy efficiency for the 2023-24 biennium.

FIGURE 2 – 10-YEAR CUMULATIVE CONSERVATION POTENTIAL – ELECTRIC (GWH)



For 2024-2025, Avista set its natural gas target according to the first two years within the 10-year conservation period. The estimated level of incremental conservation is estimated to be 982,550 therms in 2024 and 1,209,884 in 2025. The total for these two periods is 2,192,434 therms and represents the target set for the biennial period before the additional five percent decoupling commitment. Figure 3 illustrates the 10-year natural gas conservation savings potential in dekatherms (Dth).

FIGURE 3 – 10-YEAR CONSERVATION POTENTIAL – NATURAL GAS (DTH)



Overview of 2024-25 Biennial Conservation Plan

This plan describes the efforts of Avista, in consultation with interested external parties, to estimate a 10-year achievable conservation potential, ascertain a biennial acquisition target, identify qualifying measures to be counted toward the acquisition target, determine how claimed acquisition will be measured, and establish an understanding of related procedural issues.

A summary of the estimated conservation acquisition, as well as budgets, is provided in Appendix A. Descriptions of eligible measures and evaluation requirements are also described within the company's 2024 *ACP*s (Appendix B and C). Avista's energy efficiency expectations over the biennium are founded upon the pursuit of achieving all cost-effective conservation measures and operating within the prevailing market and economic conditions.

Conservation Potential and Conservation Targets

The CPA is a 20-year potential study for energy efficiency and an estimate of potential by end-use, specific to Avista's circumstances and service territory, used to inform the company's *IRP* in accordance with I-937 and other agreements. Within the electric and natural gas CPAs, energy efficiency measures applicable to and within Avista's service territory were identified and analyzed both for lost opportunity and retrofit. Since the CPA is inclusive of all energy efficiency regardless of how it is delivered, regional savings that will be acquired through NEEA[3] are included.

Specific to electric and to maintain consistency with the Northwest Power and Planning Council's (NWPPC) Power Plan, savings estimates referring to an adjusted market baseline or equivalent were used to develop targets and will be used to claim savings resulting from program operations during this biennium. Avista will look first to the Regional Technical Forum (RTF) for unit energy savings (UES) for claimed savings, and then to the company's *Technical Reference Manual* (*TRM*) or other resources.

Site-specific program acquisition will be based on verified savings estimates resulting from an independent third-party evaluation. In situations where a new measure or piece of equipment is implemented, UES may be obtained from the RTF, the CPA, or from other sources based on the best science available until an impact evaluation can be completed to provide better estimates.

Energy efficiency measures and equipment analyzed within the CPA were evaluated using the council's cost-effectiveness methodology, which employs the *California Standard Practice Manual* with some exceptions, such as the inclusion of non-energy benefits and the use of gross acquisition. The avoided costs used to evaluate measures and equipment include components for energy, carbon, capacity, risk, and transmission and distribution losses.

Energy Efficiency Portfolio – Program Summary

In addition to supporting outreach, infrastructure, and educational programs, Avista offers a wide range of electric and natural gas efficiency programs. These are comprehensively reviewed on an annual basis as part of the business planning process, which establishes an operational plan for achieving all cost-effective conservation through available or contemplated tools. To do this, the process establishes metrics for the continuous management of the energy efficiency portfolio to include budgets, labor and physical equipment requirements, and general infrastructure needs. Both short- and long-term threats and opportunities are assessed, and these analyses lead to updated strategic plans, all of which are incorporated into the company's *ACP*s.

Avista's 2024 *ACP*s contain the results of these efforts and are incorporated by reference and attached in Appendix B and C. They provide a bottom-up approach to program implementation intended to not only drive participation, but also acquire savings to be counted toward the company's target through existing programs, ramping up of existing programs, and the development of new programs. Avista anticipates 1,149 MWh in savings through new investments in Named Communities, which are in addition to savings derived from conventional programs through the CPA process. Many of these new offerings have historically been excluded from Avista's portfolio because they did not pass cost effectiveness tests.

3) NEEA's net market effects include natural adoption (if NEEA and Avista have a program operating in the market) that occurs within Avista's service territory and will be counted toward the company's target. NEEA will report code changes, savings estimates, and attribution linkages that Avista will use to report savings.

Avista is also providing a two-year planning summary in Appendix A of this *BCP*.

TABLE 2 – ELECTRIC PORTFOLIO SAVINGS AND BUDGET BY SECTOR

Sector	MWh	Budget
Low-Income Programs	1,706	$ 7,940,919
Named Communities Investment Fund	1,149	$ 4,000,000
Residential Programs	8,857	$ 4,232,900
Commercial/Industrial Programs	51,662	$ 24,704,346
Energy-Efficiency Pilot Programs	TBD	$ 2,000,000
EM&V/CPA	–	$ 602,584
NEEA	15,739	$ 3,306,993
Total	**79,183**	**$ 46,686,720**

TABLE 3 – NATURAL GAS PORTFOLIO SAVINGS AND BUDGET BY SECTOR

Sector	Therms	Budget
Low-Income Programs	12,182	$ 1,559,080
Residential Programs	863,464	$ 9,755,290
Commercial/Industrial Programs	1,027,356	$ 5,546,444
NEEA Savings	39,970	$ 812,000
Program Support Expenses Not Allocated to Program Costs	–	$ 1,036,150
Total	**1,975,867**	**$ 18,799,739**

The company's current portfolio of efficiency programs is broadly applicable across all customer segments. The overall portfolio contains individual market segments for commercial/industrial, general residential, and low-income customers, as well as offerings developed for customers in Named Communities. Each portfolio applies a segment/project-specific strategy to deliver savings opportunities to that particular customer population. Efficiency programs are offered either through standard offers or prescriptive programs, as well as through a site-specific or custom program for commercial/industrial measures not otherwise available in a prescriptive program. Certain programs are also offered through direct-install channels as well as through midstream channels, in which Avista partners with distributors to ensure efficient equipment is offered to contractors and customers. Detailed descriptions of individual programs are contained within the 2024 Electric and Natural Gas *ACP*s, which are included as Appendix B and C.

Avista proposes to retain the option to develop and revise programs as necessary over the course of the 2024-25 biennium in order to adaptively manage the programs and its elements. This ongoing portfolio management may include the launching or termination of program offerings or eligible measures without the adjustment of the biennial acquisition target. In addition to the predominately incentive-based efficiency measures offered through Avista programs, the company also funds and is an active participant in the achievement of energy efficiency through regional market transformation. This activity occurs through the NEEA portfolio of market transformation ventures, achieving resource acquisition from throughout the region. Avista also contributes data and expertise, along with other utility partners, in the continuous process of developing sound methodologies for the attribution of the energy savings from these programs to individual utilities and jurisdictions in a manner that is additive to local utility programs.

For the 2024-25 biennium, Avista's total conservation goal of 66,543 MWh has decreased in comparison to the previous biennial target of 107,174. The 2024-2025 target, however, is much closer to Avista's 2020-2021 biennial target of 76,486 MWh. The CPA reflects declining savings associated with lighting, as LEDs continue to transform the lighting market. Residential conservation potential is also down significantly from the last biennium, as is commercial potential. For more specific information about differences between the 2020 CPA and the the 2022 CPA, please see the Clean Energy Transformation Act Target Revision section on page 9 of the electric *ACP*. Avista anticipates that the 2024-2025 biennial target could remain challenging to achieve because of continuing barriers in the market, including supply chain and labor constraints, as well as continuing pressure from high interest rates and customer uncertainty in future market conditions. As such, Avista proposes maintaining higher incentive levels, as well as contractor incentives, for Site-Specific and Commercial/Industrial Lighting Programs. These incentive increases are intended to drive more throughput for these programs.

Avista will work with UTC staff and with its Energy Efficiency Advisory Group (EEAG) to get feedback and input on potential program changes or additions to meet the biennial target. The company regularly consults with its EEAG on matters pertaining to its energy efficiency program to gain advice and guidance on issues as they arise. In addition, Avista has committed to notifying the Commission of any significant unplanned changes in incentives or program eligibility that occur during the year. The same business planning process will be carried out to plan for business activities in 2024 and 2025.

Avista's Clean Energy Implementation Plan

Senate Bill 5116, or the Clean Energy Transformation Act, provides guidance to utilities for expanding their energy efficiency efforts toward customers who have experienced barriers to participation, to ensure equitable benefits of clean energy are realized by all Washington customers. For Avista, this emphasis is consistent with the company's work to ensure all customers can equitably participate in its programs.

The company has a long history of providing equitable energy assistance, as evidenced by its well-established low-income programs for bill assistance, weatherization, and conservation education and outreach. Additionally, the Avista Foundation has historically served vulnerable populations. The customer solutions team at Avista evaluates potential impacts on Named Communities when considering program design, development, and implementation. The team factors key equity components into its program planning, the team factors in key equity components like affordability, access to programs, community investment, environmental impacts, and public health benefits. Through guidance from its EAG and EEAG advisory groups, the company continues to learn and implement best practices for engaging underserved and adversely affected populations.

Avista's commitment to equity for all customers, with particular emphasis for those residing in Named Communities, is demonstrated by the employment of a dedicated CETA program manager who manages the company's Named Communities Investment Fund. The company continues to modify and optimize existing programs, such as Low-Income Weatherization and Multifamily Direct Install, to better serve customers in Named Communities, while continuing to develop new programs and solutions to reduce customers' energy burden.

As part of its CETA endeavors, Avista also developed its Clean Energy Implementation Plan, which provides an overview for moving toward the 2030 and 2045 clean energy requirements of WAC 480-100-610(2) and (3). The CEIP describes identified interim and specific clean energy targets as well as specific actions demonstrating progress toward these goals for the next four years. It also identifies Customer Benefit Indicators (CBIs) that Avista has adopted and will track, to ensure all customers are equitably benefiting from the transition to clean energy. To that end, Avista has implemented or plans to implement the following programs and initiatives in the 2024-2025 biennium. These programs focus on lowering customers' energy burden, while also creating space for community input, advocacy and ownership – respecting that customers best understand the needs of their communities.

1. **Named Communities Investment Fund (NCIF):** As part of Avista's CEIP, the company has established a reserve of funds for 2024-2025 to implement programs and projects that benefit Named Communities. Approximately 40 percent of the total $5 million, or $2 million on an annual basis, is planned to be used for energy efficiency and health and safety efforts exclusively within Named Communities, as well as for programs and project that reduce customers' energy burden, and assistance for organizations that serve members of Named Communities. This is a multifaceted approach that provides opportunities for customers who have historically experienced barriers to participating in such programs, and encourages significant improvements to properties that are in need. There are five program areas within the efficiency portion of the NCIF: weatherization for single-family homes; multifamily building upgrades; health and safety for manufactured and mobile homes; community and small business energy efficiency; and community-identified projects, that are projects identified and prioritized by Avista's Equity Advisory Group (EAG). Avista continues to discuss programs with its EEAG and EAG to increase the number of participating households in Named Communities and is moving forward with all these programs, which are described in more detail in the 2024 electric *Annual Conservation Plan*.

2. **Named Communities-Specific Savings Estimates:** In accordance with Condition 16 of the CEIP, Avista is updating its CEIP energy efficiency target in the 2023 CEIP Biennial Update, which will be filed concurrently with this *Biennial Conservation Plan*. This target update has been based on continued discussion of its residential savings target and programs with the EEAG. Savings projections associated with this funding include programs and projects that have historically been excluded from Avista's efficiency portfolio because they did not meet cost-effectiveness thresholds. For the 2024-2025 biennium, savings projections are based on historic savings and incentive spends for programs that serve low-income communities. Those assumptions are then scaled up based on the NCIF expected spending for the biennium.
3. **Community Benefit Indicators and Related Efficiency Program Tracking:** In accordance with Condition 17 of the CEIP, Avista is tracking the number of residential appliance and equipment rebates provided to customers residing in Named Communities and the number of residential rebates provided to customers residing in rental units and commits to work to expand data availability during this CEIP period. This tracking and reporting is included in the 2023 CEIP Biennial Update, was included in the 2022 *Annual Conservation Report* (*ACR*)[4], and will be included in the 2023 *Annual Conservation Report*. Assessing progress on these, as well as other CBIs, gives Avista's efficiency team important insight into assessing equitable outcomes of its programs so it can then adjust program design accordingly to maximize those outcomes. The 2023 *ACR*, the first to be delivered after the CEIP Biennial Update is filed, will represent the first year in which Avista will report progress on all CBIs that pertain to efficiency programs.
4. **Innovative Approaches to Outreach:** Avista also continues to explore the idea of an Energy Ambassador Program, which could help overcome common challenges to program participation for customers in Named Communities: lack of trust and lack of awareness of offered programs. In many Named Communities, members of these communities often assist and advise other community members in interacting with government, agency, and utility programs on a volunteer basis. An Energy Ambassador Program could formalize this role and offer compensation to "energy ambassadors" who are also members of Named Communities and perform services such as outreach and enrollment in Named Communities.
5. **Supporting Tribal Energy Needs:** In 2022, Avista began to partner with the Spokane Tribe of Indians to design a distribution resiliency solution, also known as a microgrid, for critical emergency services buildings in Wellpinit, WA. This design project, supported through a Clean Energy Grid Modernization grant from the Washington State Department of Commerce Clean Energy Fund, will continue into 2024 and 2025. In 2023, Avista expanded this partnership to look broadly at the Tribe's energy needs by providing energy audits, technical assistance, and grant writing support. Avista has sponsored 11 energy audits for the Spokane Tribe and contributed grant writing and technical support to help the Tribe procure funds to support a deep efficiency overhaul of the Spokane Tribal Administrative building. Avista looks forward to continuing and expanding on this partnership in 2024-2025.

4) See Docket No. UE-210826.

Collaborative Engagement and Public Participation

Avista has included ongoing active involvement of interested parties within its business planning and operational processes since 1992. Extensive engagement, as well as multiple opportunities for public participation, have been incorporated into the development of this *BCP* and associated issues through multiple processes, including Avista's *IRP* Technical Advisory Committee (TAC), EAG and the EEAG.

Avista's EEAG consists of interested regulatory, consumer, and energy industry participants. Avista works collaboratively with its EEAG to seek timely input in its program planning processes, maintaining regular communication with members. In preparation for the 2024-25 *BCP* and pursuant to Docket UE-210826, Order No. 01, issued by the Commission on January 18, 2022, Avista hosted webinars to inform the advisory group of its *BCP* progress and allow time for input and feedback. On June 29, 2023, Avista hosted a webinar to discuss the 2024-2025 draft CPA target, consistent with conditions 3c and 3f of the *BCP* conditions (Attachment A to Order No. 01). On August 28, 2023, Avista hosted a second "summer series" webinar to share draft program details, including budgets, with the EEAG, also in accordance with condition 3f of the order.

Plan details, including specifics around planned NCIF spending, were also shared at Avista's public participation meeting on September 14, 2023. While Avista received minimal input on its clean energy targets, participants were very focused on overall questions of affordability. Avista is taking this feedback into account by developing more programs and services to help customers reduce energy burden.

In addition to the EEAG, Avista also receives input and feedback from its EAG, which is focused on programs and projects for customers in Named Communities. Members of the EAG are charged with making decisions about how to spend the $500,000 earmarked for community-identified investments. They also provide input and feedback on programs and projects under consideration for funding through Avista's Named Communities Investment Fund.

Throughout meetings held between the fourth quarter of 2022 and the first quarter of 2023, members of the EAG developed eight areas of prioritization consideration for energy efficiency projects. The group employed a results-based accountability review and prioritization process. The energy efficiency CETA program manager, who joined Avista's efficiency team in early 2023, is actively working to implement programs and projects that are most aligned with the EAG's prioritization matrix.

The status of target achievement and associated updates will be provided to interested parties in several ways over the 2024-25 compliance period. Both the EEAG and EAG will continue to be invited and encouraged to provide input into the company's development of *ACP*s and the *BCP*s. This planning process plays a critical role in guiding Avista's business operations for the following year. Both documents are distributed to the EEAG at least 30 days prior to filing for input, which may pertain to programs, outreach, measurement and evaluation, labor, and other administration necessary to achieve conservation targets as well as CETA-related goals.

Advisory group members are also invited to participate in the *IRP* process through attending TAC meetings where the CPA is discussed. On August 10,2022, Avista's draft CPA was presented to the TAC, which included the vendor's study objectives, methodology, program characterization, and draft results summary for electric efficiency measures as well as potential demand response measures.

Members of Avista's EEAG, as well as members of the general public, were also invited to participate in multiple meetings associated with the TAC, including a public meeting on Avista's electric and natural gas *Integrated Resource Plans* on March 8, 2023 and the first TAC meeting for the 2025 *IRP* on September 26, 2023.

Avista provides monthly updates and other documents with planning, programmatic, and statistical updates, tariff rider balances, updates on acquisition, and an annual report containing final results for the year. Feedback on the draft report is sought from EEAG members prior to filing the annual report.

Cost-Effectiveness

Avista utilizes the Total Resource Cost (TRC) test, as modified by the council, to evaluate cost-effectiveness of its electric programs. The council-modified calculation of TRC includes quantifiable non-energy benefits and/or impacts, a risk adder, and a 10 percent conservation benefit adder. The council does not include a net-to-gross adjustment. In addition to the council-modified TRC, Avista provides calculations of the Program Administrator Cost test (also called the Utility Cost Test, or UCT), Ratepayer Impact Measure (RIM) test, and Participant Cost Test (PCT). For natural gas programs, the UCT has been the primary test used in assessing the portfolio's cost-effectiveness. Starting in 2024, however, the TRC will become the primary test used to assess portfolio cost-effectiveness, in compliance with BCP Condition 11b (UG-210827).

Overall conservation cost-effectiveness will be evaluated at the portfolio level on an annual basis, separately for both electric and natural gas programs. Costs included in the portfolio level analysis include conservation-related administrative costs. Avista will continue to evaluate measure- and program-level cost tests and will seek the best information available for accurate and applicable savings for electricity measures, looking first to the council's RTF. If Avista uses savings amounts for prescriptive programs that have not been established by the RTF, such estimates will be based on a rigorous impact evaluation that has verified savings levels as assessed by a third-party evaluator, which will be presented to the advisory group for feedback.

Avista's cost-effectiveness methodology has been included within the *ACP*s of Appendix B and C. For the 2024-2025 biennium, Avista estimates that its electric program will achieve a TRC cost-effectiveness ratio of 1.89 and a UCT cost-effectiveness ratio of 1.2. For the natural gas program, Avista estimates cost ratios of 2.00 for TRC and 2.85 for UCT.

New Demand Response Pilot Programs

Avista will implement two separate Time-Of-Use (TOU) Pilot Programs, as well as a Peak Time Rebate (PTR) Pilot Program during the 2024-2025 biennium. Marketing and enrollment will begin in the second quarter of 2024 and will be retained for a two-year pilot period. Avista, with input from interested parties, prepared monitoring and reporting plans to evaluate each pilot during the pilot period. At the conclusion of the pilot period, Avista will engage a third party to evaluate the results of the pilots and will then determine whether to move these pilots into the company's demand response portfolio.

The goal of the pricing pilot is to determine if Avista should offer an opt-in TOU and/or a PTR Program to all residential and/or general service customers as a permanent offering. The pilot will measure the value of time-of-use rates and peak time rebates for residential and general service customers and encompasses the following three objectives:

- **System cost minimization:** Reduce costs to serve customers by improving capacity utilization and encouraging economic conservation and peak sharing.
- **Customer choice:** Offer customers options to help them manage energy bills.
- **Equity and accessibility:** Design and offer rates and programs that consider needs and effects on low-income/vulnerable populations and highly impacted communities.

In addition to these pilot programs, Avista has committed to piloting a load-flexibility program in support of WAC194-24-180, which is a new water heater standard requiring all electric tank style water heaters sold in Washington to be equipped with a CTA-2045 communication interface. This commitment is referred to in Condition #12 of the CEIP. In order to meet this condition, Avista is partnering with NEEA and other utilities to pilot this technology in the region, which will provide economies of scale as well as broader learnings for all project sponsors. More information about this partnership is included in the NEEA section below.

NEEA Biennial Target and Programs

Avista supports regional market transformation efforts by participating in NEEA activities and programs. A portion of the company's I-937 energy savings target is fulfilled by efforts from NEEA programs for accelerating the adoption of energy-efficient equipment, as well as from codes and standards programs. For the 2024-2045 biennium, NEEA forecasts that Avista will receive 15,739 MWh toward its energy savings target, which includes 10,056 MWh from program measures and 6,696 MWh from codes and standards.

Avista participates in several of the programs offered by NEEA by incorporating those initiatives into its local offerings. Residential program measures such as ductless heat pumps, heat pump water heaters, lighting, and other programs have been made available to customers through buy-down, rebate, and direct-installation programs, as well as other channels. Avista also participates in NEEA offerings through regional efforts by continuing to fund NEEA initiatives through its funding contract. Avista will continue to evaluate the need for incorporating NEEA initiatives into the company's local program portfolio. Table 4 identifies the NEEA programs that Avista participates in from a local and regional level.

TABLE 4 – AVISTA PARTICIPATION IN NEEA PROGRAMS AND INITIATIVES

Sector	Program	Method of Participation
Residential	Ductless Heat Pumps	Locally and through regional efforts
	Extended Motor Products	Locally and through regional efforts
	Heat Pump Water Heaters	Locally and through regional efforts
	Manufactured Homes	Locally and through regional efforts
	Refrigerators/Freezers	Locally and through regional efforts
	Clothes Washers	Locally and through regional efforts
	Clothes Dryers	Locally and through regional efforts
	Room Air Conditioners	Through Avista's allocated share of regional NEEA funding
	Televisions	Through Avista's allocated share of regional NEEA funding
Commercial	Extended Motor Products	Locally and through regional efforts
	High Performance HVAC	To be determined
	Luminaire Level Lighting Controls	Locally and through regional efforts

2024-25 biennial savings derived from NEEA programs are expected to be 15,739,099 kWh, which breaks down across each year as follows:

TABLE 5 – NEEA PROGRAMS EXPECTED KWH SAVINGS, 2024

NEEA Sectors	aMW @ Site	MWh @ Site	kWh @ Site
Residential	0.66	5,813	5,813,209
Commercial	0.13	1,133	1,132,726
Industrial	0.00	0	0
Total	**0.79**	**6,946**	**6,945,935**

TABLE 6 – NEEA PROGRAMS EXPECTED KWH SAVINGS, 2025

NEEA Sectors	aMW @ Site	MWh @ Site	kWh @ Site
Residential	0.81	7,061	7,061,274
Commercial	0.20	1,732	1,731,891
Industrial	0.00	0	0
Total	**1.00**	**8,793**	**8,793,165**

For natural gas programs, NEEA forecasts that Avista will receive a total of 39,970 therms during the 2024-2025 biennium. This forecast is based on an atypically large savings estimate range of 3,300 to 68,000 therms for 2024. This large range is due primarily to uncertainty regarding various impacts of the 2021 Washington State Energy Code, which is anticipated to be in effect beginning sometime in 2024. The timing of this code implementation is one variability factor contributing to a lack of precision for the savings estimate; once an implementation date for the 2021 Washington State Energy Code has been identified, NEEA will be able to provide a more precise estimate. Separate from the uncertainty around timing is additional unpredictability surrounding the exact commercial measures that will be included in the 2021 Washington State Energy Code. This particular precariousness is the largest contributing factor to this wide range in savings estimates, because the code includes fuel normalization credits that favor the use of electric fuels over natural gas. Natural gas space and water heating products currently available in the marketplace do not meet the efficiency requirements of the new code, and products that do meet efficiency requirements are not yet commercially viable. In response, NEEA is investigating opportunities with residential natural gas heat pumps and dual-fuel systems that meet new code standards. These could become new programs in NEEA's portfolio as soon as 2026. NEEA will provide a more precise update as program targets are established in 2024, as Cycle 7 funding plans come further into focus. In the meantime, Avista relied on the midpoint of each annual estimate range to arrive at projected NEEA savings for the 2024-2025 biennium. Details around the midpoint of the range are as follows:

TABLE 7 – NEEA MIDPOINT THERM SAVINGS ESTIMATES

	2024	2025	2024-2025 (f)
Residential New Construction	26,487	0	26,487
Residential Products (Standards)	TBD	TBD	TBD
Commercial New Construction	6,571	0	6,571
Commercial Products (Standards)	3,288	3,288	6,575
Efficient Rooftop Units	87	250	337
Efficient Natural Gas Water Heaters	TBD	TBD	TBD
High Performance Windows	TBD	TBD	TBD
Total Savings	**36,432**	**3,538**	**39,970**

End-Use Load Flex Kickstart Projects

In addition to NEEA's portfolio of core market transformation programs and standards, and in response to a new permanent standard for grid-enabled water heaters (WAC 194-24-180), which went into effect on January 1 of 2023, NEEA has also proposed a suite of End-Use Load Flex Kickstart Projects. The suite of projects includes:

1. an end-use load flexibility workgroup and portfolio development effort;
2. an effort to influence equipment manufacturers to adopt open-source Universal Control Module smart controls in residential water heating and space conditioning equipment;
3. research and documentation projects to prioritize products and projects for future investment in end-use flexible load market transformation programs.

Avista plans to collect EEAG feedback on the draft pilot programs during the fourth quarter of 2023, and intends to participate in all three projects, which are anticipated to start in 2024.

2024-2025 Projected Funding

This funding estimate for NEEA activities in the 2024-2025 biennium is based on Avista's service territory allocation of 8.49% for natural gas programs and 3.95% for electric programs in 2024. Service territory allocation for 2025 is yet to be determined. NEEA is in the planning stages of their funding Cycle 7, which is anticipated to go into effect in late 2024.

TABLE 8 – NEEA BUDGET

	2024	2025
Electric	$ 1,358,000	$ 1,727,493
End-Use Load Flex Kickstart	$ 110,750	$ 110,750
Natural Gas	$ 406,000	$ 575,190
Total	**$ 1,874,750**	**$ 2,413,433**
Biennium Total		**$ 4,288,183**

UTILITY EVALUATION, MEASUREMENT, AND VERIFICATION

Evaluation, Measurement, and Verification (EM&V) is intended to represent the comprehensive analyses and assessments necessary to supply salient information to interested parties that adequately determines the energy efficiency acquisition of Avista's energy efficiency programs as well as providing real-time information for program management. EM&V, as described below and taken as a whole, is analogous with other industry standard terms such as *portfolio evaluation* or *program evaluation*.

Avista is committed to using independent third-party EM&V consultants and evaluators for the various analyses required to substantiate the I-937 portfolio over the biennium. The role of EM&V for validation of the conservation acquisition is critical to the reporting phase of the *BCP*, and the processes and protocols for conservation evaluation will continue to be refined. The existing EM&V documents, including the EM&V framework and annual EM&V plans, will be reviewed and updated as necessary to improve their benefit to the energy efficiency programs and Avista's customers.

The RTF, as an advisory committee to the council, is a valued source of information relating to the measurement of energy savings – but it's not the only source. The RTF provides UES references suitable for consideration in Avista's acquisition planning relative to each biennium. In cases where Avista uses RTF UES values and delivers programs in a manner consistent with the RTF's defined delivery mechanism, the evaluation efforts are limited to verification of participation that would be applied to the associated UES. RTF assumptions may be updated with Avista-specific assumptions (e.g., actual vs. forecasted purchases) to come up with an RTF-consistent UES that is more appropriate for Avista. Furthermore, since the RTF evaluation process incorporates a market-adjusted baseline, applications of RTF UES values are not subject to net-to-gross adjustment. Avista may elect to evaluate, refer to, and use RTF or other sources of energy efficiency metrics with equal merit. Information from the RTF, the council's power plan, NEEA, and other data sources are used in Avista's TRM to compile, catalog, and track electrical energy efficiency measures. Key criteria available from the RTF include measure costs, savings, non-energy impacts (NEIs), estimated useful lifetimes, and measure discontinued thresholds. Program-specific savings amounts, whether established by the RTF or other means, are subject to rigorous and frequent impact evaluation that serves to verify or adjust appropriate energy savings levels.

For the 2024-25 biennium, Avista will spend a sufficient amount of its conservation budget on evaluation, measurement, and verification, including a reasonable proportion on independent, third-party EM&V engagement. The company will also continue to provide opportunities for its advisory group to review the EM&V protocols to allow for continuous collaboration and improvement of these processes.

COMPLIANCE AND OTHER KEY ISSUES

In this *BCP*, Avista has stated its targets and described how these targets have been developed consistent with RCW 19.285 and WAC 480-109. In Appendix B and C, the company provides its *ACP*s, which further elaborate on the programs designed to achieve these targets, as well as how these savings will be defined and presented. Reporting standards and participation from non-company parties involvement have also been described.

As stated above, cost-effectiveness and other prudence-related issues pertaining to cost recovery will be based on the company's 2024-25 *Biennial Conservation Report* (*BCR*). Avista will file supporting evidence to demonstrate the prudency of its electric energy efficiency expenditures for its 2024 and 2025 program years within the *BCR*. Avista maintains full responsibility to manage its energy efficiency portfolio to meet the targets included herein and will inform the Commission in a timely manner if there is an expectation that the I-937 target will not be achieved.

Regarding CETA compliance, Avista will begin reporting on progress related to CBIs in its 2024 *Annual Conservation Report*, which will be filed by June 1, 2024.

CONCLUSION AND CONTACT INFORMATION

Avista respectfully requests that the Commission approve its 10-year conservation potential and the biennial conservation targets set forth in this document. The company's proposed energy efficiency acquisition for the 2024-25 biennium is based on a CPA completed by a third-party consultant, applying a methodology consistent with the council's power plan.

Avista's energy efficiency programs are funded through tariff rider Schedules 91 for electric service and Schedule 191 for natural gas. Additionally, general program design information, including details about eligibility requirements and incentives, are maintained within Avista's Schedules 90 for electric service and Schedule 190 for natural gas. For the 2024-25 compliance period, no changes were requested to the company's Schedules 91 and 191[5]. The company and its EEAG will continue to monitor these balances and propose any modifications to the Commission as necessary, pursuant to WAC 480-109-130(2). For Schedules 90 and 190, minor changes to the language of these schedules are being proposed concurrently with the filing of this *BCP*. Draft language updates to Schedules 90 and 190 are included as Appendix H and I.

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5) See Docket No. UE-230302

APPENDICES AND SUPPLEMENTS

APPENDIX A – WASHINGTON TWO-YEAR PLANNING SUMMARY

Programs	MWh Savings	Estimated Electric Budget	Therm Savings	Estimated Natural Gas Budget	Total Budget
Low-Income Programs					
Low-Income Program	1,706	$ 5,068,644	12,181	$ 881,356	$ 5,950,000
Deferred Maintenance	-	$ 700,000	-	$ 300,000	$ 1,000,000
Named Communities Investment Fund	1,149	$ 4,000,000	-	$ 0	$ 4,000,000
Low-Income Programs Total	**2,855**	**$ 9,768,644**	**12,182**	**$ 1,181,356**	**$ 10,950,000**
Residential Programs					
Prescriptive	2,321	$ 911,176	289,950	$ 3,329,770	$ 4,240,946
MultiFamily (New Offerings)	507	$ 405,391	33,182	$ 132,729	$ 538,120
Midstream	528	$ 211,247	489,283	$ 2,739,982	$ 2,951,229
On-Bill Repayment	515	$ 412,000	17,575	$ 412,000	$ 824,000
Always-On	3,752	$ 0	-	$ 0	$ 0
Home Energy Audit	1,234	$ 987,571	33,472	$ 214,222	$ 1,201,793
Residential Total	**8,857**	**$ 2,927,385**	**863,464**	**$ 6,828,704**	**$ 9,756,088**
Commercial/Industrial Programs					
Interior Prescriptive Lighting	13,147	$ 3,301,095	-	$ 0	$ 3,301,095
Exterior Prescriptive Lighting	5,275	$ 1,400,420	-	$ 0	$ 1,400,420
Direct Install Lighting	12,456	$ 6,228,000	-	$ 0	$ 6,228,000
Pay for Performance	11	$ 8,490	247,268	$ 386,358	$ 394,847
Site-Specific	15,173	$ 4,076,800	259,792	$ 926,927	$ 5,003,727
Contractor Incentive Program	0	$ 151,733	-	$ 0	$ 151,733
Clean Buildings Accelerator	1,000	$ 800,000	28,130	$ 0	$ 800,000
Prescriptive Shell	397	$ 368,213	75,620	$ 233,977	$ 602,191
Green Motors	17	$ 3,063	-	$ 0	$ 3,063
Variable Frequency Drives	24	$ 8,640	-	$ 0	$ 8,640
Compressed Air	107	$ 25,728	-	$ 0	$ 25,728
Grocer	1	$ 4,000	-	$ 0	$ 4,000
Appliances	116	$ 30,629	-	$ 0	$ 30,629
Midstream	1,079	$ 844,987	416,545	$ 2,332,649	$ 3,177,636
Active Energy Management	2,859	$ 0	-	$ 0	$ 0
Commercial/Industrial Total	**51,662**	**$ 17,251,797**	**1,027,356**	**$ 3,879,911**	**$ 21,131,708**

Programs	MWh Savings	Estimated Electric Budget	Therm Savings	Estimated Natural Gas Budget	Total Budget
Regional Efficiency Programs					
NEEA Electric (WA Portion)	15,739	$ 3,306,993	0	$ 0	$ 3,306,993
NEEA Natural Gas (WA Portion)	0	$ 0	39,970	$ 812,000	$ 812,000
Regional Efficiency Programs Total	**15,739**	**$ 3,306,993**	**39,970**	**$ 812,000**	**$ 4,118,993**
Portfolio Support					
Third-Party Non-Incentive Payments	-	$ 3,731,990	-	$ 4,248,434	$ 7,980,424
Labor	-	$ 4,591,419	-	$ 493,498	$ 5,084,917
EM&V	-	$ 548,088	-	$ 769,564	$ 1,317,652
Memberships	-	$ 102,180	-	$ 49,144	$ 151,324
Outreach	-	$ 272,482	-	$ 24,384	$ 296,866
Marketing	-	$ 1,170,490	-	$ 97,538	$ 1,268,028
Training/Travel	-	$ 13,624	-	$ 1,220	$ 14,844
Regulatory	-	$ 6,812	-	$ 1,220	$ 8,032
Studies and Research	-	$ 136,242	-	$ 14,000	$ 150,242
Software	-	$ 313,354	-	$ 28,042	$ 341,396
Conservation Potential Assessment	-	$ 54,496	-	$ 310,146	$ 364,642
General Implementation	-	$ 490,724	-	$ 60,578	$ 551,302
Pilot Programs	-	$ 2,000,000	-	$ 0	$ 2,000,000
Portfolio Support Total	**-**	**$ 13,431,901**	**-**	**$ 6,097,768**	**$ 19,529,669**
Totals Included in Cost Effectiveness	63,374	$ 38,481,214	1,903,003	$ 16,908,029	$ 55,389,243
Portfolio Totals	**79,113**	**$ 46,686,720**	**1,942,973**	**$ 18,799,739**	**$ 65,486,459**
Estimated EM&V Percentages		1.42%		4.55%	

APPENDIX B – 2024 ELECTRIC ENERGY EFFICIENCY ACP

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 Avista's control and may have a significant effect on the company's operations, results of operations, financial condition, or cash flows, which could cause actual results to differ materially from those anticipated in its statements.

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

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Avista Utilities' *Annual Conservation Plan* (*ACP*) is provided consistent with RCW 19.285.040 and WAC 480-109.120(2), as well as requirements outlined in Commission Order No. 01 in Docket No. UE-210826, approving Avista's *2022-23 Biennial Conservation Plan* (*BCP*) with conditions.

As Avista begins the first year of its 2024-2025 biennium, Avista continues to deliver reliable energy service along with efficiency choices that meet customers' changing energy needs. 2024 will mark the third year of implementing the Clean Energy Transformation Act (CETA). The energy efficiency team will build on the success of CETA programs and initiatives piloted and executed in 2022 and 2023, while continuing to develop solutions that extend the benefits of clean energy to Named Communities (highly impacted and vulnerable populations) within Avista's service territory, ensuring equitable benefits for all, but especially for members of Named Communities.

While the 2024-2025 biennial conservation target is significantly lower than the 2022-2023 biennial target, barriers to customer participation in Avista's efficiency programs remain a challenge. Persistent supply chain constraints, labor shortages, and rising interest rates all continue to be significant obstacles for customers. Given these conditions, Avista will continue to take an aggressive approach to energy savings acquisition in 2024, optimizing incentives for customers while taking care to maintain cost-effectiveness and preserve affordability for customers, and also implementing new outreach efforts to engage members of Named Communities in culturally appropriate ways.

Avista's energy efficiency portfolio continues to be an effective tool for lowering customers' overall energy usage and energy burden. Planned activities for 2024 will focus on strengthening existing programs while continuing to develop new pathways for participation in efficiency programs.

The 2024 *ACP* represents program efforts made by the company to achieve its expected eligible acquisition savings for the first year of the 2024-25 biennium, while also providing details on programs and initiatives. For 2024, Avista has identified estimated conservation savings of 31,717 megawatt-hours (MWh) from local efforts as well as 6,946 MWh from regionally acquired savings through the Northwest Energy Efficiency Alliance (NEEA),[1] combining for a total estimate of 38,663 MWh.

1) To achieve consistency with other Washington investor-owned utilities, Avista has included "Program Measures" and savings from "Codes & Standards Measures."

Table 1 provides the estimated conservation achievement (in MWh) and anticipated expenses for each market sector in Avista's program portfolio, as well as estimated expenses for Evaluation, Measurement, and Verification (EM&V). The total expense for 2024 is estimated to be $23,508,613. This amount includes an estimated $2 million[2] for programs that serve Named Communities, as well as $1 million for new pilot programs and $1.47 million to fund NEEA regional market transformation efforts, in addition to the nearly $3.6 million set aside for low-income programs. The proportion of total utility expenditures returned to customers in the form of direct benefit is 72 percent.

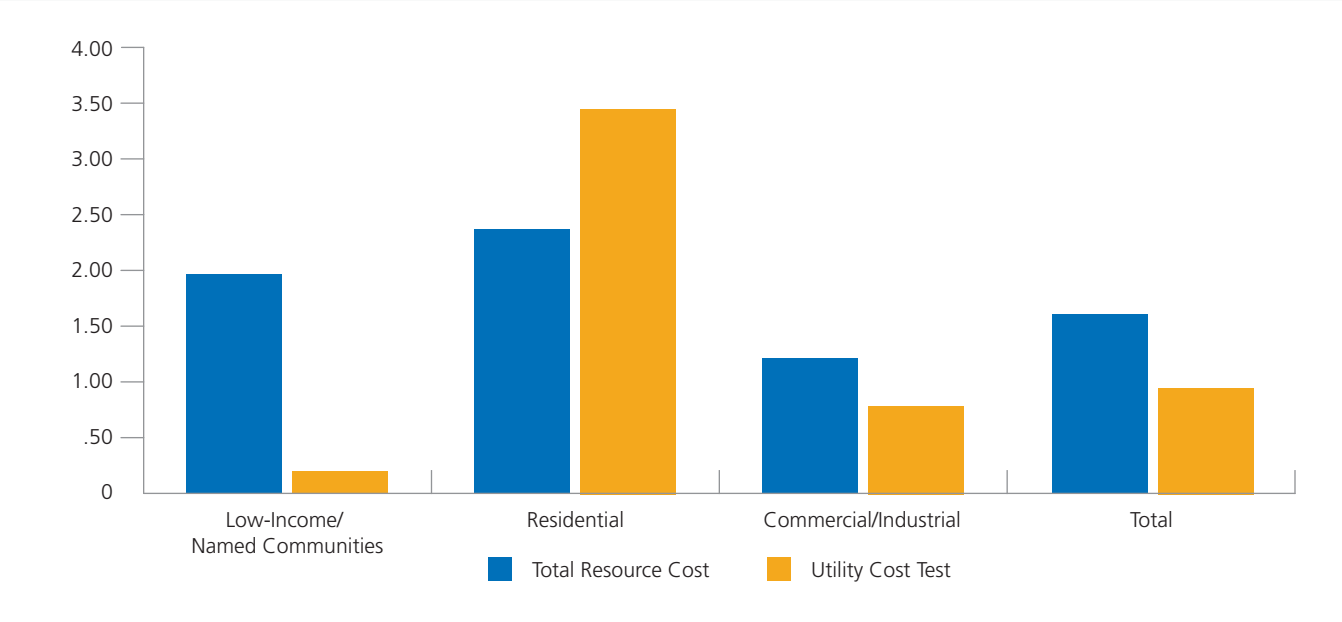
TABLE 1 – PORTFOLIO SAVINGS AND BUDGET BY SECTOR

	MWh	Budget
Low-Income Programs	853	$ 4,320,460
Named Communities	574	$ 2,000,000
Residential Programs	4,459	$ 2,116,450
Commercial/Industrial Programs	25,831	$ 12,352,173
Energy-Efficiency Pilot Programs	TBD	$ 1,000,000
EM&V / CPA	–	$ 250,780
NEEA	6,946	$ 1,468,750
Total	**38,663**	**$ 23,508,613**

2) Includes $2 million of Named Community investment funds and any potential administrative allocations.

Cost-effectiveness is a key indicator of Avista's energy efficiency portfolio performance. While Avista pursues all cost-effective measures, the company also retains flexibility in its program design so that meaningful energy efficiency can be attained by all customers. Avista's energy efficiency program portfolio includes a segment of programs that are tailored to serve the unique energy needs of income-qualified customers, as well as customers who are members of Named Communities. Figure 1 illustrates a summary of the portfolio cost-effectiveness for each sector and in total.

FIGURE 1 – PORTFOLIO COST-EFFECTIVENESS BY SECTOR



	Low-Income/ Named Communities	Residential	Commercial/ Industrial	Total
Total Resource Cost	1.98	2.40	1.22	1.62
Utility Cost Test	0.18	3.50	0.80	0.95

Introduction

The 2024 *ACP* outlines Avista's program offerings and provides details on verifying and reporting savings. The company's plan is based on two key principles: the first is to pursue all cost-effective kWh savings by offering financial incentives for implementing energy-saving measures; the second is to use the most effective mechanism to maximize delivery of energy efficiency services to customers. These mechanisms are varied and include prescriptive programs or standard offers such as high-efficiency appliance rebates; site-specific or customized analyses at customer premises; midstream incentives, which go directly to HVAC and hot water heating equipment distributors; regional market transformation efforts in partnership with other utilities; low-income weatherization services through local Community Action Agencies (CAAs); new programs to serve energy needs for members of Named Communities; a multi-channel communication effort; and support for cost-effective appliance standards and building codes.

This *ACP* represents a planning process that relies on meaningful and extensive engagement from Avista's Energy Efficiency Advisory Group (EEAG) as well as its Equity Advisory Group (EAG). Avista consults with its advisory groups multiple times over the course of a year – seeking input and guidance on best practices for new programs, as well as advice on possible changes to existing programs and services – to adaptively manage its program portfolio in a nimble way that reflects changing market conditions. Public participation meetings also provide an avenue for obtaining customer and interested party inputs and guidance for program development and refinement.

The business planning process for the Avista program portfolio builds on the electric *Integrated Resource Plan* (*IRP*) and Conservation Potential Assessment (CPA) processes. These are overall resource planning processes completed every two years that integrate energy efficiency and generation resources into a preferred resource scenario. The purpose of the business plan is to create an operational strategy for reaching the aggregate targets identified within the *IRP* in a manner that is cost-effective – and that considers all aspects of customer value.

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 91 electric tariff. The tariff rider surcharges are periodically adjusted with the objective of moving these balances toward zero.

Washington I-937 Acquisition Target for the 2024-25 Biennial Period

The Energy Independence Act (EIA) requires utilities to establish a minimum electric acquisition standard for conservation resources for each designated biennium. For 2024-25, Avista's EIA target is 63,374 MWh, which represents the overall conservation to be obtained by the company before the additional five percent decoupling threshold[3] of 3,169 MWh. The total conservation goal is 66,543 MWh. The Avista-specific conservation goal, which removes 15,739 MWh in savings derived from NEEA, is 50,804 MWh. To arrive at the EIA penalty threshold of 47,635 MWh, the five percent decoupling penalty is removed from the Avista-specific conservation goal. Energy savings acquisitions attributed to Avista through regional market transformation have been included in the acquisition target; they have been excluded, however, from the EIA penalty threshold.

TABLE 2 – BIENNIAL CONSERVATION TARGET

2024-25 Biennial Conservation Target (MWh)	
CPA Pro-Rata Share	63,374
EIA Target	**63,374**
Decoupling Threshold	3,169
Total Utility Conservation Goal	**66,543**
Excluded Programs (NEEA)	(15,739)
Utility Specific Conservation Goal	**50,804**
Decoupling Threshold	(3,169)
EIA Penalty Threshold	**47,635**

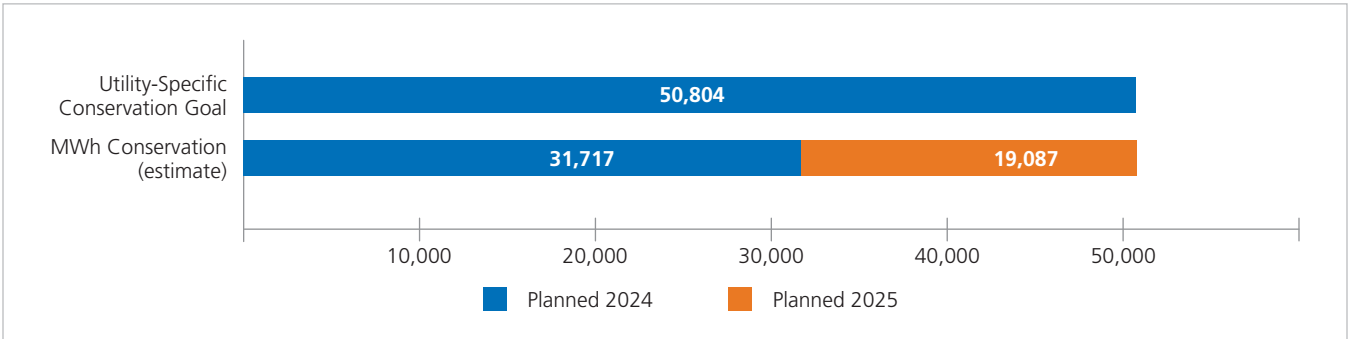
Since the EIA target was established based on Northwest Power and Conservation Council (NWPCC) methodologies and the council's Regional Technical Forum (RTF) Unit Energy Savings (UES) values, those same methodologies and savings are employed, to the extent possible, in measuring the savings eligible to achieve that target. The planning effort has, with a few isolated exceptions, adopted the same approach in order to generate the best prediction of how 2024 portfolio performance will be retrospectively measured. The use of RTF UES values also assists in the management of the company's EM&V expense by reducing the expenses associated with impact evaluation. The relationship between the regional utilities and the RTF is, however, a symbiotic one, and any impact evaluations performed on a current RTF measure will be shared with the RTF to help improve the quality of the regional deemed UES.

3) As part of the General Rate Case Settlement Agreement in Docket Nos. UE-140188 and UG-140189, the company agreed, in consideration of receiving a full electric decoupling mechanism, to increase its electric energy conservation achievement by five percent over the conservation target approved by the Commission, beginning with the 2016-17 biennial target..

As Avista enters the first year of its biennial period, several challenges related to achieving energy efficiency conservation are expected to continue. To address these market barriers, Avista is focusing on adaptive management of its program design to better engage with customers, address hard to reach markets, and focus on areas where customers have not engaged. Figure 2 estimates the biennial savings derived from program years 2024 and 2025.

With market challenges slowing participation, Avista will need to invest in ways to better engage with customers to ensure that it meets its utility-specific conservation goal of 50,804 MWh.

FIGURE 2 – BIENNIAL ELECTRIC CONSERVATION ESTIMATE



The level of conservation estimated in 2024 will impact the current balances within the energy efficiency tariff rider (Schedule 91). This conservation level is expected to result in an underfunded balance by the end of 2024. Table 3 below shows the estimated balance at the beginning of the year, estimated funding from customer collections, and annual expenditures by the end of the year. Based on these estimates, Avista anticipates that there will be an underfunded balance of $4.87 million if the company does not modify its tariff rider rate in 2024.

TABLE 3 – 2024 TARIFF RIDER BALANCE ESTIMATES

Estimated Electric Energy Efficiency Balances		(Underfunded) / Overfunded
Estimated Balance at January 1, 2024	$	1,041,539
Tariff Rider Funding	$	17,600,790
Annual Expenditures	$	23,508,613
Estimated Balance at December 31, 2024	$	(4,866,284)

The 2024 budget is estimated to be approximately $6.1 million dollars lower than the plan for 2023. The main driver for this decrease in estimated spending is a decrease in forecasted participation required to meet Avista's biennial goal. However, increased incentive values, new program design, and other factors also contribute to the increase in specific program budgets from 2023 to 2024. Budgets for Low-Income Programs, Named Communities Programs, and the Midstream Program are increasing in 2024. Low-Income Programs in 2024 will include an additional $1 million to help customers with deferred maintenance needs, per WUTC orders UE-220553, UG-220054, and UE-210854 (consolidated). The administrative budget for Washington State Equity and Justice Programs (Low-Income and Named Communities) will increase due to Avista's addition of a full-time CETA program manager to the efficiency team. NEEA's budget will also increase to accommodate Avista's participation in NEEA's suite of End-Use Load Flex Kickstart projects.

TABLE 4 – 2023 AND 2024 ANNUAL CONSERVATION PLANS, 2023 VS 2024 EXPECTED INCENTIVE SPEND

	2023	2024
Low-Income Programs	$ 2,191,766	$ 2,534,322
Named Communities	$ 2,000,000	$ 2,000,000
Deferred Maintenance Program	$ 0	$ 700,000
Low-Income and Named Communities Admin	$ 957,530	$ 1,547,676
Residential Programs	$ 1,618,250	$ 1,155,374
Multifamily Weatherization	$ 309,339	$ 202,695
Multifamily Direct Install	$ 633,595	$ 0
Always-On	$ 1,687,500	$ 0
Residential Midstream	$ 157,812	$ 105,623
Commercial/Industrial Programs	$ 12,417,714	$ 8,203,405
Commercial Midstream	$ 110,381	$ 422,493
Energy-Efficiency Pilot Programs	$ 1,000,000	$ 1,000,000
Third Party Costs	$ 1,144,056	$ 860,602
General Admin, Labor, and Program Support	$ 3,716,746	$ 3,056,893
CPA and EM&V Engagements	$ 278,645	$ 250,780
Northwest Energy Efficiency Alliance	$ 1,358,000	$ 1,468,750
Total	**$ 29,581,334**	**$ 23,508,613**

CLEAN ENERGY TRANSFORMATION ACT

Senate Bill (SB) 5116, otherwise known as CETA, was approved by the Washington State Legislature in 2019. Avista was the first investor-owned utility in the state to file its Clean Energy Implementation Plan (CEIP) in October of 2021. The plan was approved on June 16, 2022[1].

Avista continues to engage its Equity and Energy Efficiency Advisory Groups to provide input and guidance for Avista's CETA-related energy efficiency activities. These groups advise Avista on best and emerging practices for program outreach and help prioritize funding for community-based projects, as the company continues to ensure that energy and non-energy benefits of clean energy are equitably extended to all customers, but especially to customers who are members of Named Communities.

In late 2022, Avista hired a dedicated CETA program manager, whose role is to develop and implement programs and offerings for Avista customers who are members of Named Communities. Avista also leverages its CETA database, which includes an estimated energy burden for all customers who are members of Named Communities in the company's service territory, to help inform program design and outreach plans. Details about programs for Named Communities that Avista is designing and implementing can be found on page 38.

Clean Energy Transformation Act Target Revision

The CEIP outlines Avista's path toward its goal of making the transition to clean energy in compliance with the Clean Energy Transformation Act. CETA outlines requirements for utilities in Washington to eliminate coal-fired resources from electric power supply by 2025, attain a carbon neutral electric supply by 2030, and achieve 100 percent non-emitting electricity supply by 2045. Along with these goals, specific targets are to be set for energy efficiency programs.

Avista's specific target is informed by its *IRP* and its CPA, with an emphasis on equity considerations. For Avista's 2022-2025 CEIP, Avista leveraged its 2020 CPA to extend pro-rata share of savings over the 10 year period, then applied the pro-rata share to a four-year span, consistent with the methodology used for EIA target setting. The 2022 CPA shows a significant decline in expected conservation potential as compared to the 2020 CPA. Avista has therefore proposed to revise the CEIP conservation targets for 2024 and 2025 to align with the 2024-2025 BCP target proposed in this plan.

TABLE 5 – CLEAN ENERGY IMPLEMENTATION PLAN SPECIFIC TARGET REVISION

Year	2022 CPA Derived Target in MWh	2020 CPA Derived Target in MWh	Variance
2024	33,271.5	53,322	(20,051)
2025	33,271.5	53,322	(20,051)
Total	**66,543**	**106,644**	**(40,102)**

1) This program runs from October 2023 to December 2024. Program spend in calendar year 2023 will be reported in 2023 review. Remaining funds to be spent in 2024.

Avista leverages a third party agency to conduct a 10-year CPA every two years, pursuant to RCW 19.285.040(1) and WAC 480-109-120(1). This projection must consider all conservation resources that are cost-effective and available.

For each CPA cycle, previous assumptions about codes and standards are dropped, and the analysis is built around the best available projection of expected savings based on anticipated changes to codes and standards, as well as the most current information available at the time the CPA is conducted. During the 2020 CPA process, for example, the EISA lighting standard backstop was not in effect, so lighting savings were projected to be much higher in the 2020 CPA. By 2022, the EISA lighting standard backstop was back in effect, resulting in lower projected lighting savings in the 2022 CPA. The biggest factor, however, contributing to the difference between the potential derived from the 2020 CPA and the 2022 CPA was the implementation of the 2021 Washington State Energy Code, which the 2022 CPA process expected to be effective starting in 2023. While the CPA assumed a 30 percent increase in residential electric load over the 10-year conservation period, most of this load is expected to be new construction and is therefore subject to the energy code that is in effect at the time of construction. A decrease of 7 percent for the commercial/industrial load was also projected. These two factors, combined with a significant reduction in lighting savings from the EISA lighting standard backstop, resulted in a significantly lower target in the 2022 CPA than in the 2020 CPA.

The proposed revised CEIP biennial target of 66,543 MWh includes Avista's decoupling commitment of an additional five percent beyond the pro-rata savings projections. It also includes projected savings of 1,149 MWh from programs that invest in and serve Named Communities. These savings are in addition to savings derived from conventional programs through the CPA process. Avista has developed Customer Benefit Indicators (CBIs) and associated metrics as a measurement of impact for the communities it serves. Developed with significant input from Avista's EAG, these metrics are not based solely on energy conservation but also on ensuring that all customers, especially those in Named Communities, equitably benefit from the transition to clean energy. Avista's 2023 *Annual Conservation Report* (*ACR*) to be filed by June 1, 2024, will be the first *ACR* to report on all CBIs that are relevant to Avista's energy efficiency specific actions. Avista will continue to track progress on CBIs for CETA achievements in 2024 and 2025.

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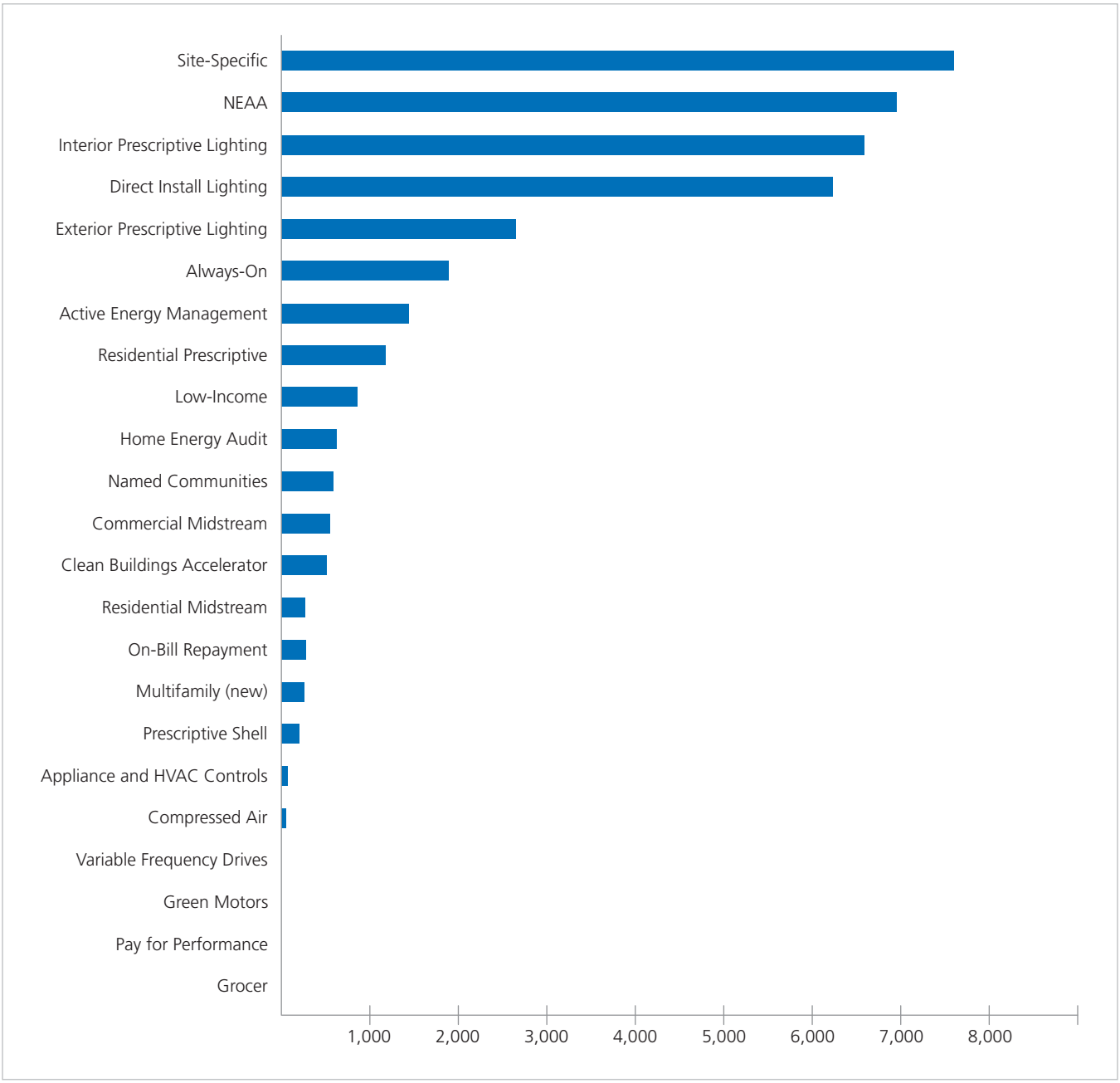
POPCORN
Junior Mints
Large $2.75

ENERGY EFFICIENCY PORTFOLIO OVERVIEW

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

For 2024, the company anticipates approximately 38,663 MWh of I-937 qualified savings from its program offerings. These savings are derived from utility-specific conservation, as well as regional efforts from NEEA. Figure 3 illustrates the major categories from which those savings are achieved.

FIGURE 3 – SAVINGS FROM ENERGY EFFICIENCY PROGRAMS (MWH)



Overall Energy Efficiency Budget Projections

A compilation of the total energy efficiency budget is assembled at the completion of the planning process. The placement of the budget compilation at the close of the process is consistent with Avista's commitment to achieve 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 timely enough to maintain a materially neutral tariff rider balance. The budget is thus a product of the planning process and not a planning objective. The company recognizes that customer demand and market factors exist outside of the budgeting process and that forecasted expenses may be higher or lower than actual results. The forecasted budget does not represent an expectation or commitment to limit expenses to the planned amounts.

The overall 2024 budget projection is summarized in Table 6, which includes elements of the energy efficiency budget that have been designated as "supplemental" to indicate program elements that are not included in the cost-effectiveness calculation. These supplemental costs include NEEA funding, as well as funds for third-party CPA and EM&V studies.

TABLE 6 – ENERGY EFFICIENCY BUDGET SUMMARY

	2023 Washington Electric Budget	Supplemental Budget	Non-Supplemental Budget
Total Incentives and Direct Benefit to Customer (DBtC)	$ 14,862,374	$ 0	$ 14,862,374
Program Labor/DBtC	$ 2,010,340	$ 0	$ 2,010,340
Pilot Programs	$ 1,000,000	$ 0	$ 1,000,000
Total Non-Labor/Non-Incentive	$ 5,635,899	$ 1,770,042	$ 3,865,857
Total	**$ 23,508,613**	**$ 1,770,042**	**$ 21,738,571**

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 monetary incentives 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 direct customer benefits, the inclusion of the energy efficiency engineering team in an energy efficiency project provides customers with access to a valuable resource for identifying and implementing savings measures at their home or business. Engineering labor is included as a direct benefit to customers rather than an administrative cost because the engineering team's labor provides a direct benefit to customers in the form of customized information and analysis specific to a particular building or efficiency project, similar to a service a customer may pay for out of pocket (e.g., an American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) energy audit).

TABLE 7 – PROPORTION OF FUNDS RETURNED TO CUSTOMERS THROUGH DIRECT BENEFITS

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

Program-by-program details of the expected incentive expenditures for 2024 are provided in greater detail in Table 8.

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 highly correlated to programs' throughput and energy acquisition and, based on customer participation, the amounts are subject to change. Note that for some active programs, the benefit of the program offering is not based on the incentive value, but rather on identifying opportunities for energy efficiency projects. For those projects, any resulting incentive is included with its native program.

TABLE 8 – CUSTOMER DIRECT INCENTIVE EXPENDITURE DETAIL

Energy Efficiency Program	Direct Incentive Expenditures	
Low-Income and Equity Programs		
Low-Income	$	2,534,322
Named Communities Investment Fund	$	1,538,462
Deferred Maintenance Program	$	700,000
Total Low-Income and Equity Incentives	**$**	**4,772,784**
Residential Programs		
Prescriptive	$	455,588
Midstream	$	105,623
Always-On	$	0
Multifamily (New Offerings)	$	202,695
On-Bill Repayment	$	206,000
Home Energy Audit	$	493,786
Total Residential Incentives	**$**	**1,463,692**
Commercial/Industrial Programs		
Interior Prescriptive Lighting	$	1,650,548
Exterior Prescriptive Lighting	$	700,210
Direct Install Lighting	$	3,114,000
Site-Specific	$	2,038,400
Prescriptive Shell	$	184,107
Midstream	$	422,493
Green Motors	$	1,531
Variable Frequency Drives	$	4,320
Compressed Air	$	12,864
Grocer	$	2,000
Appliance	$	15,314
Active Energy Management	$	0

Energy Efficiency Program	Direct Incentive Expenditures
Pay for Performance	$ 4,245
Contractor Incentive Program	$ 75,866
Clean Buildings Accelerator	$ 400,000
Total Commercial/Industrial Incentives	**$ 8,628,699**
Total of All Incentives	**$ 14,862,374**

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 9. The expenses are allocated to programs based on the percentage of overall avoided cost achieved through each program's energy efficiency achievements. An exception to this allocation methodology is that third-party non-incentive payments are directly attributable to the programs they originate from.

TABLE 9 – NON-INCENTIVE UTILITY EXPENSE DETAIL

Expense Type	Washington Electric Portfolio	Supplemental Budget	Non-Supplemental Budget
Third-Party Non-Incentive Payments	$ 1,865,955	$ 0	$ 1,865,955
Labor	$ 2,757,248	$ 0	$ 2,757,248
EM&V	$ 274,044	$ 274,044	$ 0
Memberships	$ 51,090	$ 0	$ 51,090
Outreach	$ 136,241	$ 0	$ 136,241
Marketing	$ 585,245	$ 0	$ 585,245
Training/Travel	$ 6,812	$ 0	$ 6,812
Regulatory	$ 3,406	$ 0	$ 3,406
Studies and Research	$ 68,121	$ 0	$ 68,121
Software	$ 156,677	$ 0	$ 156,677
Conservation Potential Assessment	$ 27,248	$ 27,248	$ 0
General Implementation	$ 245,362	$ 0	$ 245,362
Pilot Programs	$ 1,000,000	$ 0	$ 1,000,000
NEEA	$ 1,468,750	$ 1,468,750	$ 0
Total	**$ 8,646,239**	**$ 1,770,042**	**$ 6,876,197**

† Software expenses have been estimated for the continued implementation of the iEnergy platform and anticipated enhancements to its existing platforms.

Residential Portfolio Overview

Avista's residential portfolio comprises several approaches to engage and encourage customers to make energy efficiency improvements in their home. While prescriptive rebate programs have long been the main component of the portfolio, residential HVAC and water heating measures were transitioned to the Midstream Program, which launched in 2023. Details of the Midstream Program are discussed on page 20.

Prescriptive measures remain for shell measures, appliances, thermostats, and ENERGY STAR Certified Manufactured Homes. The Always-On Program leverages real-time Advanced Metering Infrastructure (AMI) data insights to help customers better understand their energy use, and the On-Bill Repayment (OBR) Program provides customers access to a simple and convenient financing option at an affordable interest rate. These programs are supplemented by educational and outreach efforts, including a Home Energy Audit Program. While the audit program is instrumental in identifying the need for weatherization, the associated savings from those efforts are captured within the Shell Program.

For 2024, Avista anticipates approximately 4,428,711 kWh to be achieved through residential programs with an expected spend of $1,463,692. Table 10 summarizes 2024 residential program savings and budget estimates.

TABLE 10 – RESIDENTIAL PROGRAMS OVERVIEW

Residential Programs	Electric Program Savings (kWh)	Expected Incentive Spend
ENERGY STAR Homes	450	$ 16,294
Always-On	1,876,009	$ 0
Shell	1,064,000	$ 175,481
Midstream	264,058	$ 105,623
Prescriptive	1,160,093	$ 263,813
Multifamily (New Offerings)	253,369	$ 202,695
On-Bill Repayment	257,500	$ 206,000
Home Energy Audit	617,232	$ 493,786
Total Residential	**4,428,711**	**$ 1,463,692**

Residential Programs

Residential Prescriptive Program

Program Description

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

TABLE 11 – RESIDENTIAL PRESCRIPTIVE PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		1,160,543
Incentives	$	455,588
Non-Incentive Utility Costs	$	250,329
Total Costs	**$**	**705,917**
Non-Energy Impacts	$	712,006
Cost-Effectiveness		
Total Resource Cost		2.84
Utility Cost Test		6.78

Program Manager

Michele Drake

Residential Appliance and Thermostat Program

Program Description

Residential appliance measures are intended to motivate customers to purchase appliances that demonstrate higher than average energy efficient performance by meeting ENERGY STAR criteria for efficiency. ENERGY STAR acts as an independent third-party, maintaining a website of qualified products and verifying the performance of various appliances. Customers are asked to provide an ENERGY STAR certificate for each appliance, along with an application and purchase documentation. Avista also offers rebates for smart thermostats, as well as line voltage thermostats in multifamily residences.

Program Eligibility

All Washington residential electric customers who purchase ENERGY STAR certified clothes washers, dryers, refrigerators, and freezers are eligible for appliance rebates. For thermostat rebates, both single family homes and multifamily residences are eligible for contractor or self-install smart thermostat measures. Multifamily homes are also eligible for line voltage thermostat measures.

Incentive Revisions

For 2024, Avista will remove top-load washers from appliance measure offerings, at the direction of its independent evaluator. Avista will add a combined washer dryer unit to the program in response to customer requests and market availability of this product. Additional incentive tiers will be considered in 2024.

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

Residential ENERGY STAR Manufactured Homes Program

Program Description

ENERGY STAR-certified manufactured homes measures are intended to encourage customers who are buying a new manufactured home to invest in an energy-efficient product. The ENERGY STAR designation allows buyers easily identify manufactured homes that are holistically more energy efficient than standard construction. Over time, 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 the Northwest Energy Efficient Manufactured Housing Program (NEEM) to provide independent, third-party certification of manufactured homes. NEEM's process includes inspections at manufacturing plants to ensure that homes are built to specification.

Program Eligibility

Eligibility includes all Avista residential electric customers who purchase a certified ENERGY STAR or ENERGY STAR with NEEM+ manufactured home.

Incentive Revisions

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

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

Residential Shell Program

Program Description

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

Program Eligibility

Elimination of minimum usage as a prerequisite for participation will continue in 2024. Eligibility will apply to all Avista Washington residential electric customers who install qualified materials and meet all program requirements for installation. Self-install options for windows and storm windows will also continue. Both eligibility changes remove barriers to customer participation.

Incentive Revisions

The modified incentive amounts, incentive structure, and installation options established in 2023 will continue in 2024. The additional DIY installation options for some measures, tiered options for insulation, and rebate amounts are aimed at continuing to remove barriers and further promote the importance of adequate shell measures in homes.

Midstream Program

Program Description

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

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

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

TABLE 12 – MIDSTREAM RESIDENTIAL PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		264,058
Incentives	$	105,623
Non-Incentive Utility Costs	$	19,901
Total Costs	**$**	**125,524**

TABLE 13 – MIDSTREAM COMMERCIAL PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		539,665
Incentives	$	422,493
Non-Incentive Utility Costs	$	25,698
Total Costs	**$**	**448,192**

Program Manager

Michele Drake

Program Eligibility

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

Program Revisions

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

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

Multifamily Weatherization Program – New Offerings

Program Description

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

Program Manager

Greta Zink

TABLE 14 – RESIDENTIAL MULTIFAMILY PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		253,369
Incentives	$	202,695
Non-Incentive Utility Costs	$	35,213
Total Costs	**$**	**237,908**

On-Bill Repayment Program

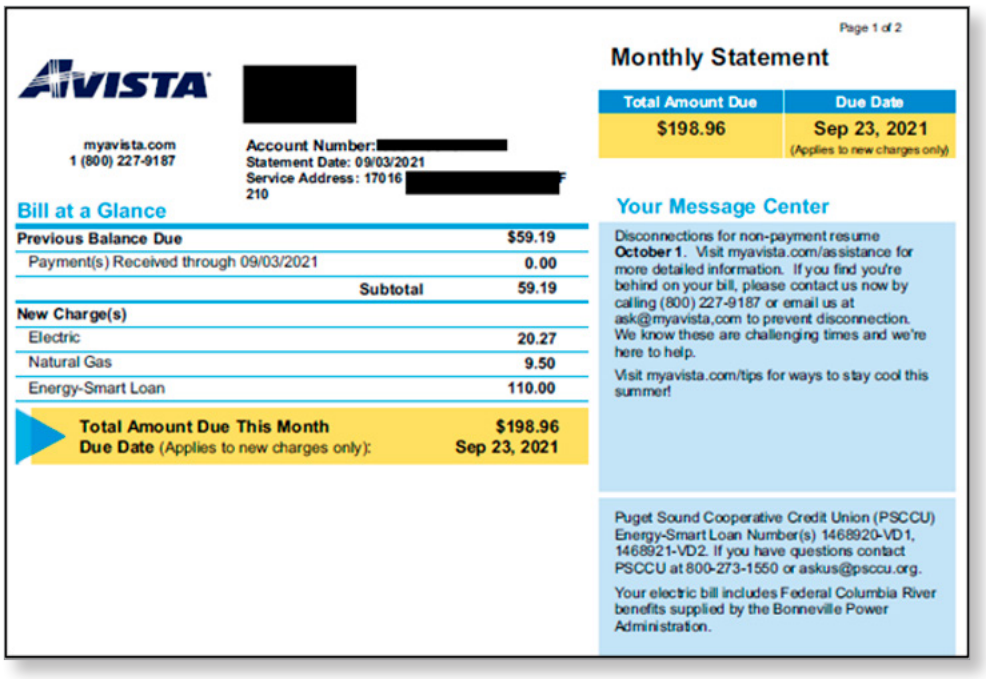
Program Description

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

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

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

FIGURE 4 – ON-BILL REPAYMENT BILL EXAMPLE



Page 1 of 2

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

TABLE 15 – ON-BILL REPAYMENT PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		257,500
Incentives	$	206,000
Non-Incentive Utility Costs	$	35,213
Total Costs	**$**	**241,213**

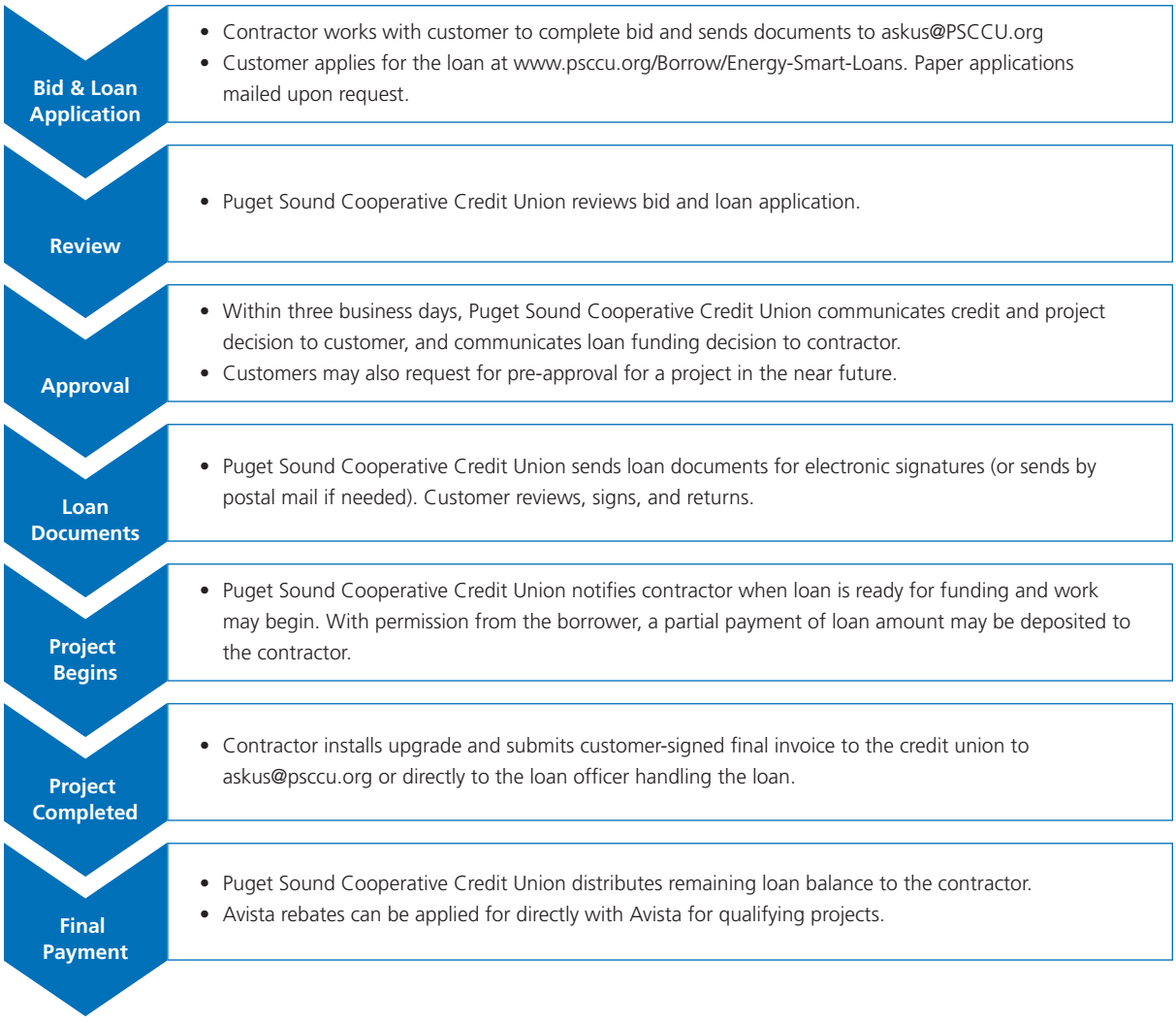
TABLE 16 – ON-BILL REPAYMENT PROGRAM RATES AND TERMS

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

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

Participation in the On-Bill Repayment Program is outlined below.

FIGURE 5 – ON-BILL REPAYMENT CUSTOMER PARTICIPATION JOURNEY



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

Program Implementation

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

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

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

Program Eligibility

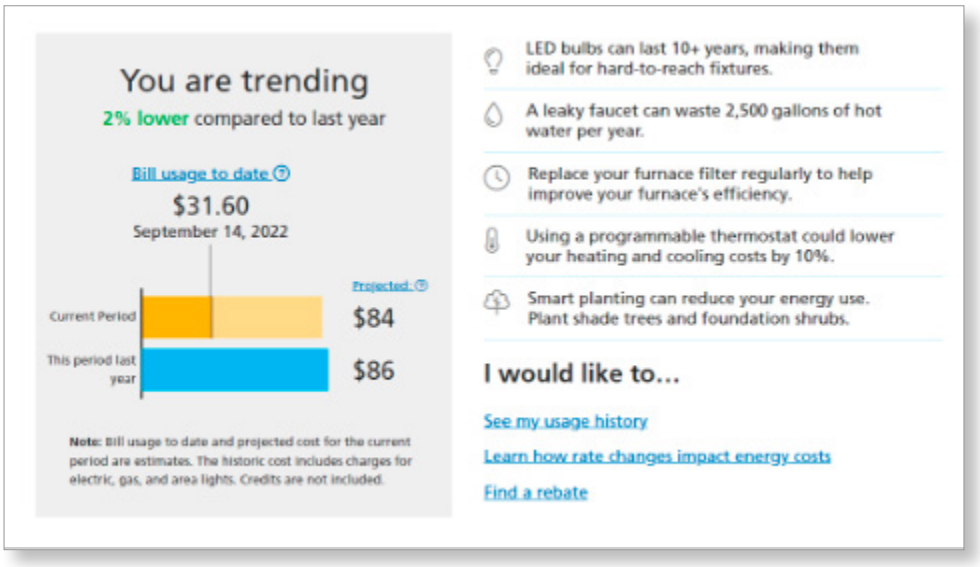
Residential and small business customers in owner-occupied buildings may be eligible for OBR; funded measures must be fueled by Avista. An eligible projects list created by Avista and supported by Washington State's Clean Energy Fund program guidelines is maintained on both Avista's and PSCCU's websites;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

Residential Always-On Load Behavioral Program

Program Description

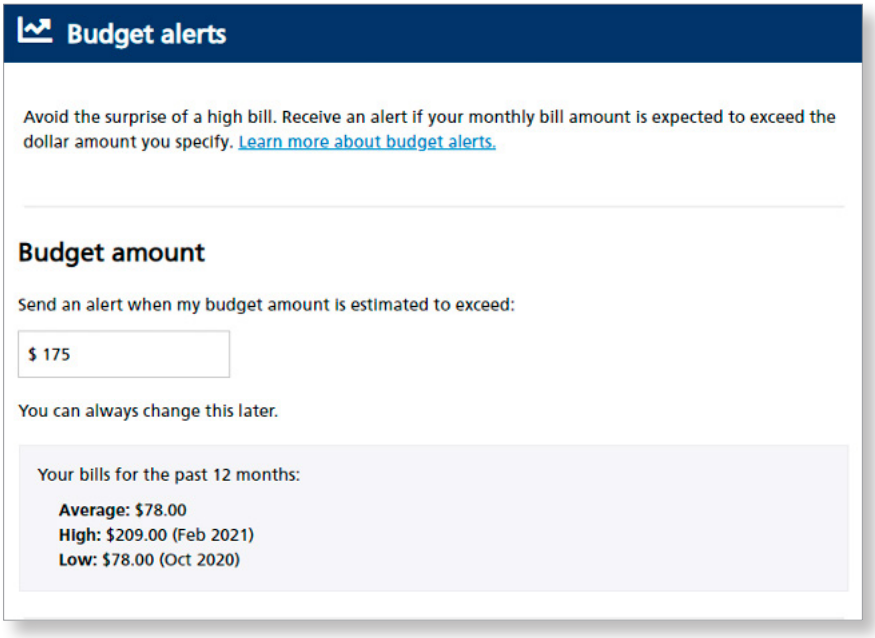
Avista completed installation of Advanced Metering Infrastructure meters in its Washington State service territory in 2021. This AMI deployment has presented numerous opportunities to enhance energy conservation opportunities for customers. Customers are currently able to access energy usage data through a customer portal, myavista.com, which uses AMI data to provide insights for customers to adaptively manage their energy consumption. Through the portal, customers can view a projected monthly bill based on average daily usage. They can also view five-minute interval data, which allows them to understand their energy use profile in greater detail. Figure 6 shows a screenshot of a sample customer portal account summary.

FIGURE 6 – RESIDENTIAL ALWAYS-ON LOAD BEHAVIORAL PROGRAM CUSTOMER ACCOUNT PORTAL EXAMPLE



Avista has also developed notifications that are sent to customers when their user-defined budget threshold is projected to be exceeded. Customers can log in at myavista.com or call customer service to define a budget threshold (e.g., $175). If the projected bill amount is predicted to exceed their chosen amount, Avista will alert the customer, via email or text, thus providing them with the opportunity to adjust usage to lower their monthly bill.

FIGURE 7 – RESIDENTIAL ALWAYS-ON LOAD BEHAVIORAL PROGRAM BUDGET ALERT EXAMPLE



Based on what was learned from previous experience with home energy reports and with the Sense Device Behavioral Pilot – which estimated that customers who were engaged with an energy savings application saved approximately 7 percent of baseline usage – Avista has identified a new opportunity to provide additional customer-facing value from the Washington AMI deployment. The targeted-load behavioral program uses AMI-based non-intrusive load monitoring to identify the loads that are present within a residence. Load information is shared with customers to better inform them of energy efficiency solutions. Avista used Bidgely's patented machine learning algorithms found in their Enterprise Analytics and CARE tools to develop these programs.

An example of an AMI-based load disaggregation is shown in Figure 8.

FIGURE 8 – RESIDENTIAL ALWAYS-ON LOAD BEHAVIORAL PROGRAM EXAMPLE

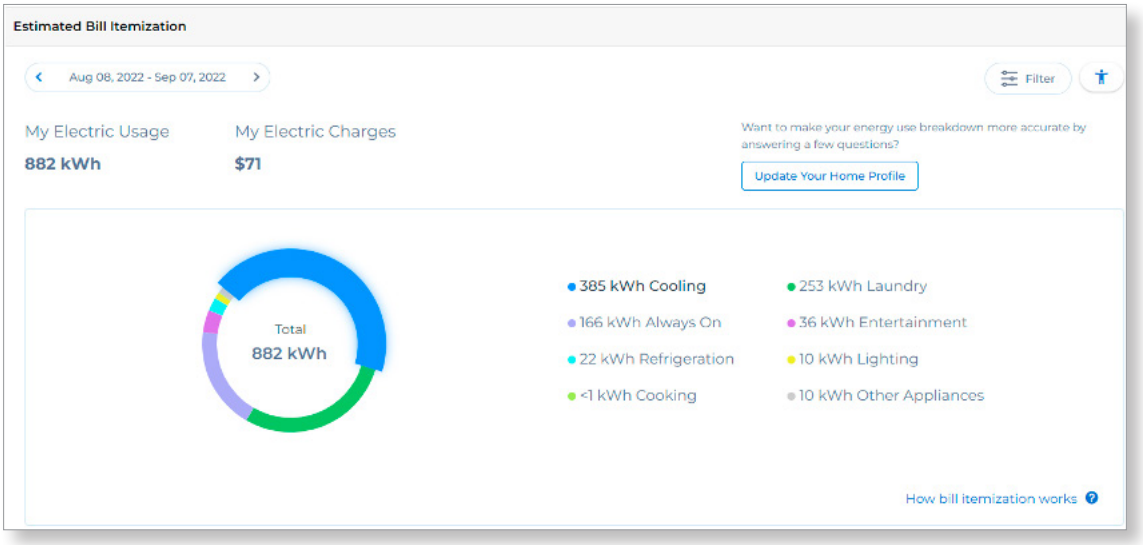


TABLE 17 – RESIDENTIAL ALWAYS-ON PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		1,876,009
Incentives	$	0
Non-Incentive Utility Costs	$	101,412
Total Costs	**$**	**101,412**
Cost-Effectiveness		
Total Resource Cost		3.38
Utility Cost Test		3.07

Program Manager

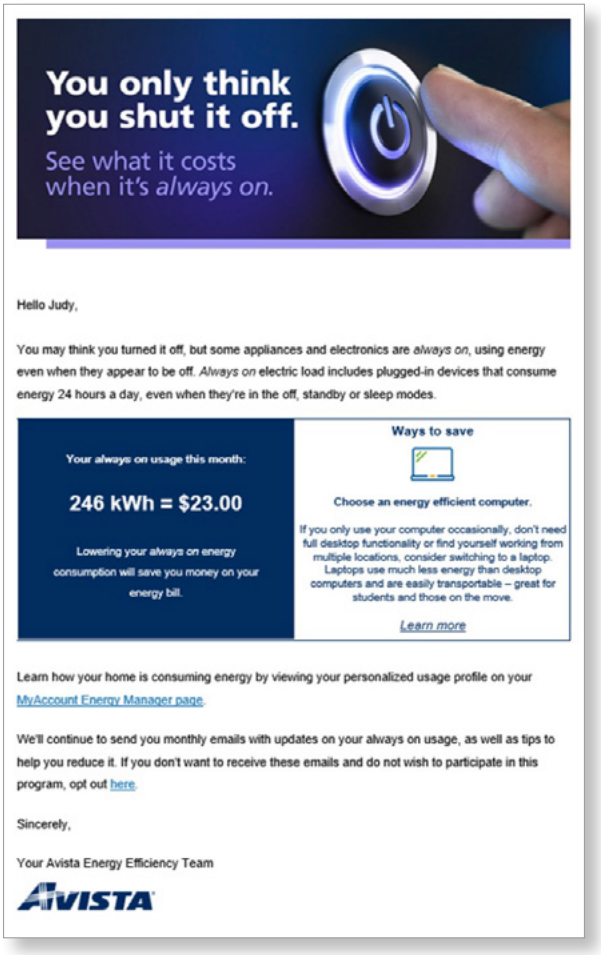
Rachelle Humphrey

Program Implementation

The initial target of the program is reductions in always-on load. This target was selected because, on average, 20 percent of a customer's bill can be attributed to always-on loads, and because calculations related to determining always-on loads are very accurate. An additional benefit of targeting always-on loads is that significant improvements can be achieved with low- or no-cost behavioral interventions, such as turning off computers when not in use. Participants in this program will be randomly assigned to one of two potential groups: one treatment arm (90 percent) and one control group (10 percent). Communications, which will be sent monthly to customers in the treatment group, will include personalized information regarding always-on usage, associated costs, rotating tips to reduce the load, and links to their full home usage profile on myavista.com. This program allows Avista to determine if a reduction in always-on usage occurs as a behavioral response to receiving direct usage communications.

Avista will track and report on observed energy savings as a result of the program. Based on initial estimates from the Bidgely Analytics Workbench, Avista customers are consuming approximately 140 kWh of always-on load a month. The program is estimating a reduction of 1.5 percent (2.1 kWh) a month relative to each customer's baseline. Avista will begin delivering this program in the third quarter of 2023.

FIGURE 9 – RESIDENTIAL ALWAYS-ON LOAD BEHAVIORAL PROGRAM EMAIL EXAMPLE



Program Eligibility

For the initial pilot, Avista targeted the top third of always-on users – around 75,000 customers. In 2023, Avista will increase the number of participants in the program to around 110,000 residential electric customers. Following the results of the pilot, Avista estimates a less than two percent opt-out rate of customers who choose to no longer receive communications related to the program.

Program Evaluation

Given the uniqueness of behavioral programs, Avista will work with its EM&V vendor to include within its EM&V plan effective methods for the evaluation of this program. It is assumed that the persistence of savings, the lasting impact around energy efficiency messaging, exists through the always-on communication. However, Avista will defer to its evaluator on industry best practices for evaluating incremental savings through these programs.

Residential Home Energy Audit Program

Program Description

The Home Energy Audit Program is designed to educate and drive customer engagement around conservation and promote Avista's energy efficiency programs and renewable-energy options. 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 components of this program include (a) providing customers with a home assessment from a knowledgeable and qualified home inspector with energy auditor credentials, (b) direct installation measures such as pipe wrap and LEDs, (c) marketing efforts to drive customers to the program, and (d) energy efficiency education that includes increasing awareness of Avista's rebate programs, products, and services. The Avista website also communicates program requirements and highlights opportunities for customers.

TABLE 18 – RESIDENTIAL HOME ENERGY AUDIT PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		617,232
Incentives	$	493,786
Non-Incentive Utility Costs	$	24,976
Total Costs	**$**	**528,762**

Program Implementation

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

Program Eligibility

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

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.

Low-Income and Named Communities Portfolio Overview

Low-Income Program

Program Description

Low-Income Programs are offered in collaborative effort with eight Community Action Agencies – including one Tribal Housing Authority – under a bi-annual contract with Avista. The funding allows for considerable flexibility for CAAs to deliver weatherization services to each individual low-income client through a mix of measures most applicable to their home.

Program Manager

Renee Zimmerman

TABLE 19 – LOW-INCOME PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		853,007
Incentives	$	2,534,322
Non-Incentive Utility Costs	$	238,621
Total Costs	**$**	**2,772,942**
Non-Energy Impacts	$	6,258,934
Cost-Effectiveness		
Total Resource Cost		3.23
Utility Cost Test		0.26

As partners with Avista, the CAAs and Tribal Housing Authority qualify the customers, generate referrals (often from their bill assistance offerings), and have access to multiple funding sources available to best meet customers' home energy needs. Their goal is to help customers increase energy efficiency in the home, resulting in lower energy bills.

The agencies serving Avista's Washington service territory receive an aggregate annual funding amount of $4.25 million, which covers the cost of energy efficiency work; any needed health, safety, or repair improvements; agency administration, and program support. Currently, Avista's Low-Income Program is budgeted at $4.25 million for the natural gas and electric weatherization program. The increase over the 2023 budget is intended to serve more low-income 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 electricity or natural gas. 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.

For example, the budgets listed below are agency annual allocations. The agencies will receive two-year agreements, which will begin in 2024, 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 20 shows the 2024 budgeted annual funding allocation by agency and counties served. Please note that the contract amounts below include funding for both electric and natural gas weatherization programs.

TABLE 20 – LOW-INCOME PROGRAM FUNDING BY COMMUNITY ACTION AGENCY

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

Current funding of $4.25 million is shown. Funding increased in accordance with Avista's 2022 GRC settlement in Washington.[1]

The agencies are authorized to use 15 percent of these funds for administration cost reimbursement. Avista also permits up to 30 percent of the contract to fund health, safety, and home repairs as deemed appropriate. This spending is at the agency's discretion and offers flexibility in preparing a home to accommodate the improvement and preserve the longevity of the installed measures.

1) Docket Nos. UE-140188 and UG-140189,

TABLE 21 – LOW-INCOME APPROVED MEASURES AND DIRECT CUSTOMER BENEFITS

	Projected Participation		Funding	Per-Unit kWh Savings		Direct Benefit to Customer
Air Infiltration – Electric	27	Units	Fully Fund	803	$	1,612.90
ENERGY STAR-Rated Refrigerator	50	Units	Fully Fund	39	$	640.55
Windows (ENERGY STAR-Rated; ufactor .30)	109,919	Sq. Ft.	Fully Fund	6 per Sq. Ft.	$	20.45 per Sq. Ft.
Attic Insulation	40,636	Sq. Ft.	Fully Fund	1 per Sq. Ft.	$	1.76 per Sq. Ft.
Duct Insulation	17,696	Sq. Ft.	Fully Fund	3 per Sq. Ft.	$	3.05 per Sq. Ft.
Floor Insulation	44,050	Sq. Ft.	Fully Fund	1 per Sq. Ft.	$	3.03 per Sq. Ft.
Wall Insulation	13,220	Sq. Ft.	Fully Fund	2 per Sq. Ft.	$	2.17 per Sq. Ft.
Duct Sealing	21	Units	Fully Fund	710	$	654.20
Health, Safety Repair	1	Unit	Fully Fund	1	$	1.00
LED lamps	29	Units	Fully Fund	1	$	1.10
Smart Thermostats – Contractor-Installed	200	Units	Fully Fund	749	$	250.00
Door Sweep – CFM50 reduction – Leave Behind	4	Units	Fully Fund	14	$	20.00
Storm Windows (Low-E Rated)	0	Sq. Ft.	Fully Fund	6 per Sq. Ft.	$	10.47 per Sq. Ft.

The 2024 program year will continue to see many common electric efficiency improvements being fully funded. Health, safety, and repair projects are also fully funded, although no more than 30 percent of the annual contract may be used for this work and must accompany a qualifying efficiency improvement. Avista will continue a fully-funded measure for direct-install LEDs and calculate projected participation, per-unit kWh savings, and direct customer benefit.

Per WAC 480-109-100(10)(a), measures identified through the deemed measure priority list in the *Weatherization Manual* are considered cost-effective. Agencies may choose to use their health, safety, and repair allocation toward the full cost of the rebated measure if they do not have other funding sources to make up the difference.

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

New Approaches to Engaging Customers in Named Communities

Avista is making a significant commitment during the CEIP implementation period to pursuing new methods for engaging customers in Named Communities. These programs will focus on achieving the metrics identified in the CBIs – while also creating space for customer and community input, advocacy, and ownership – respecting that customers best understand the needs of their own communities.

Avista plans to make $2 million available annually for new energy efficiency projects in Named Communities for the each of the last two years of the initial CEIP four-year period. This body of funding will be used specifically to address obstacles to participation in efficiency programs for members of Named Communities. Program goals will focus on reducing energy burdens; increasing engagement in company programs, health, and safety benefits; and enhancing customer reliability. Avista modified its tariff rider to allow flexibility in the program design and offer fully funded conservation solutions to a broader group of customers than the company historically reached with its fully funded programs for low-income customers.[2] The following sections describe the programs Avista plans to fund under this initiative. With each program, Avista plans to offer a mix of rebates and fully funded measures. However, this mix may change, as Avista further engages with its advisory groups and customers to maximize program benefits.

Program Manager

Ana Matthews

Community Identified Projects

Estimated Annual Budget: $500,000

This program utilizes a modified Participatory Budgeting Process[3] in which Avista will fund community projects identified and prioritized by the company's Equity Advisory Group. Community members in Avista's Washington service territory are represented by this EAG. Additionally, the company considers input from the (EEAG) and from customers directly – most specifically under-served groups, to inform the program and pilot design and process. Avista sees this participatory process as an approach to obtain essential input from community members and interested parties for program design, development, and implementation.

2) See Docket No. UE-210399 for these revisions to Avista's tariff Schedule 90.

3) Participatory budgeting is a democratic process in which community members decided how to spend part of a budget.

At the end of 2022, the EAG identified energy efficiency initiatives for Named Communities and prioritized the initiatives in early 2023. The chart below provides an overview of the EAG identified initiatives.

TABLE 22 – EQUITY ADVISORY GROUP IDENTIFIED INITIATIVES

Rank	EAG Identified Energy Efficiency Initiatives
1	Focus efforts on improving energy efficiency (and EE awareness/education) for schools, community centers, and other places where Named Communities spend time
1	Focus efforts on improving energy efficiency for Spokane Tribe partners
2	Improve energy efficiency in multi-family and mobile home communities
3	Increase tree canopy and shade in Named Communities (consider tradeoffs with solar)
3	Increase access to energy efficient products and appliances for Named Communities
4	Increase awareness of and engagement in energy efficiency programs while also meeting whole-house needs through community-based partnerships and referrals to services
5	Set aside funds to match for energy efficiency grant applications for community organizations and tribal partners (could have higher feasibility)
6	Focus efforts on improving energy efficiency for community members without stable housing (consider including with other initiatives)

Multifamily Building Upgrades in Named Communities

Estimated Annual Budget: $750,000

Many customers with high energy burdens are renters. Therefore, the problem of split incentives in multifamily scenarios needs to be addressed. In an effort to tackle this issue and encourage landlords to make efficiency investments in their rental units, Avista plans to pilot incentives for landlords who own multifamily rental properties in Named Communities. The company will issue an RFP in fall 2023 to identify a program implementor for new multifamily programs at Avista. The implementor's approach could include the following elements:

- Full funding of insulation measures such as attic, wall, and floor without min/max R value requirements for existing insulation
- Higher incentives for windows and doors
- A 50 percent funding of total cost incentive for ductless heat pumps, water heaters, and thermostats
- Strategic energy management services for multifamily buildings
- Continuation of any remaining direct-install opportunities for lighting, showerheads, and aerators

Table 23 summarizes the incentives Avista may make available for the multifamily segment.

TABLE 23 – MULTIFAMILY BUILDING SPLIT INCENTIVES FUNDING LEVELS

Resources/Measures	Per-Unit Funding
Attic Insulation	Fully Fund
Floor Insulation	Fully Fund
Wall Insulation	Fully Fund
Insulated Doors	Fully Fund
Low-E Storm Windows	Enhanced Rebate
Low-E Windows	Enhanced Rebate
Line Voltage Thermostats	Enhanced Rebate
Ductless Heat Pumps	Enhanced Rebate
Heat Pump Water Heaters	Enhanced Rebate
Direct-Installation LED, Showerheads, Aerator	Fully Fund

In advance of the launch of this program, Avista has committed to improving energy efficiency in several income-restricted housing complexes in Spokane by helping cover the costs of new HVAC equipment as well as building weatherization. Work on these projects will commence in late 2023 and will conclude by early 2025.

Weatherization, Health and Safety for Manufactured and Mobile Homes

Estimated Annual Budget: $150,000

For this program, Avista plans to expand its initial weatherization pilot for manufactured and mobile homes to offer weatherization, health, and safety services to members of Named Communities who live in manufactured or mobile homes. The primary metric for health and safety repairs offered through the program will be energy burden reduction, rather than a sole focus on energy efficiency.

Avista has allocated an annual amount of $150,000 for these projects. In collaboration with partner CAAs, the company continues to work through appropriate considerations for customers who lease mobile homes from another party, in addition to working with its marketing team on successful approaches for engaging communities and identifying geographic areas on which to focus outreach efforts.

TABLE 24 – WEATHERIZATION, HEALTH AND SAFETY FOR MANUFACTURED AND MOBILE HOMES FUNDING LEVELS

Resources/Measures	Per-Unit Funding
Health and Safety	Fully Fund
Ductless Heat Pumps	Rebate
Attic Insulation	Fully Fund
Floor Insulation	Fully Fund
Wall Insulation	Fully Fund
Insulated Doors	Fully Fund
Low-E Storm Windows	Fully Fund
Low-E Windows	Fully Fund
Heat Pump Water Heaters	Rebate

Single-Family Weatherization

Estimated Annual Budget: $300,000

The single-family segment represents the largest number of customers with an energy burden requirement. For these income qualified customers, resources are available through CAAs. Avista's Low-Income Program provides full funding for numerous measures; it is, however, intended to serve all communities.

For customers within Named Communities, Avista will provide full funding for insulation measures and higher incentive amounts for doors and windows, which is consistent with its Low-Income Program. This segment does not, however, have an income qualification requirement. Avista will also explore ways to link this program offering with its On-Bill Repayment Program, which provides low-interest financing for energy-efficient equipment.

Program design and distribution of funds will be determined in late 2023 and early 2024. Avista intends to work with its partner CAAs and the Equity and Energy Efficiency Advisory Groups to further develop the design of the Single-Family Weatherization Program and may consider initiating an RFP to solicit ideas to offer these services at scale.

TABLE 25 – SINGLE-FAMILY WEATHERIZATION POTENTIAL MEASURES

Resources/Measures
Attic Insulation
Floor Insulation
Wall Insulation
Insulated Doors
Low-E Storm Windows
Low-E Windows

Incentives for Businesses and Organizations Serving Named Communities

Estimated Annual Budget: $300,000

Avista will invest in making efficiency improvements for nonprofit community organizations, religious organizations, and businesses that serve members of Named Communities. This program aligns with feedback received from the EAG: that customers would like to see more neighborhood-level investments, which, in turn, may make more resources available to provide additional benefits to the communities that these businesses and organizations serve. The program could provide site-specific incentives at a higher rate than currently available and offer building audits or other services such as grid integration through the Connected Communities project described below. The program may also offer other distributed energy projects that are identified as priorities in the Named Communities Investment Fund (NCIF).

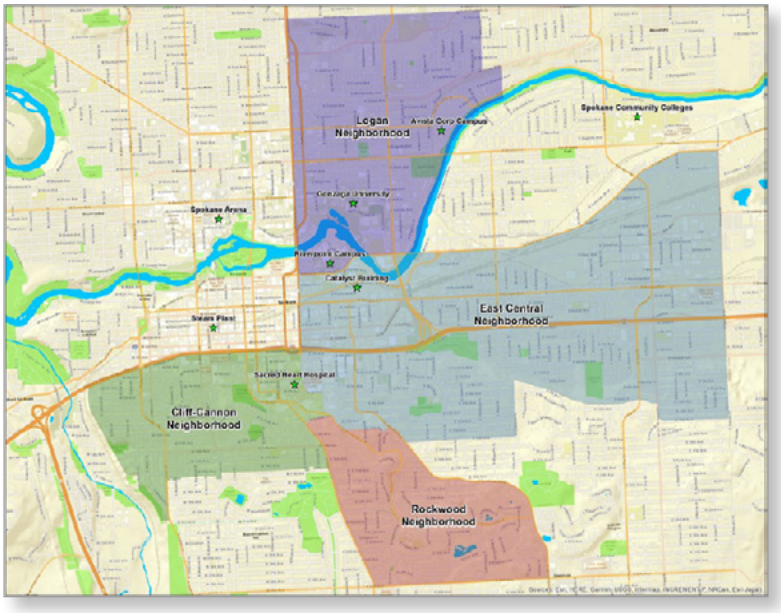
Initially, Avista will aim to fully distribute funding for each of the new offerings listed above in accordance with the estimated budget for each. When excess funds are available in one program, Avista may elect to transfer funds to another program to support other identified needs. Funds may be borrowed from the second year of the biennium if necessary (e.g., 2025 funding, up to the allotted $2,000,000, can be used in 2024 if funds are exhausted in a given program area).

Connected Communities

This five-year demonstration project is a partnership between Edo, Avista, McKinstry, Pacific Northwest National Laboratory (PNNL), and Urbanova. It is centered in several of Avista's Named Communities, including the East Central area, the Logan neighborhood, and the Cliff-Cannon neighborhood – all of which are in Spokane. The project explores and demonstrates clean, equitable products and solutions for commercial and residential customers to optimize grid utilization, increase resiliency, and reduce energy burden. The project also provides the ability to dispatch customer assets to improve grid utilization without compromising customer needs and comfort. This project is funded through a grant from the Department of Energy, as well as partner contributions.

The goal of this project is to advance a new scalable business model that will demonstrate a mutually beneficial framework for the grid, the people it serves, and the built environment. It offers the opportunity to modulate building load with energy efficiency and to host energy resources, providing enhanced grid services.

FIGURE 10 – CONNECTED COMMUNITIES



Avista/Spokane Tribe of Indians Energy Partnership

Avista continues to partner with the Spokane Tribe of Indians to design a grid resiliency solution in Wellpinit, WA. This project – funded through a grant from the Department of Commerce Clean Energy Fund, with matching provided by Avista – is an effort to develop an energy delivery platform to enhance grid resiliency for Wellpinit and surrounding areas. The microgrid will include existing and planned solar generation, as well as planned electrical storage that is interconnected with the utility grid in Wellpinit. The microgrid platform and switching devices will be configured to create points of integration with Avista's distribution management system (DMS) and supervisory control and data acquisition (SCADA). The project will focus on energy resiliency, while maximizing the value of (a) new and existing solar energy storage, (b) controllable customer loads, and (c) backup generators to support Tribal goals of emergency preparedness, carbon footprint reduction, and self-sufficient strategies to maintain operations during an outage or natural disaster. Avista will consult with Spokane Tribe members and with the Equity Advisory Group regarding design considerations and outreach strategies for the duration of this design project. While the grant does not fund construction, it does create shovel-ready packages of work that, once completed, will provide energy resilience during wildfires, energy independence for critical facilities, and energy billing benefits for customers.

In 2023, the partnership between Avista and the Spokane Tribe expanded beyond the microgrid project to look more broadly at the Tribe's energy needs. A distribution circuit load analysis for the grid resiliency design project identified high energy use and high peak-loading in the Spokane Tribal Administrative building, which serves as the headquarters for the Spokane Tribe. Avista was able to leverage funding from the Named Communities to cover the costs of ASHRAE Levels I and II energy audits for the administrative building. These audits identified a significant number of opportunities for efficiency upgrades. The NCIF also covered costs for 10 additional energy audits of Tribal buildings in Wellpinit, which were completed in August 2023. Avista will continue to engage with the Tribe to grow this energy partnership.

The building energy audits conducted in January 2023 identified a significant number of efficiency upgrade opportunities for the Spokane Tribal Administrative building. In March 2023, the Tribe leveraged information from the audits to submit a grant application to Washington's Clean Energy Fund through the Rural Clean Energy Innovation Program. The application detailed the project scope identified in the audit, which includes replacement of all five rooftop HVAC units, a new building HVAC controls system, duct repair and air balancing, building envelope improvements and selected window replacement, and upgrades to selected lighting. Avista supported the Tribe's grant application with technical support and project planning. The total cost of the project is expected to be $1.1 million.

In August 2023, the Washington State Department of Commerce awarded the project $991,000. To support the grant's required 10 percent match, Avista's NCIF is contributing a planned estimate of $18,720 in efficiency rebates in 2024, and the Spokane Tribe is providing the balance of the match requirement. When the project is completed, the Tribe can expect to save approximately 340,000 kWh per year and over $30,000 in annual energy costs. The upgrades include replacement of aging HVAC equipment, which will involve decommissioning outdated, high-emitting refrigerant. The carbon offsets from decommissioning this refrigerant are estimated to be 3,091 pounds of carbon dioxide. The Tribe intends to complete these upgrades in early 2024. In addition to providing a portion of the funding match, Avista will also provide technical support on the project.

Commercial/Industrial Portfolio Overview

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

Unlike the Site-Specific Program, prescriptive paths do not require pre-project contracting, 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 or midstream channels are 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 employ 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.

For the 2024 program year, Avista anticipates 25,830,992 kWh to be achieved through commercial/industrial programs with an expected spend of $8,652,899. Table 26 includes the estimated savings and spend by program.

TABLE 26 – COMMERCIAL/INDUSTRIAL PROGRAM OVERVIEW

Commercial/Industrial Programs	Electric Program Savings (kWh)	Expected Spend
Interior Prescriptive Lighting	6,585,225	$ 1,650,548
Exterior Prescriptive Lighting	2,637,497	$ 700,210
Direct Install Lighting	6,228,000	$ 3,114,000
Site-Specific	7,586,631	$ 2,038,400
Prescriptive Shell	198,445	$ 184,107
Midstream	528,117	$ 422,293
Green Motors	8,382	$ 1,531
Variable Frequency Drives	12,000	$ 4,320
Compressed Air	53,600	$ 12,864
Grocer	291	$ 2,000
Appliance and HVAC Controls	58,159	$ 15,314
Active Energy Management	1,429,340	$ 0
Pay for Performance	5,306	$ 4,245
Contractor Incentive Program	0	$ 75,866
Clean Buildings Accelerator	500,000	$ 400,000
Total Commercial/Industrial	**25,830,992**	**$ 8,652,899**

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 provides calculated incentives to support the installation of qualifying energy efficiency equipment at commercial/industrial sites. These projects typically have a higher degree of complexity than the traditional prescriptive or midstream offerings and rely on custom calculations of savings and incentive levels. Examples of these projects include process improvements, upgrades to specialized equipment used in manufacturing, lighting installations that rely on specialized controls, and other measures designed around the customer's specific needs.

Avista's Site-Specific Program is a major component in its commercial/industrial offerings and has historically been one of the more cost-effective portions of the energy efficiency portfolio. Customers receive technical assistance and incentives in accordance with Avista's Schedule 90 in Washington. The program approach strives for a flexible response to energy efficiency projects that have demonstrable kWh savings within program criteria. Most site-specific kWh savings are composed of custom lighting projects and custom HVAC, envelope, and industrial process load projects that do not fit the prescriptive path. The Site-Specific Program is available to all commercial/industrial retail electric customers, and typically brings in the largest portion of savings to the overall energy efficiency portfolio.

Program Manager

Lorri Kirstein

TABLE 27 – COMMERCIAL/INDUSTRIAL SITE-SPECIFIC PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		7,586,631
Incentives	$	2,038,400
Non-Incentive Utility Costs	$	811,862
Total Costs	**$**	**2,850,262**
Non-Energy Impacts	$	2,098,478
Cost-Effectiveness		
Total Resource Cost		1.38
Utility Cost Test		1.09

Program Implementation

This program will offer an incentive for any qualifying electric 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 make adjustments to the percentage of incremental cost paid in order 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.[4] Site-specific program savings can be difficult to predict because of the large nature of the projects and long sales cycles. General economy shifts may also affect customer willingness to fund efficiency improvements. Increases in process and eligibility complexity and in customer costs to participate beyond the capital investment, as well as costs for post-measurement activities, are kept in mind and managed in order to continue to successfully engage customers.

Key components of the program include 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.

Program Revisions

In order to meet savings goals in a difficult labor and supply chain environment, Avista has added a Contractor Incentive Program (CIP) for contractors who complete projects. This incentive will be paid directly to contractors and would be in addition to customer incentives that continue to go directly to the customer. The incentive is set at $0.01 per kWh for completed projects.

4) A 15-year simple payback is used as a proxy for cost-effectiveness for communication with customers. In some situations, a potential project may be tested against the TRC to determine whether it is cost-effective outside of the 15-year simple payback guideline.

TABLE 28 – COMMERCIAL/INDUSTRIAL SITE-SPECIFIC PROGRAM MEASURES, INCENTIVES, AND BUDGET

	Annual Electric Savings (kWh)	Annual Incentive
Site-Specific Projects	7,000,000	$ 1,820,000

TABLE 29 – COMMERCIAL/INDUSTRIAL CONTRACTOR INCENTIVE PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		0
Incentives	$	75,866
Non-Incentive Utility Costs	$	32,514
Total Costs	**$**	**108,380**

Commercial/Industrial Business Partner Program

Program Description

The Business Partner Program (BPP) is an outreach effort designed to target Avista's small business customers by bringing awareness of utility programs and services that can assist them in managing their energy bills. Small business owners and managers are often focused on ways to save money, and they lack the time or capital to make improvements. The BPP provides a comprehensive approach by offering these typically hard-to-reach customers education about understanding their utility bills and billing options offered by Avista, and financial incentives for efficiency measures.

Commercial/Industrial Prescriptive Lighting Program

Program Description

This program is intended to prompt commercial electric customers to increase the energy efficiency of their lighting equipment through direct financial incentives. It indirectly supports the infrastructure and inventory necessary to ensure that the installation of high-efficiency equipment is a viable option for customers.

In an effort to streamline the process and make it easier for customers and vendors to participate in the program, Avista utilizes a prescriptive approach for commercial/industrial customers. This program provides for many common retrofits to receive a pre-determined incentive amount utilizing a per-unit lighting incentive calculation of approximately $0.26 per kWh. Additionally, baseline existing wattages and replacement wattages, as well as costs per unit and customer run times – all averages from historical project data – are considered when calculating incentive amounts and energy savings.

The Prescriptive Lighting Program makes it easier for customers – particularly smaller customers and vendors – to participate in the program. The measures included in the Prescriptive Lighting Program include retrofits from fluorescent lamps and fixtures, HID, MR16, and incandescent can fixtures to more energy-efficient LED light sources and networked controls.

Program Manager

Rachelle Humphrey

TABLE 30 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE LIGHTING PROGRAM METRICS

Projected Program Metrics	Interior	Exterior
Overall kWh Savings	6,573,678	2,637,497
Incentives	$ 1,650,548	$ 700,210
Non-Incentive Utility Costs	$ 711,378	$ 328,196
Total Costs	**$ 2,361,925**	**$ 1,028,406**
Non-Energy Impacts	$ 2,317,469	$ 586,095
Cost-Effectiveness		
Total Resource Cost	1.19	1.42
Utility Cost Test	0.63	1.25

Program Implementation

Key components of this program are direct incentives to encourage customer interest, marketing efforts to drive customers to the program, account executive outreach, and ongoing work with trade allies to ensure that customer demand can be met. Along with Avista's current opportunities that allow trade allies to submit prescriptive lighting incentive applications directly into the iEnergy tracking and payment system, Avista has released additional functionality for customers to self-serve with an online application process.

Critical to program success is clear communication to lighting supply houses, distributors, electricians, and customers on incentive requirements and forms. The Avista website also communicates program requirements and highlights opportunities for customers. Avista's regionally based account executives are an important part of delivering the Prescriptive Lighting Program to commercial/industrial customers. Any changes to the program typically include an advance notice of 90 days to submit required documentation under the old requirements and/or incentive levels. This usually includes, at a minimum, direct email communication to trade allies as well as forms and website updates.

Program Eligibility

This program is applicable to commercial/industrial facilities with electric service provided by Avista through rate schedules 11 or above.

TABLE 31 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE LIGHTING PROGRAM MEASURES AND INCENTIVES

	Projected Participation		Per-Unit kWh Savings	Incentive
Interior Lighting				
T8 TLED 2'	700	Unit	28	$ 9.00
T8 TLED 3'	175	Unit	49	$ 11.00
T8 TLED 4'	63,000	Unit	55	$ 14.00
T8 TLED 8'	1,400	Unit	108	$ 27.00
T8 LED U-Bend	700	Unit	50	$ 15.00
T5 TLED 4'	700	Unit	66	$ 17.00
T5HO 4' TLED	2,800	Unit	120	$ 35.00
TLED to TLED (> 5W reduction)	700	Unit	28	$ 7.00
TLED to TLED (< 5W reduction)	700	Unit	11	$ 3.00
CFL to CFLED	1,750	Unit	28	$ 18.00
MR16 LED	35	Unit	81	$ 9.00
1x4 LED Fixture	175	Unit	134	$ 40.00
2x2 LED Fixture	525	Unit	158	$ 40.00
2x4 LED Fixture	1,400	Unit	308	$ 75.00
T8 8' LED Strip Fixture	525	Unit	355	$ 90.00
4LT5HO to LED Fixture	70	Unit	489	$ 120.00
6LT5HO to LED Fixture	175	Unit	613	$ 210.00
175W HID to LED FIxture/Lamp	35	Unit	580	$ 150.00
250W HID to LED Fixture/Lamp	70	Unit	1,155	$ 300.00
400W HID to LED Fixture/Lamp	350	Unit	1,250	$ 325.00
1000W HID to LED Fixture/Lamp	35	Unit	5,040	$ 600.00
CFL fixture to LED Retrofit	175	Unit	84	$ 20.00
65W Incandescent to LED Retrofit	18	Unit	215	$ 55.00
75-100W Incandescent to LED Retrofit	350	Unit	257	$ 65.00
150W Incandescent to LED Retrofit	210	Unit	522	$ 85.00
Occupancy Sensor Wall Switch	35	Unit	65	$ 17.00
Occupancy Sensor Ceiling/Fixture Mount	350	Unit	288	$ 75.00
Networked Lighting Controls	700	Unit	577	$ 150.00
Exterior Lighting				
89W HID to LED Fixture/Lamp	193	Unit	324	$ 85.00
100W HID to LED Fixture/Lamp	263	Unit	454	$ 120.00
150W HID to LED Fixture/Lamp	280	Unit	684	$ 180.00

	Projected Participation		Per-Unit kWh Savings	Incentive
175W HID to LED Fixture/Lamp	88	Unit	677	$ 180.00
200W HID to LED Fixture/Lamp	18	Unit	493	$ 120.00
250W HID to LED Fixture/Lamp	280	Unit	886	$ 230.00
320W HID to LED Fixture/Lamp	88	Unit	1056	$ 280.00
400W HID to LED Fixture/Lamp	700	Unit	1,444	$ 375.00
575W HID to LED Fixture/Lamp	4	Unit	1,647	$ 400.00
750W HID to LED Fixture/Lamp	7	Unit	2,610	$ 750.00
1000W HID to LED Fixture/Lamp	88	Unit	3,422	$ 930.00
1500W HID to LED Fixture/Lamp	7	Unit	4,976	$ 1,300.00
100W New Construction Fixture	140	Unit	656	$ 170.00
140W New Construction Fixture	7	Unit	803	$ 225.00
160W New Construction Fixture	70	Unit	963	$ 250.00
T12/T8 Fluorescent to LED Lamp	70	Unit	77	$ 20.00
Sign Lighting	7,000	Unit	45	$ 13.00
Networked Lighting Controls	70	Unit	166	$ 85.00

TABLE 32 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE LIGHTING PROGRAM REVISIONS

	2023	2024
Interior Lighting		
T8 TLED 2'	$ 9.00	$ 9.00
T8 TLED 3'	$ 11.00	$ 11.00
T8 TLED 4'	$ 14.00	$ 14.00
T8 TLED 8'	$ 27.00	$ 27.00
T8 LED U-Bend	$ 15.00	$ 15.00
T5 TLED 4'	$ 17.00	$ 17.00
T5HO 4' TLED	$ 35.00	$ 35.00
TLED to TLED (> 5W reduction)	$ 5.00	$ 7.00
TLED to TLED (< 5W reduction)	Site-Specific	$ 3.00
CFL to CFLED	$ 18.00	$ 18.00
LED MR16	Site-Specific	$ 9.00
1x4 LED Fixture	$ 40.00	$ 40.00
2x2 LED Fixture	$ 36.00	$ 40.00
2x4 LED Fixture	$ 60.00	$ 75.00
T8 8' LED Strip Fixture	$ 85.00	$ 90.00

	2023	2024
4LT5HO to LED Fixture	$ 100.00	$ 120.00
6LT5HO to LED Fixture	$ 210.00	$ 210.00
175W HID to LED Fixture/Lamp	$ 145.00	$ 150.00
250W HID to LED Fixture/Lamp	$ 265.00	$ 300.00
400W HID to LED Fixture/Lamp	$ 325.00	$ 325.00
1000W HID to LED Fixture/Lamp	$ 560.00	$ 600.00
CFL Fixture to LED Retrofit	$ 20.00	$ 20.00
65W Incandescent to LED Retrofit	$ 45.00	$ 55.00
75-100W Incandescent to LED Retrofit	$ 60.00	$ 65.00
150W Incandescent to LED Retrofit	$ 75.00	$ 85.00
Occupancy Sensor Wall Switch	$ 17.00	$ 17.00
Occupancy Sensor Ceiling/Fixture Mount	$ 75.00	$ 75.00
Networked Lighting Controls	$ 150.00	$ 150.00
Exterior Lighting		
89W HID to LED Fixture/Lamp	$ 85.00	$ 85.00
100W HID to LED Fixture/Lamp	$ 120.00	$ 120.00
150W HID to LED Fixture/Lamp	$ 180.00	$ 180.00
175W HID to LED Fixture/Lamp	$ 180.00	$ 180.00
200W HID to LED Fixture/Lamp	Site-Specific	$ 120.00
250W HID to LED Fixture/Lamp	$ 230.00	$ 230.00
320W HID to LED Fixture/Lamp	$ 280.00	$ 280.00
400W HID to LED Fixture/Lamp	$ 375.00	$ 375.00
575W HID to LED Fixture/Lamp	$ 400.00	$ 400.00
750W HID to LED Fixture/Lamp	$ 750.00	$ 750.00
1000W HID to LED Fixture/Lamp	$ 930.00	$ 930.00
1500W HID to LED Fixture/Lamp	$ 1,300.00	$ 1,300.00
100W New Construction Fixture	$ 170.00	$ 170.00
140W New Construction Fixture	$ 225.00	$ 225.00
160W New Construction Fixture	$ 250.00	$ 250.00
T12/T8 Fluorescent to TLED	Site-Specific	$ 20.00
Sign Lighting	$ 13.00	$ 13.00
Networked Lighting Controls	$ 85.00	$ 85.00

Commercial/Industrial Direct Install Lighting Program

Program Description

In partnership with Resource Innovations, Avista is providing a Direct Install Lighting Program to supplement and enhance the ongoing customer engagement and energy efficiency efforts already in place. In contract with local electrical trade allies, customers receive installation of appropriate energy-saving lighting measures such as lamps, fixtures, and controls; a brief on-site audit identifying additional efficiency opportunities; and marketing and collateral handouts to encourage future program participation. This program allows customers who have traditionally been unable to participate in programs requiring upfront capital the opportunity to receive new lighting and lowered energy costs. The direct install methodology also boosts local markets by endorsing local businesses and trade allies and providing training and upskilling opportunities.

Program Manager

Rachelle Humphrey

TABLE 33 – COMMERCIAL/INDUSTRIAL DIRECT INSTALL LIGHTING PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		6,228,000
Incentives	$	3,114,000
Non-Incentive Utility Costs	$	574,229
Total Costs	**$**	**3,688,229**
Non-Energy Impacts	$	1,405,691
Cost-Effectiveness		
Total Resource Cost		0.96
Utility Cost Test		0.52

Program Implementation

Avista and Resource Innovations have developed engagement procedures for the direct installation and audit approach to market and implement the Direct Install Lighting Program. The iEnergy software platform is utilized to streamline customer eligibility, maintain data integrity, and lower administrative costs. Specifically, the development of the iEnergy OnSite tool has allowed trade allies to conduct customer eligibility checks, complete surveys and enrollment, perform facility walk-through assessments, and project scope creation and costs. It also captures all applicable lighting program data, tracks equipment that is removed and installed, calculates site-specific savings based on wattage reduction and hours of operation, generates customer-facing reports, and allows for quality control reviews and inspections as required.

Program Eligibility

This program provides a valuable service to small and medium electric customers in Avista's Washington service territory under rate schedules 11 or 12. Resource Innovations uses ZIP codes and city identifiers to cluster eligible customers geographically and establish an efficient routing for door-to-door marketing, audits, and installations. Customers may also complete a request form on myavista.com to express interest in participating. Table 34 shows the estimated annual savings and the value of the direct installation (direct benefit to customer, or DBtC) for the lighting program. DBtC amounts represent the total cost of the program outside of allocated program administrative costs.

TABLE 34 – COMMERCIAL/INDUSTRIAL DIRECT INSTALL LIGHTING PROGRAM MEASURES AND DIRECT BENEFIT TO CUSTOMER

	Projected Participation	Annual Savings	Annual DBtC
Direct Installation – LED Lighting and Controls	223 Projects	6,228,000	$ 3,114,000

Commercial/Industrial Prescriptive HVAC Variable Frequency Drive Program

Program Description

The Prescriptive HVAC Variable Frequency Drive Program is intended to prompt customers to increase the energy efficiency of their HVAC fan or pump applications with a Variable Frequency Drive (VFD) retrofit. Adding a VFD to HVAC systems is an effective tool for cutting operating costs, improving overall system performance, and reducing wear and tear on motors.

Program Manager

Greta Zink

TABLE 35 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE HVAC VFD PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		12,000
Incentives	$	4,320
Non-Incentive Utility Costs	$	3,749
Total Costs	**$**	**8,069**
Non-Energy Impacts	$	383
Cost-Effectiveness		
Total Resource Cost		1.13
Utility Cost Test		0.96

Program Implementation

The Prescriptive HVAC Variable Frequency Drive Retrofit Program is offered for retrofitting VFDs on existing HVAC equipment. The prescriptive rebate approach issues payment to the customer after the measure has been installed. Eligibility includes commercial customers who use Avista electricity and apply the VFD to the eligible fan or pump measures. Customers must submit a completed rebate form, invoices, and documentation to verify the horsepower of the motor on which the VFD was installed within 90 days of installation. Each rebate will be qualified and processed within iEnergy with the current-year calculator. Avista will send incentive checks to customers or their designees after each project is approved. Rebates will not exceed the total amount on the invoice. All VFD projects will have an installation verification inspection before the check is issued. This program is promoted by trade allies, Avista account executives, the Avista website, and Avista marketing efforts. The website is also used to communicate program requirements, incentives, and forms.

TABLE 36 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE HVAC VFD PROGRAM MEASURES AND INCENTIVES

	Projected Participation	Per-Unit kWh Savings	Incentive
HVAC Cooling Pump	5 Units	1,091	$ 200
HVAC Heating Pump or Combo	4 Units	1,756	$ 200

Commercial/Industrial Prescriptive Shell Program

Program Description

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

Program Manager

Greta Zink

TABLE 37 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE SHELL PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		198,445
Incentives	$	184,107
Non-Incentive Utility Costs	$	33,895
Total Costs	**$**	**218,002**
Cost-Effectiveness		
Total Resource Cost		1.55
Utility Cost Test		1.02

Program Implementation

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

TABLE 38 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE SHELL PROGRAM MEASURES AND INCENTIVES

	Projected Participation	kWh Savings	Incentives
Less than R11 Attic Insulation (E/E) to R30-R44 Attic Insulation	8,297 Sq. Ft.	1.02 per Sq. Ft	$ 1.00 per Sq. Ft
Less than R11 Attic Insulation (E/E) to R45+ Attic Insulation	0 Sq. Ft.	1.39 per Sq. Ft	$ 1.25 per Sq. Ft
Less than R11 Roof Insulation (E/E) to R30+ Roof Insulation	26,990 Sq. Ft.	1.36 per Sq. Ft	$ 1.00 per Sq. Ft
Less than R4 Wall Insulation (E/E) to R11-R18 Wall Insulation	42,552 Sq. Ft.	2.82 per Sq. Ft	$ 1.00 per Sq. Ft
Less than R4 Wall Insulation (E/E) to R19+ Wall Insulation	8,097 Sq. Ft.	4.11 per Sq. Ft	$ 1.25 per Sq. Ft

Commercial/Industrial Green Motors Program

Program Description

The goals of the Green Motors Program are to organize, identify, educate, and promote member motor service centers to commit to energy-saving shop rewind practices, continuous energy improvement, and motor-driven system efficiency.

Green Motors Practices Group (GMPG) launched the green motors initiative in 2008 to work with Northwest regional utilities and other sponsoring organizations to provide incentives, through GMPG's member motor centers, for qualifying motors meeting the organization's standards. Avista joined this effort in offering the program to electric customers who participate in the green rewind program for 15-5,000 horsepower (HP) motors. This program provides an opportunity for Avista customers to participate in a regional effort. Without it, this market is difficult for the company to reach as a local utility. Avista commercial electric customers are eligible for this program. Incentives are paid as a credit off the invoice at the time of the rewind. A $1 per horsepower incentive goes to the customer; $1 per horsepower to the service center.

Program Manager

Greta Zink

TABLE 39 – COMMERCIAL/INDUSTRIAL GREEN MOTORS PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		8,382
Incentives	$	1,531
Non-Incentive Utility Costs	$	4,021
Total Costs	**$**	**5,552**
Non-Energy Impacts	$	1,408
Cost-Effectiveness		
Total Resource Cost		2.53
Utility Cost Test		0.70

Program Implementation

This program is implemented and administered by the GMPG from inception to rebate payment. There is an administration fee based on the kWh savings for the organization. The incentive is split between the service center and the customer. Customers receive their incentive as an immediate discount off their bill. The energy efficiency program management team oversees the contract, monitors the program, and qualifies and processes the monthly projects within iEnergy with the current-year calculator. The program is promoted by GMPG, participating service centers, Avista account executives, the Avista website, and Avista marketing efforts. The website is also used to communicate program requirements, incentives, and forms.

Measures and Incentives

The incentive for this program is $1 per HP of the motor being rewound, up to $10,000 for 5,000 HP, and is taken directly off the customer bill at the service center. There is also a $1 per HP fee paid to the service center for participating.

TABLE 40 – COMMERCIAL/INDUSTRIAL GREEN MOTORS PROGRAM MEASURES AND INCENTIVES

	Projected Participation	Per-Unit kWh Savings	Incentive
15 HP Industrial	0 Units	525	$ 30
20 HP Industrial	0 Units	703	$ 40
25 HP Industrial	0 Units	893	$ 50
30 HP Industrial	0 Units	962	$ 60
40 HP Industrial	0 Units	1,121	$ 80
50 HP Industrial	0 Units	1,206	$ 100
60 HP Industrial	0 Units	1,269	$ 120
75 HP Industrial	0 Units	1,305	$ 150
100 HP Industrial	2 Units	1,723	$ 200

	Projected Participation		Per-Unit kWh Savings	Incentive	
125 HP Industrial	0	Units	1,990	$	250
150 HP Industrial	3	Units	2,366	$	300
200 HP Industrial	0	Units	3,138	$	400
250 HP Industrial	3	Units	3,799	$	500
300 HP Industrial	2	Units	4,535	$	600
350 HP Industrial	0	Units	5,287	$	700
400 HP Industrial	0	Units	5,994	$	800
450 HP Industrial	0	Units	6,732	$	900
500 HP Industrial	0	Units	7,491	$	1,000
600 HP Industrial	0	Units	10,137	$	1,200
700 HP Industrial	0	Units	11,777	$	1,400
800 HP Industrial	0	Units	13,431	$	1,600
900 HP Industrial	0	Units	15,077	$	1,800
1000 HP Industrial	0	Units	16,682	$	2,000
1250 HP Industrial	0	Units	17,812	$	2,500
1500 HP Industrial	0	Units	21,329	$	3,000
1750 HP Industrial	0	Units	24,779	$	3,500
2000 HP Industrial	0	Units	28,201	$	4,000
2250 HP Industrial	0	Units	31,527	$	4,500
2500 HP Industrial	0	Units	34,957	$	5,000
3000 HP Industrial	0	Units	41,686	$	6,000
3500 HP Industrial	0	Units	48,532	$	7,000
4000 HP Industrial	0	Units	55,466	$	8,000
4500 HP Industrial	0	Units	62,269	$	9,000
5000 HP Industrial	0	Units	69,044	$	10,000
200 HP Agricultural	0	Units	1,231	$	400

*This incentive includes the $1 per HP fee paid to the service center for participating.

Commercial/Industrial Compressed Air Program

Program Description

Targeting commercial compressed-air customers, this program is for compressed air leak detection. Incentives are paid for the repair of leaks identified by an audit from a preliminary acoustic imaging detector, followed by a second audit that verifies the repair of those leaks. Avista commercial electric customers are eligible for this program.

Program Manager

Greta Zink

TABLE 41 – COMMERCIAL/INDUSTRIAL COMPRESSED AIR PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		53,600
Incentives	$	12,864
Non-Incentive Utility Costs	$	6,918
Total Costs	**$**	**19,782**
Non-Energy Impacts	$	40,575
Cost-Effectiveness		
Total Resource Cost		2.53
Utility Cost Test		0.70

Program Implementation

The Compressed Air Leak Detection Program pays $0.23 per kWh for repairing leaks in compressed air systems. A preliminary acoustic imaging detector audit is performed, creating a report that is used to identify and repair the leaks. A second acoustic imaging detector report is done to identify the repairs and savings. The following documentation must be submitted within 90 days after the repair has been completed: a completed rebate form, invoices, and the pre- and post-acoustic imaging reports that summarize the number of leaks and kWh savings. Avista will send incentive checks to customers or their designees after each project is approved. The incentive will not exceed the total amount on the project invoices. 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 website is also used to communicate program requirements, incentives, and forms.

TABLE 42 – COMMERCIAL/INDUSTRIAL COMPRESSED AIR PROGRAM MEASURES AND INCENTIVES

	Projected Participation	Per-Unit kWh Savings	Incentive
Compressed Air	9 Units	6,000	$ 1,440

Commercial/Industrial Grocer Program

Program Description

This program offers incentives to customers who increase the energy efficiency of their refrigerated cases and related grocery equipment, including improvements with lighting, anti-sweat heater controls, gaskets and strip curtains, and various motor components. Refrigeration often represents the primary electricity expense in a grocery store or supermarket. The prescriptive rebate approach issues payment to the customer after the measure has been installed. Commercial customers who use Avista fuel for the measure applied for are eligible.

Program Manager

Greta Zink

TABLE 43 – COMMERCIAL/INDUSTRIAL GROCER PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		291
Incentives	$	2,000
Non-Incentive Utility Costs	$	2,416
Total Costs	**$**	**4,416**
Cost-Effectiveness		
Total Resource Cost		0.03
Utility Cost Test		0.03

Program Implementation

Customers must submit a completed rebate form and invoice 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 incentive checks to customers or their designees after each 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 website is also used to communicate program requirements, incentives, and forms.

Commercial/Industrial Appliance and HVAC Controls Program

Program Description

This program offers incentives to Avista commercial customers who install front-loading ENERGY STAR commercial clothes washers and/or smart thermostats.

Program Manager

Greta Zink

TABLE 44 – COMMERCIAL/INDUSTRIAL APPLIANCE AND HVAC CONTROLS PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		58,159
Incentives	$	15,314
Non-Incentive Utility Costs	$	10,744
Total Costs	**$**	**26,059**
Cost-Effectiveness		
Total Resource Cost		1.38
Utility Cost Test		1.25

Program Implementation

Customers installing an ENERGY STAR commercial washing machine that has a water heating fuel supplied by Avista are eligible for the clothes washer rebate in Washington. This program also offers incentives to Avista commercial customers who retrofit an existing thermostat that is not capable of connecting to the Internet. The primary target for thermostats incentivized under this program is small commercial spaces that have single zone heating systems in a conditioned space and are not occupied 24/7. Hotel and motel customers are not eligible for thermostats, but they can apply for incentives for washers under this program.

To be eligible for thermostat incentives in this program, Avista commercial customers need to install a thermostat that is web-based with remote programming capabilities. The program also requires that the thermostat control a single HVAC system with its own supply fan, serving a single conditioned space.

Qualified thermostats must have these capabilities:

- Multiple temperature set-back schedules
- Fan-mode scheduling (continuous-on versus auto mode)
- Limited-duration overrides (reverts to programming after 24 hours)
- Remote monitoring and programming (web-based)
- Automatic restoration after power outage
- Support multiple cooling stages

Initial programming must be set up at the time of installation and include:

- Scheduled temperature setback
- Scheduled fan mode
- Override duration ≤ 3 hours
- Strip heat lockout (HP only)
- No simultaneous heating and cooling

For both the clothes washer and smart thermostat rebates, customers must submit a completed rebate form and invoice 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 incentive checks to customers or their designees after each 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 website is also used to communicate program requirements, incentives, and forms.

Commercial/Industrial Pay for Performance

Program Description

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

TABLE 45 – COMMERCIAL/INDUSTRIAL PAY FOR PERFORMANCE CONTROLS PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		5,306
Incentives	$	2,709
Non-Incentive Utility Costs	$	6,954
Total Costs	**$**	**6,064**

Program Implementation

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

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

Washington State Clean Buildings Law – Support Programs

Program Description

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

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

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

The Department of Commerce is responsible for assuring compliance and determining early adopter incentive fund allocations. They have published recommendations for affected building owners to prepare, including benchmarking their buildings through Portfolio Manager and developing and executing an energy efficiency plan. Utilities in Washington play a vital role in working cooperatively with the Department of Commerce to execute the new law and to support building owners as they navigate the compliance process. Avista has identified the four key areas of support shown in Table 46.

TABLE 46 – COMMERCIAL/INDUSTRIAL WASHINGTON STATE CLEAN BUILDINGS ACT EARLY ADOPTER INCENTIVES

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

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

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

TABLE 47 – COMMERCIAL/INDUSTRIAL CLEAN BUILDINGS ACCELERATOR PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		500,000
Incentives	$	400,000
Non-Incentive Utility Costs	$	33,895
Total Costs	**$**	**433,895**
Cost-Effectiveness		
Total Resource Cost		0.66
Utility Cost Test		0.20

Commercial/Industrial Pilot Programs and Potential New Programs

For 2024, Avista is exploring multiple pilot programs for commercial/industrial customers. The progress of these new programs is shared regularly with the EEAG. The pilot programs listed below are in addition to pilot programs Avista is developing related to CETA, as well as those the company is developing for residential customers.

Active Energy Management Pilot

Program Description

Consistent with Avista's goals to be carbon-neutral by 2030 and carbon-free by 2045 – and also aligning with efficiency requirements on commercial buildings – the Active Energy Management (AEM) pilot focuses on the exploration of clean energy transformation for commercial buildings. AEM can be defined in industry terms as a strategic energy management program that employs monitoring-based commissioning processes and the best fault detection and diagnostic tools.

For this pilot, Avista has partnered with Edo, a building efficiency and grid optimization business that is a joint investment between Avista Development and McKinstry. The AEM pilot uses the newly built eco-district's communication networks, cloud services, and data-mining algorithms to capture, process, and disseminate actionable information to participants in the program. The technology platform is expected to provide a framework to evaluate building performance.

The AEM pilot represents an enhanced approach to utility customer solutions. Specifically, the pilot provides high-touch energy management services and education to customers to complete the identified energy conservation measures.

Twelve customers and 14 buildings are actively engaged and participating in the program through monthly meetings and discussions about implementing energy conservation measures, which will continue until December 31, 2024. Throughout the remainder of the program, the focus will be on meeting the following goals:

1. Achieve 4.8 million kWh of energy savings over the pilot term.
2. Acquire rich facility operating information that can inform future rate or program design, particularly focused on future load flexibility programs.
3. Increase customer satisfaction for participating building owners and operators.
4. Gain insight into customer willingness to participate in future demand flexibility programs.
5. Demonstrate non-energy benefits from program participation, including occupant comfort, reduced greenhouse gas emissions, and improved equipment life expectancy.

This pilot program will be evaluated at its conclusion to determine if the following objectives have been achieved in addition to the goals stated above:

- **Support customers in identifying and implementing operational energy efficiency opportunities and demonstrate the cost-effectiveness of those efficiency savings.** This pilot most closely resembles monitoring-based commissioning or strategic energy management programs currently deployed in other utilities, but with a slightly different approach, which aggregates data from multiple buildings.
- **Build capacity of Avista account management and energy efficiency resources.** This model is intended to support the Avista account management and energy efficiency teams in deepening their understanding of facility operations and energy efficiency opportunities through hands-on training. An outcome of this pilot will be a deeper understanding of the organizational capability of Avista to support this level of customer engagement.
- **Share facility data with relevant Avista teams for R&D purposes.** Facility operating information can be used to model new customer programs, such as time-of-use rates or Demand Response (DR) incentives. It can also replace assumed data in models and optimization tools.
- **Increase customer satisfaction and engagement.** The hands-on components of this program are designed to build trust between Avista energy efficiency team members and building operators. This relationship will increase satisfaction with Avista and engagement by building owners and operators in other Avista programs.

TABLE 48 – COMMERCIAL/INDUSTRIAL ACTIVE ENERGY MANAGEMENT CONTROLS PROGRAM METRICS

Projected Program Metrics		
Overall kWh Savings		1,429,340
Incentives	$	0
Non-Incentive Utility Costs	$	10,744
Total Costs	**$**	**10,744**
Cost-Effectiveness		
Total Resource Cost		5.93
Utility Cost Test		12.80

Hybrid Heat Pump Pilot

Program Description

Starting in 2024, Avista plans to conduct a pilot program to explore the differences between cold climate heat pumps and hybrid heat pumps, with a focus on learning more about the performance of each type. For the purposes of this pilot, a hybrid heat pump is defined as an electric heat pump with natural gas backup heating. Avista hopes to determine the feasibility of adding these measures to the company's efficiency programs.

The pilot will subsidize the installation costs of 12 heat pumps in total – six cold climate and six hybrid. In addition to the pilot's primary goals, Avista hopes to learn more about the factors that influence customers (economic, environmental, behavior, emotional) as they consider significant HVAC upgrades. Avista is also interested in learning more about perceived home comfort for each of these systems.

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

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

REGIONAL MARKET TRANSFORMATION

REGIONAL MARKET TRANSFORMATION

Avista's local energy efficiency portfolio seeks to influence customers to purchase cost-effective energy efficiency products and services through a combination of incentives, awareness, and addressing barriers to adoption. The local energy efficiency portfolio is intended to be permanent in nature, with the understanding that the specific programs and eligibility criteria will be revised over time in recognition of the changing marketplace, technologies, and economics. Though these efforts can, and often do, create permanent changes in how customers make energy choices, it is generally not feasible for Avista to design local programs to influence markets that are often regional or national in scale.

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.

Northwest Energy Efficiency Alliance

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. Avista has a high degree of confidence that the NEEA portfolio will succeed, and that the company's Washington customers will continue to benefit from these efforts. 2024 savings derived from NEEA programs are expected to be as follows:

TABLE 49 – NEEA 2024 EXPECTED SAVINGS BY SECTOR

Expected Savings by Sector	aMW @ Site	MWh @ Site	kWh @ Site
Residential	0.66	5,813	5,813,209
Commercial	0.13	1,133	1,132,726
Industrial	0.00	0	0
Total	**0.79**	**6,946**	**6,945,935**

For 2024, Avista's Washington portion of the NEEA's electric budget is expected to be approximately $1,358,000 for core savings activities, as well as an additional $110,750 for the suite of End-Use Load Flex Kickstart projects NEEA plans to offer in support of a new permanent standard for grid-enabled water heaters (WAC 194-24-180). The suite of projects includes an end-use flexibility workgroup and portfolio development effort; an effort to influence equipment manufacturers to adopt Universal Control Module smart controls; and varied research and documentation projects that prioritize products and projects for future investment.

TABLE 50 – NEEA 2024 PROJECTED BUDGET

Projected Budget	2024	
Electric	$	1,358,000
End-Use Load Flex Kickstart	$	110,750
Total	**$**	**1,468,750**

Although NEEA funding requirements are incorporated within the budget, they are considered supplementary expenditures outside the scope of the current year's local portfolio. The NEEA portfolio has not been incorporated in either the acquisition projection or the cost-effectiveness of the 2024 local portfolio developed within this plan.

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AVISTA-SPECIFIC METHODOLOGIES AND ANALYTICAL PRACTICES

AVISTA-SPECIFIC METHODOLOGIES AND ANALYTICAL PRACTICES

Over time, Avista has evolved approaches 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 total resource cost (TRC) test and utility cost test (UCT) 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" in Avista's calculations, include:

- The funding associated with regional programs (NEEA)
- The cost to perform CPA studies
- 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.[1] 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 a TRC cost. 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.

1) Avista used a discount rate of 4.85% for commercial/industrial programs and 4.56% for residential programs.

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

Evaluation, Measurement, and Verification

Within its energy efficiency portfolio, Avista incorporates EM&V activities to validate and report verified energy savings related to its energy efficiency measures and programs. EM&V protocols serve to represent the comprehensive analyses and assessments necessary to supply useful information to management and non-company parties that adequately identify the acquisition of energy efficiency 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 the utility, Avista actively participates in regional energy efficiency activities. Avista has a voting role on the RTF, a critical advisory committee to the NWPCC. The RTF oversees standardization of energy savings and measurement processes for electric applications in the Pacific Northwest. This knowledge base provides energy efficiency data, metrics, non-energy benefits, and references suitable for inclusion in Avista's *Technical Reference Manual* (*TRM*) relating to acquisition planning and reporting. In addition, the company engages with other Northwest utilities and NEEA in various pilot projects or subcommittee evaluations. Portions of the energy efficiency savings acquired through 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 the 2024 EM&V engagement, Avista plans to issue an RFP to identify a single EM&V vendor for all residential and commercial programs for the 2024-2025 biennium. The RFP process is expected to be completed in late 2023.

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 effective changes to the inclusion of NEIs (see the section on non-energy impacts on pg. 72). The company 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 its estimates. The company acknowledges that it has the responsibility to use the best available data no matter the source; at times, that comes from internal estimates. Avista will continue to work with members from the RTF to identify measures or technologies that may have gaps in data and provide information where needed. These efforts further refine the RTF measures and form UES values that are more specific to Avista's service territory.

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

Non-Energy Impacts Study and Gap Analysis

Over the last few years, Avista engaged with DNV (formerly DNV-GL) to develop and quantify a list of NEIs for Avista's electric and natural gas programs, along with a gap analysis of areas for future NEI development. These efforts identified several NEIs for low-income, residential, and commercial/industrial customers, including those affecting participants, society, and the utility.

While basic conservation efforts consider the effect of energy efficiency measures on the utility's system by deferring capital investments, NEIs provide an opportunity to assign value to what is received by the customer, providing a link between an efficiency measure and a measurable customer benefit. As such, NEI values are included in Avista's TRC cost-effectiveness test as a benefit to the customer. Avista started utilizing NEI values in its benefits calculations for TRC and PCT cost-effectiveness tests starting with the company's 2022 *Annual Conservation Report*, which was filed on June 1, 2023. Avista has incorporated updated NEI values into its TRM and continues to utilize NEI values in its cost-effectiveness calculations. NEI values are tracked on a per-measure basis and range from less than $.01 per kWh up to $.46 per kWh. Low-Income Program measures have the highest non-energy benefit value to customers because of the health and safety benefits provided to qualified customers at no cost.

Other categories of non-energy impact values that are quantified in Avista's NEI values include avoided illness from pollution; reductions in noise; increases in productivity; ease of selling or leasing a space based on improvements; avoided costs of insurance/fire damage; and NEIs related to energy burden reduction. Examples include reductions in bad debt write-offs; reductions in calls to the utility; reductions for utility carrying costs on arrearages; and thermal comfort and operations savings for customers. For each measure in Avista's portfolio, the NEI value for each identified category is aggregated and then matched against an NEI database to create an Avista-specific NEI value for that measure.

As new benefits are identified, Avista engages with its NEI study vendor to conduct gap analyses and add new NEI values to Avista's TRM. A gap analysis study was completed in 2023. Avista will include these additional NEI values in its cost-effectiveness calculations as a portion of the 2023 report deliverable.

In 2024, Avista will conclude the study on low-global warmth potential (GWP) refrigerants that is currently underway. This study focuses specifically on non-energy impacts of mitigating high-GWP refrigerants. Significant decarbonization NEIs are anticipated. Once this work is completed, Avista will leverage those NEIs to develop additional incentives for air conditioning and refrigeration measures, as well as incentives for proper disposal of high-GWP refrigerant. These greenhouse gas reduction efforts are important elements of Avista's decarbonization plans.

Energy Efficiency at Power Production Facilities

As required by 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.[2] 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 primarily focused on providing safe and reliable power, they understand the benefit of efficiency and how those levels contribute to the regional clean energy goal. Avista will continue to work with its generation team to identify potential projects in the next biennium.

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

Schedule 90 – Energy Efficiency Programs

Avista's electric energy efficiency operations are governed by Schedule 90 tariff requirements. This tariff details 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. For the 2024-25 compliance period, Avista has proposed minor changes to the language in these schedules. Draft language updates to each schedule are included in Appendix H and I to the *BCP*.

2) UE-19092 Attachment A – Condition 12a.

CONCLUSION AND CONTACT INFORMATION

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This 2024 *ACP* represents program efforts by Avista to achieve its expected eligible acquisition savings for the first year of the 2024-25 biennium. In addition, the plan is designed to identify various activities that promote and support energy efficiency for the transition to clean energy, for reduction of energy costs for customers, and deferral of investments in Avista's energy system. For additional supporting information, please see the following appendices:

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

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GLOSSARY OF TERMS

GLOSSARY OF TERMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

cooling degree days: A measure of how hot the temperature was on a given day or during a period of days. Cooling 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 above which cooling is typically needed. As an example, a day with a mean temperature of 80°F has 15 cooling degree days. If the next day has a mean temperature of 83°F, it has 18 cooling degree days.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

measure life: See Effective Useful Life (EUL).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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


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

Background

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

Overview

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

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

The following details the key aspects of this plan:

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

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

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

Summary of Individual Evaluations

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

2024-25 Electric and Natural Gas Portfolio Impact Evaluation

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

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

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

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

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

2025 Portfolio Process Evaluation

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

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

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

Third-Party Vendor Evaluation Plan

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

APPENDIX B – COST-EFFECTIVENESS METHODOLOGY

The cost-effectiveness evaluation of Avista's energy efficiency programs has been standardized to a significant degree in order to provide for greater transparency and understanding of the metrics. Avista has brought these 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

Per Docket UE-210826, the commission currently uses a modified TRC test, consistent with the council, as its primary cost-effectiveness test. Rate Schedule 90, "Electric Energy Efficiency Programs," also requires Avista to maintain a TRC cost-effectiveness of 1.0 or higher at the portfolio level (excluding low-income programs, which can be paid up to 100 percent of project cost). Avista therefore considers the modified TRC to be its primary cost-effectiveness test, and relies primarily on this test when evaluating existing and potential measures and programs, as well as when evaluating cost-effectiveness at the portfolio level. This modified TRC test includes all quantifiable non-energy impacts, a risk adder, and a 10 percent conservation benefit adder. All cost-effectiveness calculations assume a net-to-gross ratio of 1.0, consistent with the council's methodology.

The following table summarizes Avista's approach to calculating the four basic cost-effectiveness tests. The categorization and nomenclature provide clarity regarding each cost and benefit component. Although the TRC test is considered to be the primary test, Avista also provides Utility Cost Test ratios, in compliance with *BCP* condition 8b (Docket UE-210826), as well as the Participant Cost Test and the Ratepayer Impact test. The two latter tests provide insights into cost impacts for program participants as well as for ratepayers, which are important considerations for Avista's program designs and evaluations. Please note that some of the values within the table below represent negative values.

TABLE 2 – SUMMARIZATION OF STANDARD PRACTICE TEST BENEFITS AND COSTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- *Customer segment portfolio* – An aggregation of programs within a customer segment (e.g., low-income, residential, commercial/industrial).
- *Fuel portfolio* – Aggregating electric or natural gas energy efficiency programs.
- *Regular vs. low-income portfolios* – Separating income-qualified measures delivered through 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 the program and ultimately portfolio analysis. At each level of aggregation, those costs that are incremental at that stage are incorporated into the cost-effectiveness analysis. Incremental customer cost and benefits are fully incorporated into measure-level analysis. Utility costs (both labor and non-labor) are currently fully incorporated within the program level of aggregation based on previous advisory group discussions regarding the company's ability to expand or contract the portfolio to meet acquisition target. Cost allocations are made based on the expected adjusted Btu acquisition of the program, with adjustments by the relative avoided cost of electricity and natural gas (e.g., a kWh is a highly processed Btu compared with an equivalent natural gas).

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

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

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

Unit Energy Savings

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

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

Analytical Methodology Applicable to Low-Income Programs

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

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

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

As a consequence of these two assumptions, the low-income portfolio accrues considerable non-energy benefits, as do programs designed to serve Named Communities.

For low-income programs, the administrative reimbursement permitted to the CAA is considered to be a component of the measure cost. This amount reimburses the CAA for back-office costs that would, in a typical trade ally bid, be incorporated into the project invoice. For 2024, the admin reimbursement is 30 percent for Washington and 15 percent for Idaho.

APPENDIX C – ELECTRIC PROGRAM SUMMARY

Program	MWh Savings	Estimated Budget
Low-Income Programs Total		
Low-Income Programs	853,007	$ 3,620,460
Named Communities	574,288	$ 2,000,000
Deferred Maintenance Program	0	$ 700,000
Low-Income Programs Total	**1, 427,296**	**$ 6,320,460**
Residential Programs		
Prescriptive	1,160,543	$ 650,840
Multifamily (New Offerings)	253,369	$ 289,565
On-Bill Repayment	257,500	$ 294,286
Midstream	264,058	$ 150,890
Always-On	1,876,009	$ 25,461
Home Energy Audit	647,232	$ 705,408
Residential Programs Total	**4,458,711**	**$ 2,116,450**
Commercial/Industrial Programs		
Interior Prescriptive Lighting	6,585,225	$ 2,361,925
Exterior Prescriptive Lighting	2,637,497	$ 1,000,300
Direct Install Lighting	6,228,000	$ 4,448,571
Site-Specific	7,586,631	$ 2,912,000
Prescriptive Shell	198,445	$ 263,009
Midstream	528,117	$ 603,562
Green Motors	8,382	$ 2,188
Variable Frequency Drives	12,000	$ 6,171
Compressed Air	53,600	$ 18,377
Grocer	291	$ 2,857
Appliance and HVAC Controls	58,159	$ 21,878
Active Energy Management	1,429,340	$ 25,461
Pay for Performance	5,306	$ 6,064
Contractor Incentive Program	0	$ 108,380
Clean Buildings Accelerator	500,000	$ 571,429
Commercial/Industrial Programs Total	**25,830,993**	**$ 12,326,713**
Other Program and Administrative		
CPA & EM&V	-	$ 250,780
NEEA	6,945,935	$ 1,468,750
Pilot Programs	-	$ 1,000,000
Total Other Program and Administrative	**6,945,935**	**$ 2,719,530**
Total Electric Budget	**38,662,935**	**$ 23,508,613**

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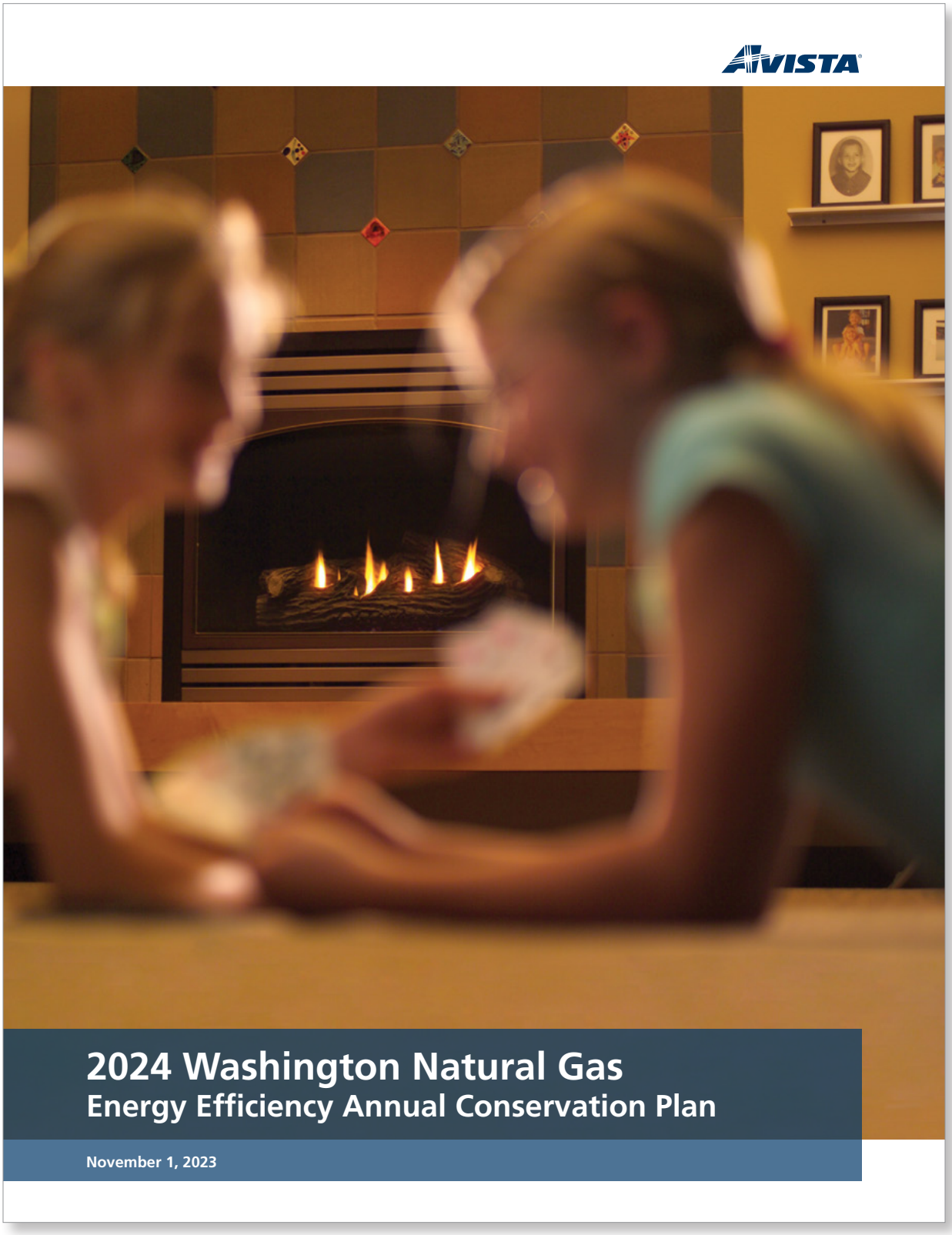
WASHINGTON WATER POWER

APPENDIX C – 2024 NATURAL GAS ENERGY EFFICIENCY ACP



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 Avista's control and may have a significant effect on the company's operations, results of operations, financial condition, or cash flows, which could cause actual results to differ materially from those anticipated in its statements.

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

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POMEROY
MERCANTILE

EXECUTIVE SUMMARY

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

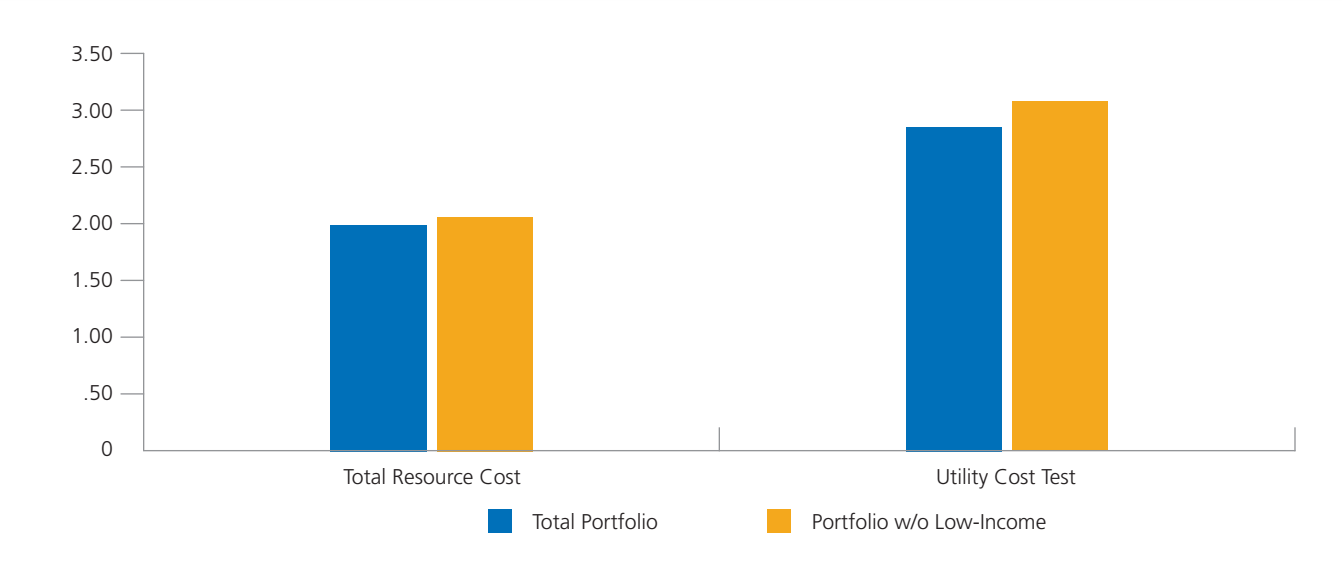
Table 1 illustrates the estimated savings and total budget per sector for 2024.

TABLE 1 – PORTFOLIO SAVINGS AND BUDGET BY SECTOR

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

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

FIGURE 1 – PORTFOLIO COST-EFFECTIVENESS



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

Introduction

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

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

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

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

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

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

2024 Natural Gas IRP Target

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

Key Impacts

Conservation Target Setting for Natural Gas

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

TABLE 2 – 10-YEAR NATURAL GAS CONSERVATION POTENTIAL

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Residential	295,957	470,308	553,376	633.806	721,475	851,062	874,313	843,883	781,107	688,891
Commercial	626,431	1,301,857	1,940,136	2,643,274	3,381,480	4,162,491	4,970,895	5,775,508	6,595,446	7,392,077
Industrial	19,861	40,045	60,305	80,830	101,293	121,697	142,004	162,077	181,802	201,051
Total Potential	**942,249**	**1,812,211**	**2,553,817**	**3,357,911**	**4,204,248**	**5,135,249**	**5,987,212**	**6,781,467**	**7,558,355**	**8,282,019**

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

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

Energy Efficiency Budget Projections

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

TABLE 3 – ENERGY EFFICIENCY BUDGET SUMMARY

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

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

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

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

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

TABLE 5 – CUSTOMER DIRECT INCENTIVE EXPENDITURE DETAIL

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

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

TABLE 6 – NON-INCENTIVE UTILITY EXPENSE DETAIL

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

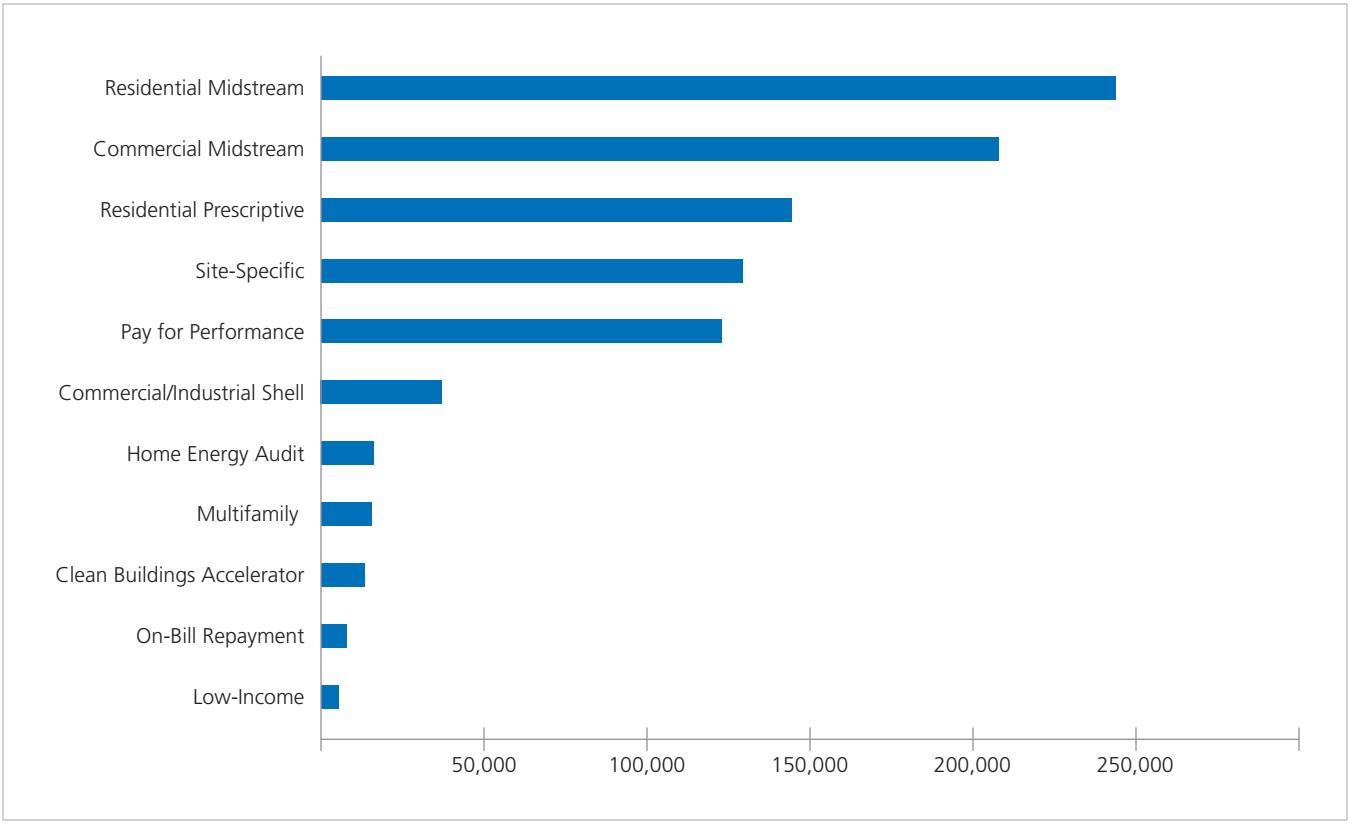
Projections of expected labor requirements by job classification are made by managers within the energy efficiency team, and labor overheads are applied. Labor is allocated to programs based on the weighted value of benefits the program brings to the overall portfolio.

ENERGY EFFICIENCY PORTFOLIO OVERVIEW

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

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

FIGURE 2 – SAVINGS FROM ENERGY EFFICIENCY PROGRAMS (THERMS)



Residential Portfolio Overview

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

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

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

TABLE 7 – RESIDENTIAL PROGRAM OVERVIEW

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

Residential Programs

Residential Prescriptive Programs

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

TABLE 8 – RESIDENTIAL PRESCRIPTIVE PROGRAM METRICS

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

Program Manager

Michele Drake

Residential ENERGY STAR Manufactured Homes Program

Program Description

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

Program Eligibility

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

Incentive Revisions

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

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

Residential Thermostat Program

Program Description

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

Incentive Revisions

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

Residential Shell Program

Program Description

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

Program Eligibility

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

Incentive Revisions

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

Midstream Incentive Program

Program Description

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

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

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

Program Manager

Michele Drake

TABLE 9 – MIDSTREAM RESIDENTIAL PROGRAM METRICS

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

TABLE 10 – MIDSTREAM COMMERCIAL PROGRAM METRICS

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

Program Eligibility

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

Incentive Revisions

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

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

Multifamily Weatherization Program – New Offerings

Program Description

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

Program Manager

Greta Zink

TABLE 11 – MULTIFAMILY WEATHERIZATION PROGRAM METRICS

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

Residential Home Energy Audit Program

Program Description

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

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

TABLE 12 – RESIDENTIAL HOME ENERGY AUDIT PROGRAM METRICS

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

Program Implementation

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

Program Eligibility

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

Program Measures and Incentives

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

On-Bill Repayment Program

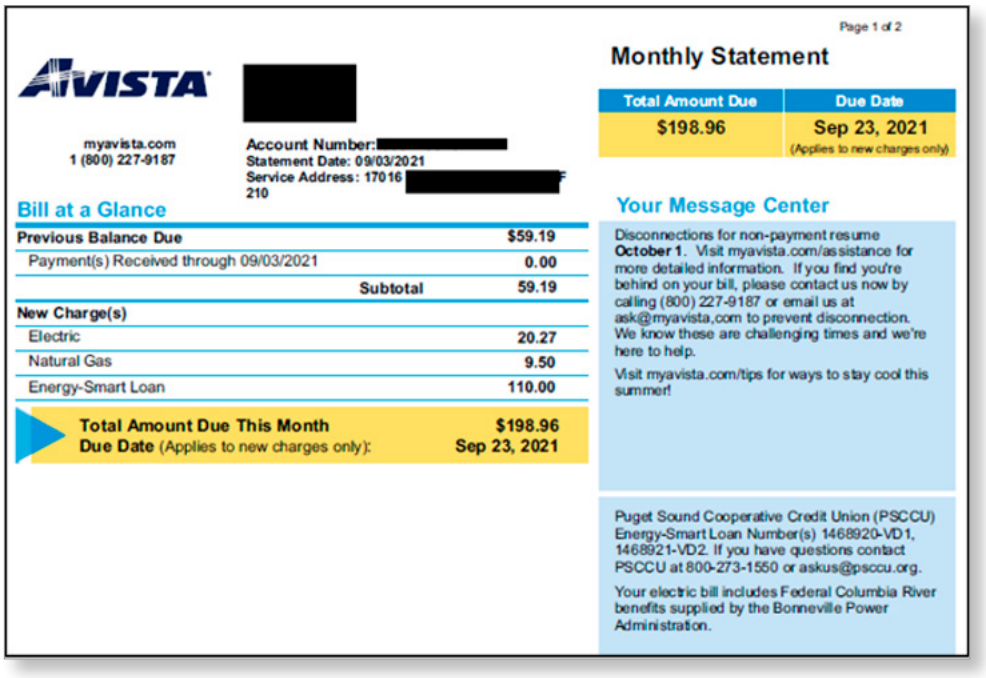
Program Description

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

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

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

FIGURE 3 – ON-BILL REPAYMENT PROGRAM BILL EXAMPLE



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AVISTA

[redacted]

myavista.com
1 (800) 227-9187

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

Monthly Statement

Total Amount Due	Due Date
$198.96	Sep 23, 2021 (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.

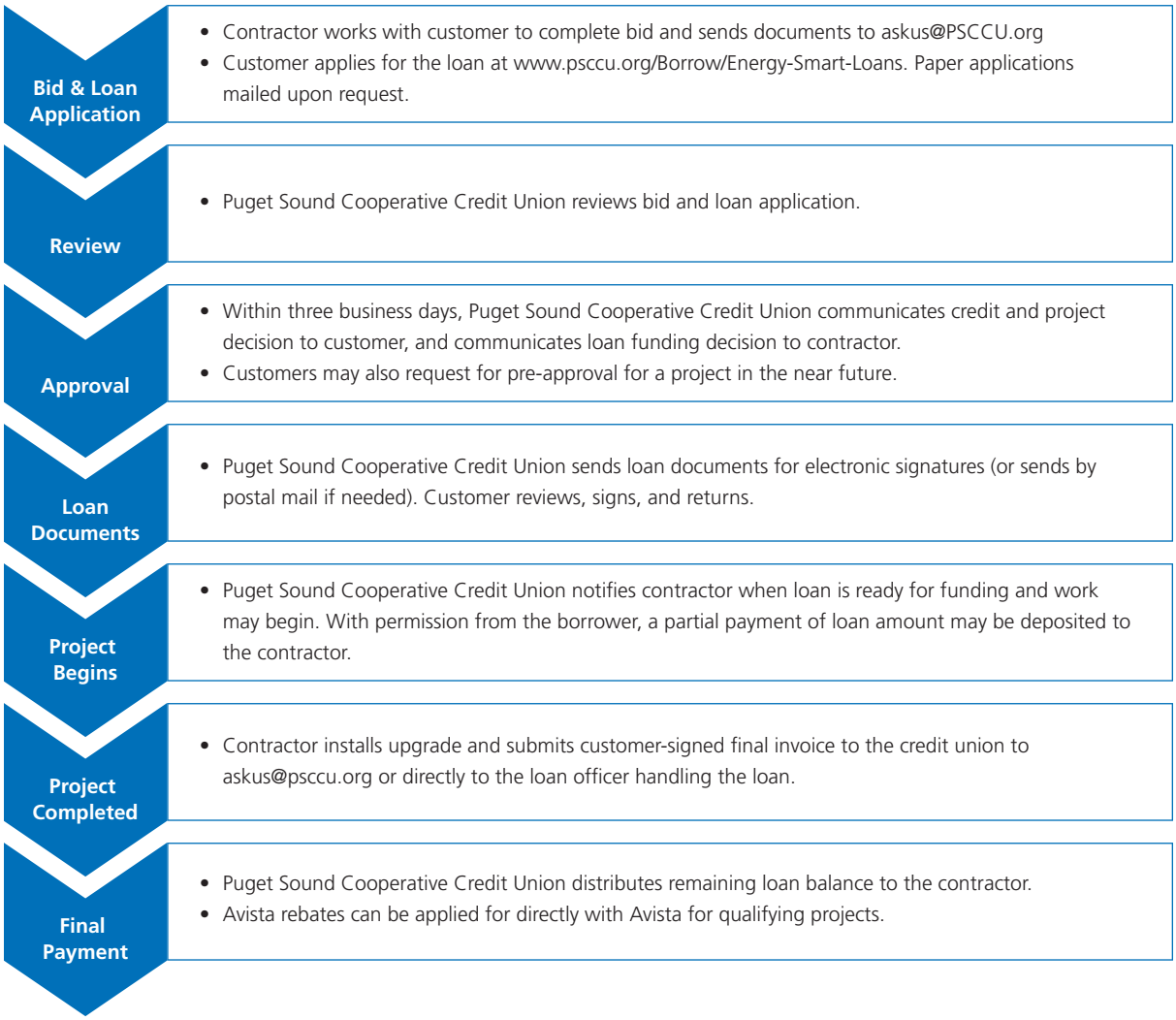
PSCCU favorable interest rates are further lowered by Avista subsidies to allow more customers access to energy efficiency project funding.

TABLE 13 – ON-BILL REPAYMENT PROGRAM RATES AND TERMS

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

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

FIGURE 4 – ON-BILL REPAYMENT CUSTOMER PARTICIPATION JOURNEY



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

TABLE 14 – ON-BILL REPAYMENT PROGRAM METRICS

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

Program Implementation

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

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

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

Program Eligibility

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

Low-Income Portfolio Overview

Low-Income Program

Program Description

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

Program Manager

Renee Zimmerman

TABLE 15 – LOW-INCOME PROGRAM METRICS

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

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

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

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

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

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

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

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

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

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

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

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

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

Commercial/Industrial Portfolio Overview

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

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

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

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

TABLE 18 – COMMERCIAL/INDUSTRIAL PROGRAM OVERVIEW

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

Commercial/Industrial Programs

Commercial/Industrial Site-Specific Program

Program Description

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

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

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

Program Manager

Lorri Kirstein

TABLE 19 – COMMERCIAL/INDUSTRIAL SITE-SPECIFIC PROGRAM METRICS

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

Program Implementation

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

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

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

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

Commercial/Industrial Business Partner Program

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

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

Commercial/Industrial Prescriptive Insulation Program

Program Description

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

Program Manager

Greta Zink

TABLE 21 – COMMERCIAL/INDUSTRIAL PRESCRIPTIVE SHELL PROGRAM METRICS

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

Program Implementation

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

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

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

Commercial/Industrial Pay for Performance Program

Program Description

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

TABLE 23 – COMMERCIAL/INDUSTRIAL PAY FOR PERFORMANCE PROGRAM METRICS

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

Program Manager

Greta Zink

Program Implementation

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

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

Pilot Projects and New Program Offerings

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

Washington State Clean Buildings Act Early Adopter Incentives

Program Description

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

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

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

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

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

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

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

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

TABLE 25 – COMMERCIAL/INDUSTRIAL CLEAN BUILDINGS ACCELERATOR PROGRAM METRICS

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

Hybrid Heat Pump Pilot

Program Description

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

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

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

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REGIONAL MARKET TRANSFORMATION

REGIONAL MARKET TRANSFORMATION

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

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

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

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

AVISTA-SPECIFIC METHODOLOGIES AND ANALYTICAL PRACTICES

AVISTA-SPECIFIC METHODOLOGIES AND ANALYTICAL PRACTICES

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

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

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

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

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

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

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

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

Evaluation, Measurement, and Verification

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

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

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

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

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

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

Cost-Effectiveness Metrics, Methodology, and Objectives

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

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

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

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

Energy Efficiency at Power Production Facilities

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

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

Schedule 190 – Energy Efficiency Programs

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

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

Schedule 191 – Demand Side Management Rate Adjustment

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

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CONCLUSION AND CONTACT INFORMATION

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

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

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GLOSSARY OF TERMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

measure life: See Effective Useful Life (EUL).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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


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

Background

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

Overview

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

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

The following details the key aspects of this plan:

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

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

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

Summary of Individual Evaluations

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

2024-25 Electric and Natural Gas Portfolio Impact Evaluation

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

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

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

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

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

2025 Portfolio Process Evaluation

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

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

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

Third-Party Vendor Evaluation Plan

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

APPENDIX B – COST-EFFECTIVENESS METHODOLOGY

The cost-effectiveness evaluation of Avista's energy efficiency programs has been standardized to a significant degree in order to provide for greater transparency and understanding of the metrics. Avista has brought these 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 (PAC) test.
3. ***Participant Cost Test:*** A participating customer's view of cost-effectiveness is focused upon reduced energy cost (at the customer's retail rate). Avista also includes the value of any non-energy benefits that they may receive. Incentives received by the customer offset the incremental cost associated with the efficiency measure. This is the participant cost test (PCT). Since participation within utility programs is voluntary, it could be asserted that well-informed participating customers are performing their own cost-effectiveness test based on their own circumstances and voluntarily participate only to the extent that it is beneficial for them to do so.
4. ***Ratepayer Impact Measure:*** Non-participating customers are affected by a utility program solely through the impact on their retail rate. Their usage, since they are non-participants, is unaffected by the program. The impact of energy efficiency programs on the utility rate imposed upon these non-participating customers is the result of the reduced utility energy costs, diminished utility revenues, and the cost associated with the utility program. Since utility retail energy rates exceed the avoided cost under almost all scenarios (peak end-use load and a few other exceptions apply), the non-participant rarely benefits. This is the rate impact measure (RIM), also known as the non-participant test.

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

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

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

TABLE 1 – SUMMARIZATION OF STANDARD PRACTICE TEST BENEFITS AND COSTS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Methodology for Allocation of Energy Efficiency Costs

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

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

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

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

Unit Energy Savings

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

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

Analytical Methodology Applicable to Low-Income Programs

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

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

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

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

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

APPENDIX C – NATURAL GAS PROGRAM SUMMARY

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

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APPENDIX D – UNIT ENERGY SAVINGS (UES) VALUES

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Electric – Residential Prescriptive							
Smart Thermostats – DIY	749	$ 222	-	7	$ 150.00	$ 24.07	Unit
Energy Star Homes – Manufactured, Electric, Dual Fuel	43	$ 2,676	-	45	$ 1,000.00	$ 0.00	Unit
Standard Size Refrigerator and Refrigerator-Freezer – Side-mounted Freezer – ENERGY STAR	49	$ 107	-	15	$ 100.00	$ 0.00	Unit
Standard Size Freezer – Upright – ENERGY STAR	20	$ 72	-	22	$ 50.00	$ 0.00	Unit
ENERGY STAR Washer	171	$ 59	-	14	$ 50.00	$ 23.81	Unit
ENERGY STAR Dryer	318	$ 412	-	12	$ 50.00	$ 44.20	Unit
Insulated Door R2.5-R5 HZ2 Zonal (ENERGY STAR Rated or Insulated R5)	800	$ 371	-	40	$ 100.00	$ 0.00	Unit
Wall Insulation	5	$ 14	-	45	$ 1.50	$ 0.06	Sq. Ft.
Attic <R11-R49/R38	1	$ 1	-	45	$ 1.50	$ 0.01	Sq. Ft.
Floor <R11-R19	0	$ 2	-	45	$ 1.00	$ 0.00	Sq. Ft.
Floor <R11 to R30	0	$ 2	-	45	$ 1.50	$ 0.00	Sq. Ft.
NEEM Certified Home	3736	$ 4428	-	43	$ 1000.00	$ 39.53	Sq. Ft.
Windows	5	$ 32	-	45	$ 10.00	$ 0.26	Sq. Ft.
Windows – DIY	5	$ 32	-	45	$ 5.00	$ 0.26	Sq. Ft.
Storm Windows	5	$ 14	-	20	$ 5.00	$ 0.00	Sq. Ft.
Storm Windows – DIY	5	$ 14	-	20	$ 4.00	$ 0.00	Sq. Ft.
Electric – Multifamily Weatherization							
Duct Sealing – MH any HZ Electric HVAC	888.03	$ 489	-	18	$ 230.89	$ 0.00	Unit
Insulated Door R2.5 – R5 HZ2 Zonal (ENERGY STAR-Rated or Insulated R5)	800.00	$ 371	-	40	$ 100.00	$ 49.40	Unit
Line Voltage Communicating Thermostat	71.30	$ 143	-	15	$ 20.00	$ 1.80	Unit
Smart Thermostats – DIY	650.00	$ 222	-	15	$ 150.00	$ 16.45	Unit
Smart Thermostats – Contractor Installed	650.00	$ 222	-	15	$ 200.00	$ 16.45	Unit
Attic <R11-R49/R38	1.02	$ 1	-	45	$ 1.50	$ 0.20	Sq. Ft.
Floor R0-R19	1.30	$ 1	-	45	$ 1.00	$ 0.20	Sq. Ft.
Floor R0 to R30	1.74	$ 1	-	45	$ 1.50	$ 0.26	Sq. Ft.
Windows – Single/Double to U30	24.44	$ 25	-	45	$ 10.00	$ 11.28	Sq. Ft.

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Windows – Single/Double to U30 – DIY	24.44	$ 25	-	45	$ 5.00	$ 11.28	Sq. Ft.
Storm Windows – Single/Double to U22	24.48	$ 10	-	20	$ 5.00	$ 11.30	Sq. Ft.
Storm Windows – Single/Double to U22 – DIY	24.48	$ 10	-	20	$ 4.00	$ 11.30	Sq. Ft.
Electric – Low-Income							
Air Infiltration – Electric	802.88	$ 1613	-	15	$ 1612.90	$ 137.75	Unit
ENERGY STAR-Rated Refrigerator	39.00	$ 100	-	20	$ 640.55	$ 0.00	Unit
Windows	6.04	$ 10	-	45	$ 20.45	$ 2.79	Sq. Ft.
Airsource Heat Pump	878.44	$ 7,820	-	15	$ 483.28	$ 121.31	Unit
Attic Insulation	0.57	$ 2	-	45	$ 1.76	$ 0.11	Sq. Ft.
Duct Insulation	2.68	$ 3	-	45	$ 3.05	$ 0.25	Sq. Ft.
Floor Insulation	1.17	$ 3	-	45	$ 3.03	$ 0.18	Sq. Ft.
Wall Insulation	2.31	$ 2	-	45	$ 2.17	$ 0.35	Sq. Ft.
Duct Sealing	709.93	$ 654	-	20	$ 654.20	$ 51.12	Unit
Ductless Heat Pump (Single Head) (w FAF)	3,016.23	$ 6,287	-	15	$ 6,286.70	$ 348.95	Unit
Ductless Heat Pump (Single Head) (displace zonal)	3,016.23	$ 6,287	-	15	$ 6,286.70	$ 292.43	Unit
Tier2-3 HPWH	587.33	$ 697	-	13	$ 697.39	$ 36.32	Unit
Conversion to Airsource Heat Pump	7,234.30	$ 7,820	-	15	$ 7,819.50	$ 730.40	Unit
HHS	1.00	$ 1	-	1	$ 1.00	$ 0.00	Unit
Outreach LEDs	9.00	$ 1	-	13	$ 1.10	$ 0.52	Unit
DoorSweep – CFM50 reduction – Leave Behind	14.38	$ 17	-	5	$ 20.00	$ 6.33	Unit
Storm Windows	6.17	$ 10	-	20	$ 10.47	$ 2.85	Sq. Ft.
Electric – Commercial Lighting							
T8 TLED 2'	24.75	$ 47	(0.34)	12	$ 9	$ 1	Unit
T8 TLED 3'	32.87	$ 276	(0.61)	12	$ 11	$ 1	Unit
T8 TLED 4'	22.16	$ 322	(0.69)	12	$ 14	$ 1	Unit
T8 TLED 8'	48.56	$ 450	(1.35)	12	$ 27	$ 3	Unit
U-Bend	30.21	$ 9	(0.62)	12	$ 15	$ 1	Unit
T5 TLED 4'	27.89	$ 87	(0.81)	20	$ 17	$ 2	Unit
T5HO TLED	40.53	$ 28	(1.49)	12	$ 35	$ 3	Unit
TLED to TLED	16.41	$ 15	(0.35)	12	$ 7	$ 1	Unit
CFL to CFLED	53.40	$ 28	(1.04)	12	$ 18	$ 2	Unit

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
1x4 Fixture	199.41	$ 85	(1.67)	12	$ 40	$ 3	Unit
2x2 Fixtures	134.90	$ 813	(1.97)	12	$ 40	$ 4	Unit
2x4 Fixtures	162.79	$ 53	(3.82)	12	$ 75	$ 8	Unit
T8 8’ Strip Fixture	230.51	$ 184	(4.41)	20	$ 90	$ 9	Unit
4LT5HO to 135W Fixture	272.72	$ 13	(6.07)	12	$ 120	$ 12	Unit
6LT5HO to 160W Fixture	328.31	$ 17	(7.60)	12	$ 210	$ 15	Unit
42W CFL to 20W LED Fixture Retrofit	74.57	$ 57	(1.04)	12	$ 20	$ 2	Unit
65W Incan to 20W LED Fixture Retrofit	59.99	$ 216	(2.67)	12	$ 55	$ 5	Unit
75-100W Incan to 20W LED Fixture Retrofit	87.54	$ 19	(3.19)	12	$ 65	$ 6	Unit
150W Incan to 30W LED Fixture Retrofit	88.75	$ 240	(6.48)	12	$ 85	$ 13	Unit
175W to 75W Fixture/Lamp	206.42	$ 200	(7.20)	12	$ 150	$ 15	Unit
250W to 140W Fixture/Lamp	354.29	$ 12	(14.34)	12	$ 300	$ 29	Unit
400W to 175W Fixture/Lamp	391.99	$ 15	(15.51)	12	$ 325	$ 32	Unit
1000W to 400W Fixture/Lamp	609.26	$ 95	(62.57)	12	$ 600	$ 127	Unit
Occ Sensor Wall Switch	108.93	$ 143	(0.81)	12	$ 17	$ 2	Unit
Occ Sensors Ceiling/Fixture Mount	159.14	$ 173	(3.58)	12	$ 75	$ 7	Unit
LLLC Fixture – NLC	175.97	$ 230	(7.16)	12	$ 150	$ 15	Unit
≤ 9W MR16 LED	9.72	$ 348	(1.00)	12	$ 9	$ 2	Unit
TLED to TLED (< 5W reduction)	17.00	$ 363	(0.14)	12	$ 3	$ 0.00	Unit
89 to 25W Fixture/Lamp	323.52	$ 152	-	12	$ 85	$ 8	Unit
90 to 30W Fixture/Lamp	454.21	$ 227	-	12	$ 120	$ 11	Unit
150 to 50W Fixture/Lamp	684.16	$ 289	-	12	$ 180	$ 17	Unit
175 to 100W Fixture/Lamp	677.42	$ 389	-	12	$ 180	$ 17	Unit
250 to 140W Fixture/Lamp	886.33	$ 335	-	12	$ 230	$ 22	Unit
320 to 160W Fixture/Lamp	1,056.36	$ 446	-	12	$ 280	$ 27	Unit
400 to 175W Fixture/Lamp	1,444.25	$ 466	-	12	$ 375	$ 36	Unit
575 to 300W Fixture/Lamp	1,647.36	$ 731	-	12	$ 400	$ 42	Unit
750 to 300W Fixture/Lamp	2,610.08	$ 750	-	12	$ 750	$ 66	Unit
1000 to 400W Fixture/Lamp	3,421.68	$ 1,009	-	12	$ 930	$ 86	Unit
1500 to 600W Fixture/Lamp	4,976.40	$ 1,180	-	12	$ 1,300	$ 126	Unit
100W NC Fixture	655.61	$ 272	-	12	$ 170	$ 17	Unit
140W NC Fixture	802.80	$ 400	-	12	$ 225	$ 20	Unit
160W NC Fixture	962.72	$ 658	-	12	$ 250	$ 24	Unit

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Sign Lighting	45.13	$ 36	-	10	$ 13	$ 1	Unit
Networked Lighting Controls	166.02	$ 164	-	20	$ 85	$ 4	Unit
T12/T8 Tubular Fluorescent	77.22	$ 30	-	12	$ 20	$ 2	Unit
200W Dig HID	493.35	$ 250	-	12	$ 120	$ 12	Unit
Electric – Commercial/Industrial Shell							
Less than R11 Attic Insulation (E/E) to R30-R44 Attic Insulation	1.02	$ 1	-	22	$ 1.00	$ 0.00	Sq. Ft.
Less than R11 Roof Insulation (E/E) to R30+ Roof Insulation	1.36	$ 1	-	22	$ 1.00	$ 0.00	Sq. Ft.
Less than R4 Wall Insulation (E/E) to R11-R18 Wall Insulation	2.82	$ 1	-	22	$ 1.00	$ 0.00	Sq. Ft.
Less than R4 Wall Insulation (E/E) to R19+ Wall Insulation	4.11	$ 1	-	22	$ 1.25	$ 0.00	Sq. Ft.
Electric – Green Motors							
15 HP Industrial	389.84	$ 107	-	6	$ 30.00	$ 3.83	Unit
25 HP Industrial	622.21	$ 136	-	7	$ 50.00	$ 6.11	Unit
30 HP Industrial	670.22	$ 149	-	7	$ 60.00	$ 6.58	Unit
40 HP Industrial	780.50	$ 182	-	7	$ 80.00	$ 7.67	Unit
50 HP Industrial	839.98	$ 202	-	7	$ 100.00	$ 8.25	Unit
60 HP Industrial	846.27	$ 238	-	8	$ 120.00	$ 8.31	Unit
75 HP Industrial	870.95	$ 257	-	8	$ 150.00	$ 8.56	Unit
100 HP Industrial	1,149.54	$ 319	-	8	$ 200.00	$ 11.29	Unit
125 HP Industrial	1,319.47	$ 358	-	8	$ 250.00	$ 12.96	Unit
150 HP Industrial	1,568.48	$ 399	-	8	$ 300.00	$ 15.41	Unit
200 HP Industrial	2,080.47	$ 481	-	8	$ 400.00	$ 20.44	Unit
250 HP Industrial	2,750.98	$ 618	-	8	$ 500.00	$ 27.03	Unit
300 HP Industrial	3,284.11	$ 624	-	8	$ 600.00	$ 32.26	Unit
350 HP Industrial	3,828.65	$ 654	-	8	$ 700.00	$ 37.61	Unit
400 HP Industrial	4,341.10	$ 731	-	8	$ 800.00	$ 42.65	Unit
450 HP Industrial	4,875.55	$ 799	-	8	$ 900.00	$ 47.90	Unit
500 HP Industrial	5,424.83	$ 863	-	8	$ 1,000.00	$ 53.29	Unit
600 HP Industrial	5,895.51	$ 1,272	-	8	$ 1,200.00	$ 57.92	Unit
700 HP Industrial	6,848.91	$ 1,388	-	8	$ 1,400.00	$ 67.28	Unit
800 HP Industrial	7,810.72	$ 1,539	-	8	$ 1,600.00	$ 76.73	Unit
900 HP Industrial	8,768.45	$ 1,697	-	8	$ 1,800.00	$ 86.14	Unit
1000 HP Industrial	9,701.55	$ 1,829	-	8	$ 2,000.00	$ 95.31	Unit

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
1250 HP Industrial	11,451.18	$ 2,185	-	8	$ 2,500.00	$ 112.49	Unit
1500 HP Industrial	13,712.46	$ 2,503	-	8	$ 3,000.00	$ 134.71	Unit
1750 HP Industrial	15,930.61	$ 2,857	-	8	$ 3,500.00	$ 156.50	Unit
2000 HP Industrial	18,130.04	$ 3,205	-	8	$ 4,000.00	$ 178.11	Unit
2250 HP Industrial	20,268.42	$ 3,491	-	8	$ 4,500.00	$ 199.11	Unit
2500 HP Industrial	22,473.40	$ 3,820	-	8	$ 5,000.00	$ 220.78	Unit
3000 HP Industrial	26,799.70	$ 4,466	-	8	$ 6,000.00	$ 263.28	Unit
3500 HP Industrial	31,201.25	$ 4,935	-	8	$ 7,000.00	$ 306.52	Unit
4000 HP Industrial	35,658.57	$ 5,510	-	8	$ 8,000.00	$ 350.30	Unit
4500 HP Industrial	40,032.49	$ 5,938	-	8	$ 9,000.00	$ 393.27	Unit
5000 HP Industrial	44,388.16	$ 6,338	-	8	$ 10,000.00	$ 436.06	Unit
Electric – Variable Frequency Drives							
Prescriptive VFDs – HVAC Cooling Pump	1,091.00	$ 200	-	16	$ 200.00	$ 3.05	Unit
Prescriptive VFDS – HVAC Heating Pump or combo	1,756.00	$ 200	-	16	$ 200.00	$ 4.92	Unit
Electric – Grocer							
LT Case: T12 to LP LED Inside Lamp	113.95	$ 15.02	-	7	$ 15.00	$ 0.32	Unit
MT Case: T8 to LED Inside Lamp	51.77	$ 15.02	-	7	$ 10.00	$ 0.14	Unit
LT Case: T8 to LP LED Inside Lamp	51.77	$ 15.02	-	7	$ 10.00	$ 0.14	Unit
T12 to LP LED Outside Lamp	69.84	$ 15.02	-	7	$ 15.00	$ 0.20	Unit
T8 to LP LED Outside Lamp	48.49	$ 15.02	-	7	$ 15.00	$ 0.14	Unit
MT Case: 2 T8 to 1 High Power LED Inside Lamp	99.03	$ 24.28	-	7	$ 20.00	$ 0.28	Unit
MT Case: 2 T12 to 1 High Power LED Inside Lamp	155.48	$ 24.28	-	7	$ 20.00	$ 0.44	Unit
LT Case: 2 T8 to 1 High Power LED Inside Lamp	83.39	$ 24.28	-	7	$ 20.00	$ 0.23	Unit
LT Case: 2 T12 to 1 High Power LED Inside Lamp	130.93	$ 24.28	-	7	$ 20.00	$ 0.37	Unit
MT Case: 2 T8 to 1 High Power LED Outside Lamp	108.67	$ 24.28	-	7	$ 15.00	$ 0.30	Unit
MT Case: 2 T12 to 1 High Power LED Outside Lamp	170.62	$ 24.28	-	7	$ 15.00	$ 0.48	Unit
Anti-Sweat Heater Controls – Low Temp	311.82	$ 100.09	-	12	$ 40.00	$ 0.87	Unit
Anti-Sweat Heater Controls – Med Temp	230.87	$ 56.31	-	12	$ 40.00	$ 0.65	Unit

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Gaskets for Low Temp Reach-in Glass Doors	211.00	$ 52.50	-	1	$ 40.00	$ 0.59	Unit
Gaskets for Medium Temp Reach-in Glass Doors	118.00	$ 42.50	-	1	$ 40.00	$ 0.33	Unit
Gaskets for Walk-in Freezer – Main Door	711.00	$ 59.00	-	1	$ 65.00	$ 1.99	Unit
Gaskets for Walk-in Cooler – Main	394.00	$ 40.00	-	1	$ 25.00	$ 1.10	Unit
Floating Head Pressure for Single Compressor Systems, LT Condensing Unit	1,391.94	$ 1,393.34	-	15	$ 100.00	$ 3.90	Unit
Floating Head Pressure for Single Compressor Systems, LT Remote Condenser	2,966.13	$ 1,393.34	-	15	$ 100.00	$ 8.30	Unit
Floating Head Pressure for Single Compressor Systems, MT Condensing Unit	712.01	$ 1,514.48	-	15	$ 100.00	$ 1.99	Unit
Floating Head Pressure for Single Compressor Systems, MT Remote Condenser	2,366.40	$ 1,514.48	-	15	$ 100.00	$ 6.63	Unit
Strip Curtains for Convenience Store Walk-in Freezers	20.00	$ 10.80	-	4	$ 10.00	$ 0.06	Unit
Strip Curtains for Restaurant Walk-in Freezers	100.00	$ 10.80	-	4	$ 10.00	$ 0.28	Unit
Strip Curtains for Supermarket Walk-in Coolers	80.00	$ 10.80	-	4	$ 10.00	$ 0.22	Unit
Strip Curtains for Supermarket Walk-in Freezers	340.00	$ 10.80	-	4	$ 10.00	$ 0.95	Unit
20W ECM replacing 20W Shaded Pole	186.91	$ 147.99	-	15	$ 100.00	$ 0.00	Unit
20W ECM replacing 1/20HP Shaded Pole	502.51	$ 151.74	-	15	$ 100.00	$ 0.00	Unit
20W ECM replacing 1/15HP Shaded Pole	807.76	$ 159.39	-	15	$ 100.00	$ 0.00	Unit
20W ECM replacing 1/20HP Permanent Split Capacitor	255.07	$ 151.73	-	15	$ 100.00	$ 0.00	Unit
20W ECM replacing 1/15HP Permanent Split Capacitor	371.36	$ 161.52	-	15	$ 100.00	$ 0.00	Unit
1/20HP ECM replacing 1/20HP Shaded Pole	377.34	$ 151.74	-	15	$ 100.00	$ 0.00	Unit
1/20HP ECM replacing 1/15HP Shaded Pole	682.60	$ 159.39	-	15	$ 100.00	$ 0.00	Unit
1/20HP ECM replacing 1/20HP Permanent Split Capacitor	129.91	$ 151.73	-	15	$ 100.00	$ 0.00	Unit
1/20HP ECM replacing 1/15HP Permanent Split Capacitor	246.20	$ 161.52	-	15	$ 100.00	$ 0.00	Unit

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Medium Temp ECM replacing Shaded Pole 9W Output Power	360.69	$ 122.31	-	15	$ 50.00	$ 0.00	Unit
Medium Temp ECM replacing Shaded Pole 10 to 15W Output Power	508.52	$ 122.31	-	15	$ 50.00	$ 0.00	Unit
Medium Temp ECM replacing Shaded Pole 16 to 20W Output Power	580.47	$ 143.99	-	15	$ 50.00	$ 0.00	Unit
Medium Temp ECM replacing Shaded Pole 20+W Output Power	551.44	$ 140.24	-	15	$ 50.00	$ 0.00	Unit
Medium Temp ECM replacing Permanent Split Capacitor 9W Output Power	200.09	$ 122.31	-	15	$ 50.00	$ 0.00	Unit
Medium Temp ECM replacing Permanent Split Capacitor 10 to 15W Output Power	170.88	$ 122.31	-	15	$ 50.00	$ 0.00	Unit
Medium Temp ECM replacing Permanent Split Capacitor 16 to 20W Output Power	232.24	$ 143.99	-	15	$ 50.00	$ 0.00	Unit
Medium Temp ECM replacing Permanent Split Capacitor 20+W Output Power	189.84	$ 140.24	-	15	$ 50.00	$ 0.00	Unit
Medium Temp PMSM replacing Shaded Pole 9W Output Power	375.93	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Medium Temp PMSM replacing Shaded Pole 10 to 15W Output Power	530.00	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Medium Temp PMSM replacing Permanent Split Capacitor 9W Output Power	215.32	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Medium Temp PMSM replacing Permanent Split Capacitor 10 to 15W Output Power	192.36	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Medium Temp PMSM replacing Electronically Commutated 9W Output Power	15.23	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Medium Temp PMSM replacing Electronically Commutated 10 to 15W Output Power	21.47	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Low Temp ECM replacing Shaded Pole 9W Output Power	499.94	$ 122.31	-	15	$ 50.00	$ 0.00	Unit
Low Temp ECM replacing Shaded Pole 10 to 15W Output Power	704.83	$ 122.31	-	15	$ 50.00	$ 0.00	Unit
Low Temp ECM replacing Shaded Pole 16 to 20W Output Power	804.55	$ 143.99	-	15	$ 50.00	$ 0.00	Unit
Low Temp ECM replacing Shaded Pole 20+W Output Power	764.31	$ 140.24	-	15	$ 50.00	$ 0.00	Unit
Low Temp ECM replacing Permanent Split Capacitor 9W Output Power	277.33	$ 122.31	-	15	$ 50.00	$ 0.00	Unit

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Low Temp ECM replacing Permanent Split Capacitor 10 to 15W Output Power	236.85	$ 122.31	-	15	$ 50.00	$ 0.00	Unit
Low Temp ECM replacing Permanent Split Capacitor 16 to 20W Output Power	321.90	$ 143.99	-	15	$ 50.00	$ 0.00	Unit
Low Temp ECM replacing Permanent Split Capacitor 20+W Output Power	263.12	$ 140.24	-	15	$ 50.00	$ 0.00	Unit
Low Temp PMSM replacing Shaded Pole 9W Output Power	521.05	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Low Temp PMSM replacing Shaded Pole 10 to 15W Output Power	734.60	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Low Temp PMSM replacing Permanent Split Capacitor 9W Output Power	298.44	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Low Temp PMSM replacing Permanent Split Capacitor 10 to 15W Output Power	266.62	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Low Temp PMSM replacing Electronically Commutated 9W Output Power	21.11	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Low Temp PMSM replacing Electronically Commutated 10 to 15W Output Power	29.76	$ 130.18	-	15	$ 50.00	$ 0.00	Unit
Walk-In Cooler Evaporator Fan Motor – 20W Shaded Pole to 20W ECM	522.41	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Cooler Evaporator Fan Motor – 20W Shaded Pole to 1/20 HP ECM	285.88	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Cooler Evaporator Fan Motor – 20W Shaded Pole to 1/15 HP ECM	(1.27)	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Cooler Evaporator Fan Motor – 1/20 HP Shaded Pole to 20W ECM	1,255.90	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Cooler Evaporator Fan Motor – 1/20 HP Shaded Pole to 1/20 HP ECM	1,019.37	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Cooler Evaporator Fan Motor – 1/20 HP Shaded Pole to 1/15 HP ECM	732.22	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Cooler Evaporator Fan Motor – 1/15 HP Shaded Pole to 20W ECM	1,856.03	$ 293.21	-	15	$ 100.00	$ 0.00	Unit
Walk-In Cooler Evaporator Fan Motor – 1/15 HP Shaded Pole to 1/20 HP ECM	1,619.50	$ 293.21	-	15	$ 100.00	$ 0.00	Unit
Walk-In Cooler Evaporator Fan Motor – 1/15 HP Shaded Pole to 1/15 HP ECM	1,332.36	$ 293.21	-	15	$ 100.00	$ 0.00	Unit
Walk-In Freezer Evaporator Fan Motor – 20W Shaded Pole to 20W ECM	694.09	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Freezer Evaporator Fan Motor – 20W Shaded Pole to 1/20 HP ECM	379.83	$ 192.18	-	15	$ 100.00	$ 0.00	Unit

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Walk-In Freezer Evaporator Fan Motor – 20W Shaded Pole to 1/15 HP ECM	(1.69)	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Freezer Evaporator Fan Motor – 1/20 HP Shaded Pole to 20W ECM	1,668.64	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Freezer Evaporator Fan Motor – 1/20 HP Shaded Pole to 1/20 HP ECM	1,354.37	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Freezer Evaporator Fan Motor – 1/20 HP Shaded Pole to 1/15 HP ECM	972.86	$ 192.18	-	15	$ 100.00	$ 0.00	Unit
Walk-In Freezer Evaporator Fan Motor – 1/15 HP Shaded Pole to 20W ECM	2,466.00	$ 293.21	-	15	$ 100.00	$ 0.00	Unit
Walk-In Freezer Evaporator Fan Motor – 1/15 HP Shaded Pole to 1/20 HP ECM	2,151.74	$ 293.21	-	15	$ 100.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Medium Temp – >44W – 2 or more motors per controller	688.36	$ 201.16	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller - Walk-In – Medium Temp – 24-43W – 2 or more motors per controller	254.23	$ 201.16	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Low Temp – >44W – 3 or more motors per controller	304.00	$ 164.11	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Low Temp – 24-43W – 3 or more motors per controller	202.67	$ 164.11	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Medium Temp – ≤23W – 5 or more motors per controller	149.52	$ 115.48	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Low Temp – ≤ 23W – 7 or more motors per controller	119.20	$ 62.99	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Medium Temp – >44 – 1 or 2 motors per controller	688.36	$ 623.60	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Medium Temp – 24-43W – 1 or 2 motors per controller	254.23	$ 623.60	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Low Temp – >44W– 1 or 2 motors per controller	304.00	$ 328.21	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Low Temp – 24-43W – 1 or 2 motors per controller	202.67	$ 328.21	-	15	$ 50.00	$ 0.00	Unit
Evaporator Fan ECM Motor Controller – Walk-In – Medium Temp – ≤23W – 1 to 4 motors per controller	149.52	$ 230.96	-	15	$ 50.00	$ 0.00	Unit

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Evaporator Fan ECM Motor Controller – Walk-In – Low Temp – ≤ 23W – 1 to 6 motors per controller	119.20	$ 207.87	-	15	$ 50.00	$ 0.00	Unit
Add door to medium temperature vertical remote condensing refrigerated case	972.30	$ 389.63	-	12	$ 225.00	$ 0.00	Unit
Add door to low temperature horizontal remote condensing refrigerated case	625.31	$ 389.63	-	12	$ 200.00	$ 0.00	Unit
Add door to medium temperature horizontal remote condensing refrigerated case	447.43	$ 389.63	-	12	$ 175.00	$ 0.00	Unit
Electric – Midstream							
Commercial HVAC	796.94	$ 300	-	12	$ 300.00	$ 0.00	Unit
Commercial Food Service	1,368.49	$ 1,057	-	12	$ 1,057.38	$ 0.00	Unit
Commercial HPWH	7,272.38	$ 600	-	12	$ 600.00	$ 0.00	Unit
Air Compression							
Compressed Air	6,000.00	$ 1,440	-	10	$ 1,440.00	$ 579.60	Unit
Natural Gas – Residential Prescriptive							
Furnace 95% (Multi-Stage)	-	$ 823	97.00	20	$ 800.00	$ 26.05	Unit
Furnace 95% (Single Stage)	-	$ 823	87.00	20	$ 700.00	$ 23.36	Unit
Web Thermostat – DIY	-	$ 240	26.64	15	$ 150.00	$ 5.89	Unit
Web Thermostat – Contractor Installed	-	$ 294	26.64	15	$ 200.00	$ 5.25	Unit
Tankless Water Heater (0.82+)	-	$ 1035	70.00	20	$ 400.00	$ 10.47	Unit
ENERGY STAR Home – Natural Gas Only	-	$ 2117	133.98	25	$ 600.00	$ 0.00	Unit
High Efficiency Water Heaters (<= 55) (.65 or greater)	-	$ 316	21.80	15	$ 100.00	$ 10.53	Unit
Boiler 95% AFUE	-	$ 2855	112.40	20	$ 450.00	$ 30.65	Unit
High Efficiency Wall Furnace (AFUE 90%)	-	$ 2000	81.66	20	$ 450.00	$ 21.93	Unit
Tankless Water Heater (0.93+)	-	$ 1500	85.00	20	$ 500.00	$ 12.71	Unit
Insulated Door R2.5-R5 HZ2 Zonal (ENERGY STAR-Rated or Insulated R5)	-	$ 371	27.30	40	$ 100.00	$ 0.00	Unit
Wall Insulation	-	$ 14	0.79	45	$ 1.50	$ 0.01	Sq. Ft.
Attic <R11-R49/R38	-	$ 1	0.04	45	$ 1.50	$ 0.00	Sq. Ft.
Floor <R11-R19	-	$ 2	0.04	45	$ 1.00	$ 0.00	Sq. Ft.
Floor <R11 to R30	-	$ 2	0.01	45	$ 1.50	$ 0.00	Sq. Ft.
Windows	-	$ 32	0.30	45	$ 10.00	$ 0.00	Sq. Ft.

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Windows – DIY	-	$ 32	0.30	45	$ 5.00	$ 0.00	Sq. Ft.
Storm Windows	-	$ 14	0.37	20	$ 5.00	$ 0.00	Sq. Ft.
Storm Windows – DIY	-	$ 14	0.37	20	$ 4.00	$ 0.00	Sq. Ft.
Natural Gas – Residential Midstream							
Furnaces	-	$ 823	1647.00	20	$ 450.00	$ 0.00	Unit
Water Heater	-	$ 315	38.57	20	$ 125.00	$ 0.00	Unit
Natural Gas – Low-Income							
Air Infiltration	-	$ 979	16.09	15	$ 979.20	$ 1.25	Sq. Ft.
ENERGY STAR-Rated Doors	-	$ 704	12.32	40	$ 704.40	$ 0.71	Unit
Windows	-	$ 31	0.31	45	$ 30.74	$ 0.02	Sq. Ft.
High Efficiency Furnace	-	$ 3,613	73.55	20	$ 3,612.67	$ 5.25	Unit
Water Heater	-	$ 2,516	7.74	13	$ 2,515.62	$ 0.55	Unit
Attic Insulation	-	$ 2	0.04	45	$ 1.87	$ 0.00	Sq. Ft.
Duct Insulation	-	$ 3	0.17	45	$ 2.92	$ 0.01	Sq. Ft.
Floor Insulation	-	$ 3	0.05	45	$ 2.67	$ 0.00	Sq. Ft.
Wall Insulation	-	$ 2	0.06	45	$ 2.12	$ 0.00	Sq. Ft.
Duct Sealing	-	$ 794	20.17	20	$ 793.95	$ 1.70	Unit
Health and Human Safety	-	$ 0	1.00	1	$ 0.10	$ 0.00	Unit
Tankless Water Heater	-	$ 573	66.50	20	$ 573.00	$ 4.75	Unit
High Efficiency Boiler	-	$ 794	20.17	20	$ 793.95	$ 1.44	Unit
Natural Gas – Multifamily Weatherization							
Web Thermostat – DIY	-	$ 240	26.64	15	$ 150.00	$ 7.15	Unit
Web Thermostat – Contractor Installed	-	$ 294	26.64	15	$ 200.00	$ 5.89	Unit
Tankless Water Heater (0.82+)	-	$ 1500	70.00	20	$ 500.00	$ 0.00	Unit
Attic <R11-R49/R38	-	$ 1	0.03	45	$ 1.50	$ 0.00	Sq. Ft.
Floor R0-R19	-	$ 1	0.04	45	$ 1.00	$ 0.00	Sq. Ft.
Floor R0 to R30	-	$ 1	0.06	45	$ 1.50	$ 0.00	Sq. Ft.
Windows – Single/Double to U22	-	$ 29	0.95	45	$ 10.00	$ 0.00	Sq. Ft.
Windows – Single/Double to U30 – DIY	-	$ 25	0.83	45	$ 5.00	$ 0.00	Sq. Ft.
Storm Windows – Single/Double to U22	-	$ 10	0.84	20	$ 5.00	$ 0.00	Sq. Ft.
Storm Windows – Single/Double to U22 – DIY	-	$ 10	0.84	20	$ 4.00	$ 0.00	Sq. Ft.

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Natural Gas – Commercial Midstream							
Water Heaters	-	$ 5,444.30	1,088.86	20	$ 1,760.59	$ 0.00	Unit
Boilers	-	$ 6,127.95	1,225.59	16	$ 7,889.85	$ 0.00	Unit
Food Services	-	$ 4,287.00	3,619.00	12	$ 1,057.38	$ 0.00	Unit
Natural Gas – Commercial/Industrial Shell							
Less than R11 Attic Insulation (E/G) to R30-R44 Attic Insulation	-	$ 1	0.09	22	$ 1.50	$ 0.17	Sq. Ft.
Less than R11 Attic Insulation (E/G) to R45+ Attic Insulation	-	$ 1	0.13	22	$ 1.50	$ 0.25	Sq. Ft.
Less than R11 Roof Insulation (E/G) to R30+ Roof Insulation	-	$ 1	0.12	22	$ 1.50	$ 0.23	Sq. Ft.
Less than R4 Wall Insulation (E/G) to R11-R18 Wall Insulation	-	$ 1	0.24	22	$ 1.50	$ 0.46	Sq. Ft.
Less than R4 Wall Insulation (E/G) to R19+ Wall Insulation	-	$ 1	0.36	22	$ 1.50	$ 0.69	Sq. Ft.
Natural Gas – Commercial/Industrial HVAC							
Boiler <300kBtu .85-.89 AFUE	-	$ 12	1.77	16	$ 5.00	$ 1.34	Unit
Boiler <300kBtu .90+ AFUE AFUE	-	$ 15	2.87	16	$ 9.00	$ 2.17	Unit
Multistage Furnace <225 kBtu .90-.95 AFUE	-	$ 9	3.67	16	$ 11.00	$ 2.78	Unit
Multistage Furnace <225 kBtu .95+ AFUE	-	$ 11	4.22	16	$ 13.00	$ 3.19	Unit
Singlestage Furnace <225 kBtu .90-.95 AFUE	-	$ 7	2.87	16	$ 5.00	$ 2.17	Unit
Singlestage Furnace <225 kBtu .95+ AFUE	-	$ 9	3.67	16	$ 11.00	$ 2.78	Unit
Unit Heater (100kBtu,0.90) – Small Unit	-	$ 1200	194.54	16	$ 600.00	$ 147.28	Unit
Unit Heater (200kBtu,0.90) – Small Unit	-	$ 2400	389.09	16	$ 1200.00	$ 294.57	Unit
Unit Heater (300kBtu,0.90) – Small Unit	-	$ 3600	583.63	16	$ 1800.00	$ 441.85	Unit
Multistage Furnace <225 kBtu .97+ AFUE	-	$ 345	29.30	16	$ 1200.00	$ 0.00	Unit
Singlestage Furnace <225 kBtu .97+ AFUE	-	$ 345	29.30	16	$ 1200.00	$ 0.00	Unit
Electric Dryer, Electric Hot Water, Front-load ENERGY STAR	-	$ 427	29.15		$ 200.00	$ 0.00	Unit
Electric Dryer, Natural Gas Hot Water, Front-load ENERGY STAR	-	$ 427	20.08		$ 200.00	$ 0.00	Unit
Any Dryer and Hot Water Fuels, Front-load ENERGY STAR	-	$ 427	20.68		$ 200.00	$ 0.00	Unit

Measure Description	1st Year kWh Savings	Incremental Cost	1st Year Therm Savings	Life	Incentive	NEI	UOM
Natural Gas – Food Services							
0.81 to 1 GPM Pre-Rinse Sprayer	-	$ 108	16.81	4	$ 50.00	$ 1.40	Unit
3 pan Steamer	-	$ 1,867	586.22	9	$ 1,300.00	$ 0.00	Unit
4 pan Steamer	-	$ 2,489	779.91	9	$ 1,700.00	$ 0.00	Unit
5 pan Steamer	-	$ 3,111	973.63	9	$ 2,200.00	$ 0.00	Unit
6 pan Steamer	-	$ 3,733	1,167.36	9	$ 2,600.00	$ 0.00	Unit
10 or larger pan Steamer	-	$ 4,287	3,043.24	9	$ 3,200.00	$ 0.00	Unit
Efficient Combination Oven (>= 16 pan and <= 20 pan)	158	$ 5,717	500.00	10	$ 1,000.00	$ 0.00	Unit
Efficient Combination Oven (>= 6 pan and <= 15 pan)	102	$ 5,717	403.00	10	$ 1,000.00	$ 0.00	Unit
Efficient Convection Oven – full size	-	$ 5,717	450.00	10	$ 700.00	$ 0.00	Unit
High Efficiency Convection Oven, 40% efficiency or better	-	$ 700	323.00	12	$ 700.00	$ 0.00	Unit
Rack Oven	-	$ 4,933	1,034.00	8	$ 2,000.00	$ 0.00	Unit
ENERGY STAR 50% efficiency Fryer	-	$ 2,500	505.00	12	$ 1,000.00	$ 0.00	Unit
High Efficiency Griddle, 40% efficiency or better	-	$ 491	88.00	12	$ 250.00	$ 0.00	Unit
High-temp Hot Water Dishwasher	-	$ 2,297	102.82	12	$ 300.00	$ 1,068.60	Unit
Low-temp Hot Water Dishwasher	-	$ 2,297	140.10	12	$ 300.00	$ 1,482.39	Unit

APPENDIX E – NEEA ELECTRIC SAVINGS FORECAST

Memorandum

6/14/2023

TO: Nicole Hydzik, Director of Energy Efficiency, Avista Utilities; Meghan Pinch, Manager of Program Managers, Avista Utilities; Kim Boynton, Manager of Planning and Analytics, Avista Utilities

FROM: Christina Steinhoff, Principal Planning Analyst

CC: Stephanie Rider, Director, NEEA Data, Planning, and Analytics; Susan Hermenet, Vice President, Research, Evaluation and Analytics, NEEA; Virginia Mersereau, Senior Manager of Strategy, NEEA Corporate Strategy

SUBJECT: 2024-2025 Electric Savings Forecast

NEEA is an alliance of utilities that pools resources and shares risks to transform markets toward energy efficiency for the benefit of consumers in the Northwest. NEEA's role is to establish technology and market conditions that advance energy efficiency in markets in a sustainable way.

Energy savings are enabled by the alliance's market transformation programs, work on building energy codes and appliance standards, and investment in tools, training, resources, data, and research to support greater efficiency. The programs seek to affect sustainable changes in markets, which then result in energy savings.

Avista Washington, Puget Sound Energy, and Pacific Power have developed a joint approach to calculate savings from NEEA initiatives. As part of the utilities' biennium savings updates, NEEA provides a two-year electric energy savings forecast. This memo provides the forecast for 2024-2025.

Appendix A documents NEEA's methodology. The attached Excel spreadsheet contains details about the baseline and technical assumptions by measure.

Please contact Christina Steinhoff at csteinhoff@neea.org with any questions about this report.

2024-2025 Forecast

NEEA is forecasting that Avista Washington will receive 1.80 aMW of savings during the 2024-2025 biennium. Savings are above the *2021 Power Plan* baseline from NEEA programs including Heat Pump Water Heaters, Retail Products Portfolio, XMP Pumps, and New Construction. The forecast does not include

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programs in development such as Variable Speed Heat Pumps and High-Performance Windows. The savings are incremental to a forecast of savings that the Bonneville Power Administration, Energy Trust of Oregon, and local utilities could claim through their programs. Appendix A describes the savings calculation and allocation approach in more detail.

Table 1: Savings Forecast (aMW, at Site)

Sectors	2024	2025	Total for the Biennium
Residential	0.66	0.81	1.47
Commercial	0.13	0.20	0.33
Industrial	0.00	0.00	0.00
Total	0.79	1.00	1.80

These are forecasted, site-based, first-year savings. Programs included are listed in the attached spreadsheet. Values in the table might not add up because of rounding.

Appendix A: Methodology to Estimate Savings

Background

Avista Washington, Puget Sound Energy, and Pacific Power Washington developed a joint approach[1] to calculate savings from NEEA initiatives. NEEA provides a two-year electric energy savings forecast. The utilities subtract the savings from their conservation forecast to develop their Biennium Conservation Target.

Unit Energy Savings (UES)

This report uses:

- Either the 2021 Power Plan or the Regional Technical Forum (RTF), whichever is the most up to date. For this report, the savings rates from the RTF were approved after 2020 and prior to May 1, 2023.[2]
- If a 2021 Power Plan or RTF Unit Energy Savings (UES) value was not available, NEEA worked with the Power Council to create a UES based on the original Power Plan baseline assumptions.

Table 2**Error! Reference source not found.** sources the savings rates.

[1] The utilities agreed that NEEA would develop a Total Regional Savings estimate using baseline and technical assumptions from the most recent Power Plan. NEEA would remove estimated savings counted by the utilities, the Bonneville Power Administration and the Energy Trust of Oregon. NEEA would allocate the remaining savings to the utilities based on their NEEA funder share percentage.

[2] Moved from Sept. 1 to May 1 because NEEA provided the forecast in June 2023, using data available in May.

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Table 2: Forecasted Savings Rate Sources for 2024-2025

Product	Forecasted Savings Rate Source
Ductless Heat Pumps	RTF. The 2024 assumptions for FAF come from version 4.0 updated in April 2022. The assumptions for single-family zonal-heated homes come from version 6.0 updated in April 2022.
Extended Motor Products	RTF. April 18, 2022. Efficient Pumps v 3.0. RTF. Jun 14, 2017. Efficient Pumps v 1.1.
Heat Pump Water Heaters	RTF. Version 6.2 updated in June 2022.
Manufactured Homes	RTF. 2020. ResMHNewHomesandHVAC_v4_1.xlsm. RTF. 2022. ResMHNewHomesandHVAC_v5_0.xlsm. SEEM UEC outputs for HUD, NEEM 1.1, and NEEM 2.0 homes in each heating/cooling zone are weighted by the percentage of homes in each climate zone per the 2016 RBSA. UEC includes electric heating, electric cooling, non-electric heating, lighting, and refrigeration.
Refrigerators	NEEA calculates the savings rate using the same methodology as the RTF (RTF. 2022. Residential Refrigerators and Freezers v6.0). However, NEEA includes savings from ENERGY STAR's Emerging Tech Award in the ENERGY STAR Most Efficient category.
Clothes Washers	RTF. 2022. ResClothesWashers_v8_0.xlsm.
Clothes Dryers	RTF. 2022. ResClothesDryers_v5_0.xlsm and RTF. 2020. ResClothesDryers_v4.0.xlsm.
Room Air Conditioners	NEEA calculation. neea.org. Go to the Portal Login → Savings Reports.
Televisions	UES analysis reviewed by TRC in 2022.
High Performance HVAC	Red Car Analytics. 2022. Analysis of Expanded Efficiency Parameters for Very High Efficiency DOAS.
Luminaire Level Lighting Controls	The savings rates come from the Regional Technical Forum's Non-Residential Lighting Standard Protocol.

The attached spreadsheet contains sources and additional information regarding the savings rate calculations. More details about the assumptions are also available on neea.org. Go to the Portal Login → Savings Reports.

For comparison against this forecast, NEEA will update the savings rates if:

- The RTF makes an update after May 1[3] of the year prior to the Biennium (e.g., 2023) and before Oct. 1 of the first year of the biennium (e.g. 2024); then, NEEA will update the forecast for the second year (e.g., 2025) with the new RTF UES
- The UES is weighted based on tracked units (e.g., commercial building type, installs by climate zone, etc.)
- Or NEEA finalized savings analysis for a building energy code or standard.

[3] Moved from Sept. 1 to May 1 because NEEA provided the forecast in June 2023, using data available in May.

Avoiding Double Counting

NEEA avoids double counting by surveying the Bonneville Power Administration, Energy Trust of Oregon, and local utilities about their local programs. This report has a forecast of local program units that it uses to avoid over-reporting savings. NEEA multiplies the savings rate and baseline saturation assumptions by the units to forecast local program savings. The regional savings minus the local program savings are the savings NEEA reports to the Washington Investor Own Utilities.

Allocation

NEEA allocates the savings from programs using funder shares. The shares vary based on the funding cycle. Savings from previous investments receive the previous funder share. Savings from current investments receive the current funder share. Table 3 shows the funder shares.

Table 3: Funder Share for the Washington Savings Forecast

Business Plan	Funding Share
2020-2024	3.95%
2015-2019	4.04%

APPENDIX F – NEEA NATURAL GAS SAVINGS FORECAST

Memorandum

Sept. 28, 2023

TO: Meghan Pinch, Manager of Program Managers, Avista Utilities; Kim Boynton, Manager of Planning and Analytics, Avista Utilities

CC: NEEA: Peter Christeleit, Manager of Natural Gas Portfolio and Strategy; Stephanie Rider, Director Manager, Data, Planning, and Analytics; Becky Walker, Vice President, Market Development and Transformation; Susan Hermenet, Vice President, Research, Evaluation and Analytics; Virginia Mersereau, Senior Manager of Strategy, NEEA Corporate Strategy

FROM: Christina Steinhoff, Principal Planning Analyst, NEEA

SUBJECT: 2024-2025 Natural Gas Savings forecast

NEEA is an alliance of utilities and energy efficiency organizations that pools resources and shares risks to transform markets toward energy efficiency that benefits consumers in the Northwest. NEEA's role is to establish technology and market conditions that advance energy efficiency in markets in a sustainable way.

Energy savings are enabled by the alliance's market transformation programs, codes and standards work, and investment in tools, training, resources, data, and research to support greater efficiency. The programs seek to affect sustainable changes in markets, which then result in energy savings.

NEEA provides annual tracking and reporting of energy savings resulting from the long-term market transformation efforts. As such, Avista Utilities has asked NEEA to provide a two-year energy savings forecast to support setting its 2024-2025 Biennial Conservation Target.

Appendix A documents NEEA's methodology. The attached Excel spreadsheet contains details about the baseline and technical assumptions by measure.

Please contact Christina Steinhoff at csteinhoff@neea.org with any questions about this report.

2024-2025 Forecast

NEEA is forecasting that it will report between 6,600-73,000 therms of savings to Avista Utilities Washington in 2024-2025 (Table 1). The forecast excludes savings from codes in 2025 until NEEA can

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assess the effects of the *Washington State Energy Code 2021* on fuel selection. NEEA will also assess the timing and viability of additional efficiency opportunities such as High-performance Windows, Commercial and Residential Heat Pumps, and High Efficiency DOAS. The following section provides more detail about the forecast and programs in development.

Table 1: Savings Forecast (therms)

	2024 (f)	2025 (f)	2024-2025 (f)
Total Savings	3,300-68,000	3,300-TBD	6,600-73,000
Residential New Construction	0-56,000	0-TBD	0-56,000
Commercial New Construction	0-7,000	0-TBD	0-7,000
Commercial Products (Standards)	3,000-4,000	3,000-4,000	6,600-7,000
Residential Products (Standards)	TBD	TBD	0-0
Efficient Rooftop Units	0-1,500	0-1,500	0-3,000
Efficient Gas Water Heaters	TBD	TBD	0-0
High Performance Windows	TBD	TBD	0-0

Note: The savings are above NEEA's market transformation baseline and are net of savings claimed through utility programs (Appendix A). Values are rounded. The codes savings forecasts are dependent on the effects of the 2021 Washington State Energy Code.

New Construction

Building energy codes set minimum efficiency requirements for residential and commercial buildings for the design, materials and equipment used in new construction and major renovations. Energy codes present a unique opportunity to assure long-term savings through efficient building design, technologies, and construction practices in a cost-effective way. The NEEA's Codes and Standards team supports regional stakeholders in code development, adoption, training, and new construction support. The team also collaborates with energy efficiency organizations and engages with entities that develop, propose, and adopt national model codes such as ASHRAE Standard 90.1 and International Energy Conservation Code (IECC). The national model codes serve as the foundation and base for the state codes adoption in the region. Finally, NEEA staff along with utility partners support builders who exceed code requirements to differentiate their buildings. Data from above code construction often helps identify new opportunities for future codes.

Commercial

The savings come from work on *Washington State Energy Code 2018*, which went into effect in February 2021. The share of new construction floor area permitted under the code begins to ramp up in 2021. NORESCO estimates the code saves 7.7 percent in total Energy Use Intensity over the prior code.[1]

NEEA is preparing to analyze energy savings for *Washington State Energy Code* 2021, which is anticipated to be effective in 2024.

Residential

The savings come from *Washington State Energy Code 2018*, which went into effect in February 2021. The code saves approximately 125 therms per new home[2]. NEEA assumes that 21 percent of the new single-family homes in Washington have gas and space water heating.[3] This percentage, however, could decrease with the next code update.

Washington State Energy Code 2021 includes fuel normalization credits that favor the use of electric fuels over natural gas.[4] Gas space and water heating products are currently not commercially available to meet the requirements. In response, NEEA is investigating opportunities with residential gas heat pumps and dual-fuel systems that meet the code and could become new programs by 2026.

[1] NORESCO. 2022. 2018 Washington State Energy Code Energy Savings Analysis for Nonresidential Buildings. Percentage includes gas and electric savings.
[2] Single-family homes with gas space and water heating.
[3] https://neea.org/resources/washington-residential-code-evaluation
[4] Although the Washington State Building Code Council voted to delay the effective date to address legal uncertainty in the language, the code is still likely to have the same fuel normalization credits that favor the use of electric space and water heating.

Product Standards

The Department of Energy published a new Commercial Packaged Boilers standard in 2020. NEEA and its energy efficiency partners influenced the outcome of the rule making by supporting a more stringent efficiency level, according to an evaluation by Michaels Energy.[5] The standard goes into effect in 2023.

NEEA is also reporting gas savings from the Washington commercial kitchen equipment appliance standard effective in 2022. Findings from the evaluation show the most significant influence that NEEA and its partners had on the standard was providing market and equipment data and potential energy and cost savings that overcame manufacturer opposition to the standard.[6]

NEEA is planning an influence evaluation to support reporting energy savings from its work on the recent Gas Furnace Federal Standard. The evaluation should be completed in 2024, allowing NEEA to report energy savings from this standard.

Voluntary Programs

NEEA works on many new technologies to bring them to market and remove barriers in the market structure in support of efficient options. NEEA currently has one program (Efficient Rooftop Units) that is in market development and two additional opportunities that could present efficiency savings in the region within the next few years.

Efficient Rooftop Units (ERTUs)

The ERTU program advanced to Market Development in late 2022. The program's goal is to accelerate the adoption of efficient gas rooftop units in the like-for-like replacement market while working to influence the adoption of improved test procedures and more stringent federal standards that require at least 20% more efficient RTUs by 2034.

NEEA had forecasted in April that it would be able to report savings for 2022 after collecting data from HVAC distributors and manufacturers. The dataset, which was available in June/July, had limited coverage of Commercial HVAC products. The program is focused on strengthening its commercial HVAC supplier relationships, which is key to increasing participation in the HVAC supplier sales data collection and improving visibility into ERTU sales. The program is also actively developing supplemental construction and permit data streams, which may enable identification of completed ERTU installations. These data streams, which still have limited coverage, should be available for reporting installations completed in 2024, and possibly in 2023. The program expects to be able to observe 25% or less of efficient unit sales through 2024.

[5] https://neea.org/resources/commercial-boilers-standard-evaluation

[6] https://neea.org/resources/oregon-and-washington-high-cri-bulb-and-commercial-kitchen-equipment-state-standards-evaluations

Meanwhile, the program has begun implementing interventions such as raising awareness of the product and working with manufacturers to produce lower-cost qualifying units. NEEA expects the uptake to ramp up late in the next Business Plan (2025-2029).

High Performance Windows

The program goal is for more than 50 percent of windows sold in the Northwest to have a 0.22 U-value or less. The program plans to stimulate national builder and consumer demand for high performance windows primarily through influencing ENERGY STAR specifications and building codes. NEEA is developing a data collection strategy and assessing the cost effectiveness and timing of the program to enter Market Development. Forecasts could be available in 2024.

Efficient Gas Water Heaters

The program is in early development and has a technical savings potential of 100-200MM therms. While there are still many unknowns, NEEA does expect a product launch for a Gas Heat Pump Water Heater during the next Business Plan (2025-2029). The launch will likely be preceded by a large scale North American field study, which will include the first units installed in the NW. NEEA will provide forecasted savings when a product launch timeline is more certain.

Appendix A: Methodology to Forecast Savings

Baseline and Technical Assumptions

This report follows NEEA's method of measuring gas energy savings from market transformation efforts. The baseline is an estimate of the market adoption without intervention by NEEA, the Energy Trust of Oregon, and utilities. The technical assumptions come from third-party research including NEEA-contracted research and the Regional Technical Forum.

The attached spreadsheet provides more information about the savings calculations, forecasting assumptions, and data sources.

Avoiding Double Counting

NEEA avoids double counting by surveying the local utilities about their programs. This report has a forecast of local program units that it uses to avoid over-reporting savings. NEEA multiplies the savings rate and baseline saturation assumptions by the units to forecast local program savings. The regional savings minus the local program savings are the savings NEEA reports.

Allocation Methodology

NEEA allocates code savings for gas measures using a service-territory approach. The approach uses EIA residential consumer accounts for residential codes and commercial sales estimates for commercial codes (Table 2).

Table 2: State Code Savings Allocation Share

Sector	WA	OR	ID
Residential	12.65%	0.00%	0.00%
Commercial	15.82%	0.00%	0.00%

For voluntary programs, NEEA allocates regional savings (Idaho, Oregon, and Washington) using shares of investment by funder (Table 3).

Table 3: Funder Shares Savings Allocation

Business Plan	Gas Funding Share
2020-2024	8.49%

Note: The 2025 forecast assumes the funding shares remains the same as the current Business Plan.

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APPENDIX G – 2022-2023 COMPLIANCE RECORD

Item	Source	Docket	Ref	Language	Cond. Met	Notes
13	BCP - E	UE-210826	1a	The following electric conservation targets are approved for Avista Corporation (Avista or Company), with conditions pursuant to RCW 19.285.040(1)(e) and WAC 480-109-120 (1). This approval is subject to the conditions described in paragraphs (2) through (13) below. i.) Ten-Year Potential: 507,829 megawatt-hours. iii.) Two-Year EIA Penalty Threshold: 91,054 megawatt-hours. iv.) Two-Year Decoupling Penalty Threshold: 5,078 megawatt-hours, pursuant to Order 5 in Dockets UE-140188 and UG-140189. v.) Total Two-Year Utility Conservation Goal: 106,644 megawatt-hours.	NA	Avista continues to pursue its stated targets.
19	BCP - E	UE-210826	1b	The commission approves targets and thresholds as measured at the customer meter. All planning and reporting must include savings data as measured at the customer meter.	NA	NA
20	BCP - E	UE-210826	1c	As part of Avista's biennial conservation acquisition efforts, Avista must continue to invest in regional studies and market transformation, in collaboration with funding from other parties and with other strategic market partners in this biennium that complements Avista's energy efficiency programs, planning, services, and measures.	yes	Avista continues to partner with NEEA on market transformation efforts.
21	BCP - E	UE-210826	2	Avista Retains Responsibility. Nothing in these conditions relieves Avista of the sole responsibility for complying with RCW 19.285 and WAC 480-109. Specifically, the conditions regarding the need for a high degree of transparency, and communication and consultation with external stakeholders, diminish neither Avista's operational authority nor its ultimate responsibility.	yes	Avista continues to retain responsibility for compliance with all applicable RCWs and WACs.
22	BCP - E	UE-210826	3a	To meet the requirements of WAC 480-109-110, Avista must continue to use its advisory group, initially created under Docket UE-941377 and UG-941378, and its Integrated Resource Planning Advisory Group as described under WAC 480-100-630.	yes	EEAG: May 16-17, 2022; October 12-13, 2022; May 23-24, 2023; June 29, 2023; October 18-19, 2023; TAC (electric): Feb. 8, 2022; March 9, 2022; Aug. 10, 2022; Sept. 7, 2022; Sept. 28, 2022; Oct. 11, 2022; Dec. 14, 2022; April 25, 2023; Sept. 16, 2023; TAC (gas): Feb. 15, 2022; Dec. 15, 2022; May 3, 2022; Aug. 10, 2022; Sept. 29, 2022; Dec. 15, 2022
23	BCP - E	UE-210826	3b	Avista must notify advisory group members of all public meetings scheduled to address Avista's integrated resource plan. Avista must also coordinate a meeting with advisory group members and the entity conducting the conservation potential assessment (CPA) addressing the scope and design of the CPA. Such a meeting must address the assumptions and relevant information utilized in the development of Avista's integrated resource plan as they apply to development and/or modification of the ten-year conservation potential. This meeting must be held early enough in the integrated resource plan public process to incorporate the group's advice. Avista must notify advisory group members of IRP advisory group meetings that present the company's natural gas and energy price forecasts and generation resource cost assumptions used in the development of the company's integrated resource plan, as these assumptions will inform the ten-year conservation potential.	yes	Avista's EEAG was notified for all meetings pertaining to the CPA as well as the IRP; AEG presented CPA to EEAG on April 21, 2022.
24	BCP - E	UE-210826	3c	Avista must consult with the advisory groups starting no later than July 1, 2023, to begin to identify achievable conservation potential for 2024-2033 and to begin to set annual and biennial targets for the 2024-2025 biennium, including necessary revisions to program details and the quadrennial 2022-2025 CEIP target. See RCW 19.285.040(1)(b); WAC 480-109-120; and WAC 480-100-640(11).	yes	Avista held a meeting for this purpose on June 29, 2023.

Item	Source	Docket	Ref	Language	Cond. Met	Notes
25	BCP - E	UE-210826	3d	Avista must inform the advisory group members when its projected expenditures indicate that Avista will spend more than 120 percent or less than 80 percent of its annual conservation budget.	yes	Avista discussed current budget and tariff rider balances at its spring 2023 EEAG meeting. No rate revisions were recommended at that time.
26	BCP - E	UE-210826	3e	If Avista believes that an event beyond its reasonable control has occurred that may prevent it from meeting its combined EIA Penalty Threshold and Decoupling Penalty Threshold, Avista will confer with the advisory group members as soon as possible to determine a path forward. See RCW 19.285.040(1)(e) and RCW 19.285.060(2).	yes	Avista has facilitated multiple conversations with its EEAG on this topic, including the fall 2022 EEAG meeting, the spring 2023 EEAG meeting, and the fall 2023 EEAG meeting.
27	BCP - E	UE-210826	3f	Prior to filing the 2024-2025 *Biennial Conservation Plan*, Avista must provide the following information to the advisory group: draft ten-year conservation potential, revised four-year target, and two-year target by August 1, 2023.	yes	Avista shared this information with its EEAG at its June 29, 2023 meeting.
28	BCP - E	UE-210826	3f	Prior to filing the 2024-2025 *Biennial Conservation Plan*, Avista must provide the following information to the advisory group: ...draft program details, including budgets, by September 1, 2023...	yes	Avista shared this information with its EEAG at its August 28, 2023 meeting, along with further plan details.
29	BCP - E	UE-210826	3f	Prior to filing the 2024-2025 *Biennial Conservation Plan*, Avista must provide the following information to the advisory group: ...draft program tariffs by October 2, 2023...	yes	Avista shared this information with its EEAG via email distribution, along with its draft *BCP/ACP*, on October 2, 2023, in addition to at its fall 2023 EEAG meeting.
30	BCP - E	UE-210826	4	Avista must provide its proposed budget in a detailed format with a summary page indicating the proposed budget and savings levels for each conservation program, and subsequent supporting spreadsheets providing further detail for each program and line item shown in the summary sheet. Avista must allocate a reasonable amount of its program budget (as determined through consultation with the advisory group) towards pilot programs, research, and data collection.	yes	This information is included in Avista's 2024 *ACP* and in the 2024-2025 *BCP*.
31	BCP - E	UE-210826	5	Avista must maintain its conservation tariffs, with program descriptions, on file with the commission. Program details about specific measures, incentives, and eligibility requirements must be filed and updated in this docket. Avista must notify the advisory group when it files updated measures, incentives, or eligibility requirements.	yes	Avista's conservation tariffs remain on file with the commission and are updated as needed, in consultation with the EEAG.
32	BCP - E	UE-210826	6a	Avista has identified several potential conservation measures described in the *BCP*. The commission is not obligated to accept savings identified in the *BCP* for purposes of compliance with RCW 19.285.	NA	NA
33	BCP - E	UE-210826	6b	When Avista proposes a new or significant change to a program, pilot, or tariff schedule, it must present the program to the advisory group with program details fully defined, to the extent practicable. After consultation with the advisory group in accordance with WAC 480-109-110(1)(h), the advisory group may advise if a revision to the conservation plan in this docket is necessary.	yes	Avista consulted with its EEAG on all new programs introduced in 2022 and 2023, including its Midstream Program, On-Bill Refinancing, Small Business Direct Install Program, and Named Communities Investment Fund programs. Avista also consulted with its EEAG on proposed incentive increase for site specific and lighting programs to encourage customer participation.

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34	BCP - E	UE-210826	6c	Avista must spend a reasonable (as determined through consultation with the advisory group) amount of its conservation budget on evaluation, measurement, and verification (EM&V), including a reasonable proportion on independent, third-party EM&V. Avista must perform EM&V annually on a maximum four-year schedule of selected programs such that, over the EM&V cycle, all major programs are covered. The EM&V function includes impact, process, market, and cost test analyses. The results must verify the level at which claimed energy savings have occurred, evaluate the existing internal review processes, and suggest improvements to the program and ongoing EM&V processes.	yes	Avista procured an independent third-party EM&V vendor to perform impact and process evaluations, as well as cost effectiveness analysis, for Avista's program portfolio.
35	BCP - E	UE-210826	6d	An independent third-party must review portfolio-level electric energy savings reported by Avista for the 2022-2023 biennial period, from existing conservation programs operated during that period, per WAC 480-109-120(4)(b)(v). The independent third-party reviewer must be selected through an RFP process and is intended to: i.) Verify the calculation of total portfolio MWh savings; and ii.) Provide a review of EM&V activities and application for best practices and reasonable findings, which includes the following: (1) Validate the adequacy of Avista's savings verification process, controls and procedures. (2) Validate savings tracking and reporting processes and practices. (3) Review program process and impact evaluations completed during the biennium for appropriateness of evaluation approach/methodologies (program specific) and program cost-effectiveness calculations.	yes	Avista contracted with ADM to perform this scope of work.
36	BCP - E	UE-210826	6e	A final report for the entire 2022-2023 biennium may be implemented in phases and delivered as a final product at an earlier date, as needed, by Avista.	in pro.	Avista filed its 2022 *ACR* on June 1, 2023. Avista will file its 2023 *ACR* as well as its 2022-2023 *BCR* on or before June 1, 2024.
37	BCP - E	UE-210826	7a	Modifications to the programs must be filed with the commission as revisions to tariffs or as revisions to Avista's current conservation plan, as determined in consultation with the advisory group.	yes	There were no modifications to Avista's conservation plan this biennium. Draft program tariff revisions for 2024 have been shared and circulated with Avista's EEAG.
38	BCP - E	UE-210826	7b	Incentives and Conservation Program Implementation – programs, program services, and incentives may be directed to consumers, retailers, manufacturers, trade allies or other relevant market actors as appropriate for measures or activities that lead to electric energy savings. Avista must work with the advisory group to establish a balanced portfolio of measures that provides savings from a variety of savings types and meets the needs of a broad spectrum of Avista customers.	yes	No new action beyond what has been discussed with its EEAG and/or filed in a plan or report.
39	BCP - E	UE-210826	7c	Conservation efforts without approved EM&V protocol – Avista may spend up to 10 percent of its conservation budget on programs whose savings impact has not yet been measured, if the overall portfolio of conservation passes the primary cost-effectiveness test used by the commission. These programs may include information-only, and pilot projects. Avista may ask the commission to modify this spending limit, following advisory group consultation. i.) Information-only services refers to those information services that are not associated with an active incentive program or that include no on-site technical assistance or on-site delivery of school education programs. Information-only services and behavior change services must be assigned no quantifiable energy savings value without full support of the advisory group. ii.) If quantifiable energy savings have been identified and commission-approved for any aspect of such programs, the budget associated with that aspect of the program will no longer be subject to this 10 percent spending restriction.	yes	Done. Avista will provide a report of expenditures related to pilot programs in its 2023 *ACR*.

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40	BCP - E	UE-210826	8a	The commission currently uses a modified Total Resource Cost (TRC) test, consistent with the council, as its primary cost-effectiveness test. The modified TRC test includes all quantifiable non-energy impacts, a risk adder, and a 10 percent conservation benefit adder. Avista's portfolio must pass the modified TRC test. All cost-effectiveness calculations will assume a Net-to-Gross ratio of 1.0, consistent with the council's methodology.	yes	This is standard practice for Avista's cost-effectiveness calculation framework.
41	BCP - E	UE-210826	8b	Avista must also provide calculations of the Program Administrator Cost Test (also called the Utility Cost Test) as described in the National Action Plan for Energy Efficiency's study "Understanding Cost-Effectiveness of Energy Efficiency Programs" (November 2008), located at: https://www7.eere.energy.gov/seeaction/system/files/documents/understanding-cost- effectiveness-ee-programs.pdf.	yes	Avista includes these calculations as a standard element if its cost effectiveness calculation framework.
42	BCP - E	UE-210826	8c	Conservation-related administrative costs must be included in portfolio level analysis.	yes	Included
43	BCP - E	UE-210826	9a	The Avista must demonstrate progress toward sustained energy burden reductions during the 2022-2023 biennium by, at a minimum, funding all eligible and cost-effective low- income conservation measures, consistent with RCW 19.405.120. i.) Avista's biennial report must include the contribution from low-income conservation programs toward sustained energy burden reductions. The report must include the number of participants and any other information that demonstrates progress as described above. The utility should include a discussion of barriers to success, options for overcoming these barriers, and potential uses for increased low- income conservation funding. ii.) Energy savings from low-income conservation measures will be counted toward conservation goals. iii.) Avista may, after consultation with advisory groups, fully fund repairs, administrative costs, and health and safety improvements associated with cost-effective low-income conservation measures. These costs are excluded from portfolio cost-effectiveness calculations. Avista shall maintain a project cost allowance of up to 30 percent for Administrative/Indirect Rate associated with the delivery of low-income conservation measures.	yes	Avista has met conditions i) and ii) through its inclusion of low-income programs in its plans and reports. iii) Avista fully funds repairs, admin costs, and healthy and safety improvements as described in this condition.
44	BCP - E	UE-210826	9b	Avista must consider how and whether existing conservation programs serve the highly impacted communities and vulnerable populations identified in its CEIP. In addition, Avista must adjust existing conservation programs or design new programs and offerings so that the portfolio of programs ensures an improvement in the equitable distribution of energy and non-energy impacts to the same communities identified in its CEIP. See WAC 480-100-640(4).	yes	Avista has designed a portfolio of programs to serve the needs of Named Communities and funds them through its Named Communities Investment Fund. Beginning in its 2023 report, Avista will also report on the extent to which existing conservation programs serve Named Communities, and will also report on CBIs that efficiency-specific actions impact.
45	BCP - E	UE-210826	10a	Avista must evaluate opportunities for location-targeted programs that provide non-wires alternatives to eliminate or delay the need for distribution system investments.	yes	The Connected Communities Program, which is described within the *BCP*, the *ACP* and in the *ACR*, explores opportunities to serve customers in Avista's territory with non-wires alternatives.
46	BCP - E	UE-210826	10b	In accordance with RCW 19.285.040(1)(g), Avista is encouraged to promote the adoption of air conditioning with refrigerants not exceeding a global warming potential (GWP) of 750 and the replacement of stationary refrigeration systems that contain ozone-depleting substance or hydrofluorocarbon refrigerants with a high GWP. At a minimum, Avista must explore the feasibility of determining and incorporating of the avoided emissions associated with replacing refrigerants exceeding 750 GWP in its cost-effectiveness calculations and discuss the results with its advisory group as necessary.	yes	Avista has partnered with DNV to develop a low-GWP NEI study.

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47	BCP - E	UE-210826	10c	Avista should consult with its advisory group to determine how it should implement RCWs 80.28.260(2) and 80.28.300. Such consultation should include, but is not limited to: whether and how to research and evaluate opportunities for cool roof and tree planting conservation, with special consideration given to highly impacted communities and vulnerable populations; whether and how to provide information to their customers regarding landscaping that includes tree planting for energy conservation; and what outreach and education efforts should be conducted to inform customers of the energy and non-energy benefits of cool roofs and strategic tree planting. Avista should utilize the department of health's environmental health disparities map and coordinate with the department of natural resources to identify areas within the utility's service territory that would benefit from heat island mitigation and strategic tree planting programs. i.) If Avista pursues such research, evaluation, and/or outreach, it should detail the research and evaluation results and outreach efforts in its conservation reporting.	yes	Avista has discussed tree canopy and cool roof opportunities with its advisory group at its fall 2022 meeting, its spring 2023 meeting, and its fall 2023 meeting. Relevant information will be included in the *ACR*/*BCR*.
48	BCP - E	UE-210826	11a	During this biennium, Avista must continue to demonstrate progress towards identifying, researching, and properly valuing non-energy impacts. The non-energy impacts considered must include the costs and risks of long-term and short-term public health benefits, environmental benefits, energy security, and other applicable non-energy impacts. In consultation with the company's conservation, equity, and resource planning advisory groups, non-energy impacts and risks must be included in the next *Biennial Conservation Plan* and Conservation Potential Assessment.	yes	Avista has partnered with DNV to continue NEI studies, including a study to follow up previous NEI gap analysis work. DNV is also completing a gas transport customer NEI study to inform a program design for Avista's natural gas transport customers in WA. NEIs have been incorporated within the CPA and 2024-2025 *BCP* where possible/quantifiable.
49	BCP - E	UE-210826	11b	Avista must identify the discrete non-energy impacts and the monetized value used in cost-effectiveness testing for each electric conservation program. This must be provided in a detailed format with a summary page and subsequent supporting spreadsheets, in native format with formulas intact, providing further detail for each program and line item shown in the summary sheet in annual plans and reports.	yes	This information was included in Avista's 2022 *ACR*, and will be included in its 2023 *ACR* as well as its 2022-2023 *BCR*.
50	BCP - E	UE-210826	11c	Avista must begin to identify the forecasted distribution of energy and non-energy benefits in annual plans and reports. This reporting must use currently quantified non-energy impacts as well as values and estimates of additional impacts as they become available. See WAC 480-100-640(3)(a)(i).	yes	Avista began to do this in its 2024 *ACP*.
51	BCP - E	UE-210826	12a	Scope of Expenditures – Funds collected through the Electric Conservation Service Rider must be used on approved conservation programs and their administrative costs. Additionally, rider funds may be used for other purposes when they have a benefit to Avista customers and are approved by the commission.	yes	no action needed.
52	BCP - E	UE-210826	12b	Recovery for Each Customer Class – Rate spread and rate design must match Avista's underlying base volumetric rates.	NA	NA
53	BCP - E	UE-210826	12c	Recovery of costs associated with distribution and production efficiency initiatives are not funded through the Electric Conservation Tariff Rider because these programs are not customer conservation initiatives. These are company conservation programs. As such, these costs are recovered in the general rate making process over time and may be requested through a general rate case, a deferred accounting petition or other allowed mechanism. The method of cost recovery in no way diminishes its obligation as required in RCW 19.285 and WAC 480-109.	yes	Avista does not recover any costs associated with distribution and production efficiency initiatives through the electric conservation tariff rider.

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54	BCP - E	UE-210826	12d	Avista must file revisions to its cost recovery tariff (Schedule 91) by June 1 each year, with requested effective date of August 1 of that same year. If Avista files its cost recovery tariff early, a draft annual report with completed savings evaluations must accompany the filing.	yes	Avista did not request revisions to Schedule 91 in 2022 or 2023. See UE-220314 and UE-230302, respectively, for Avista's requested (and approved) exemptions from WAC 480-109-130 and associated *BCP* conditions.
55	BCP - E	UE-210826	13a	Avista must continue to pursue cost-effective conservation in the form of reduction in electric power consumption resulting from increases in the efficiency of energy used at electric power production facilities it owns in whole or in part. Avista's *Annual Report* must include updates regarding production efficiency activities in power production facilities operated by Avista and, to the extent practicable, facilities wholly or partially owned by Avista that are not operated by the company.	yes	Avista is in regular contact with its generation and plant managers to determine if any projects at Avista owned or managed plants or facilities are planned. There were no projects planned in 2023. There are a few under consideration for 2024 and 2025. Avista will continue to monitor these plans and will share information as it becomes available.
56	BCP - E	UE-210853	14b	To avoid double-counting of efficiency savings achieved at electric power production facilities owned in whole or in part by Avista, the company must consult with the advisory group when developing or modifying its protocol for how savings will be claimed.	NA	NA
57	BCP - G	UG-210827	1a	The following gas conservation targets are approved for Avista Corporation (Avista or company), with conditions pursuant to RCW 80.28.380. This approval is subject to the conditions described in paragraphs (2) through (14) below. i.) Two-Year Conservation Target: 2,192,434 therms. ii.) Two-Year Decoupling Commitment: 109,622 therms, pursuant to Order 5 in Dockets UE-140188 and UG-140189. iii.) Total Two-Year Utility Conservation Goal: 2,302,056 therms.	NA	Avista continues to pursue its stated targets.
58	BCP - G	UG-210827	1b	As part of Avista's biennial conservation acquisition efforts, Avista must continue to invest in regional studies and market transformation, in collaboration with funding from other parties and with other strategic market partners in this biennium that complements Avista's energy efficiency programs, planning, services, and measures. Avista must participate in the Northwest Energy Efficiency Alliance's (NEEA) natural gas market transformation program through the end of NEEA's 2020-2024 funding cycle.	yes	Avista continues to partner with NEEA on market transformation efforts.
59	BCP - G	UG-210827	2	Avista Retains Responsibility. Nothing in these conditions relieves Avista of the sole responsibility for complying with RCW 80.28.380. Specifically, the conditions regarding the need for a high degree of transparency, and communication and consultation with external stakeholders, diminish neither Avista's operational authority nor its ultimate responsibility.	NA	NA

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60	BCP - G	UG-210827	3a	Ten-year conservation potential. Every two years, Avista must project its cumulative ten-year conservation potential in a conservation potential assessment (CPA). i.) This projection must consider all conservation resources that are cost-effective and available. ii.) Methods for identifying conservation potential: ii(1) In identifying conservation potential Avista must be consistent with the methodologies used by the Northwest Power and Conservation Council (NWPCC) as summarized in this subsection. ii(1(a)) Technical potential. Determine the amount of conservation that is technically feasible, considering measures and the number of these measures that could physically be installed or implemented, without regard to achievability or cost. (d) Total resource cost. In determining economic achievable potential as provided in (c) of this subsection, perform a life-cycle cost analysis of measures or programs to determine the net levelized cost, as described in this subsection: (i.) Conduct a total resource cost analysis that assesses all costs and all benefits of conservation measures regardless of who pays the costs or receives the benefits. (ii.) Include the incremental savings and incremental costs of measures and replacement measures where resources or measures have different measure lifetimes. (iii.) Calculate the value of the natural gas saved based on when it is saved. In performing this calculation, use time differentiated avoided costs to conduct the analysis that determines the financial value of natural gas saved through conservation. (iv.) Include the increase or decrease in annual or periodic operations and maintenance costs due to conservation measures. (v.) Include avoided energy costs equal to a forecast of regional market prices plus variable transportation costs (e.g., fuel and variable charges), which represents the cost of the next increment of natural gas available to the utility for the life of the energy efficiency measures to which it is compared. (vi.) Include benefits from deferred infrastructure capacity costs for system capacity resources and distribution capacity resources required in peak load resource planning. (vii.) Include the social cost of greenhouse gas emissions from avoided natural gas consumption. (viii.) If necessary, include a risk mitigation credit to reflect the additional value of conservation, not otherwise accounted for in other inputs, in reducing risk associated with costs of avoided no conservation resources. If this value is negative, use a value of 0 for the risk mitigation credit. (ix.) Include all non-energy impacts that a resource or measure may provide that can be reasonably quantified and monetized. (x.) Include an estimate of program administrative costs. (xi.) Include the cost of financing measures using the capital costs of the entity that is expected to pay for the measure. (xii.) Discount future costs and benefits at a discount rate equal to the weighted average cost of capital; and (xiii.) Include a 10 percent bonus to the energy and capacity benefits of conservation measures as defined in 16 U.S.C. § 839a of the Pacific Northwest Electric Power Planning and Conservation Act. iii.) This projection must be either identified through or included as an input into Avista's most recent *IRP*. Avista must document any differences from the projection in the potential assessment and the *IRP*. (iv.) The CPA must include a list of each measure used in the potential, its unit energy savings value, first year therm savings, customer incremental cost, life of the measure, any applicable non-energy impacts, and the source of the values.	yes	Avista has followed the processes described herein. See UG-210462 for Avista's CPA.
61	BCP - G	UG-210827	3b	Avista must file a CPA by June 1, 2023, in a new docket. The CPA must be approved by the commission per RCW 80.28.380.	yes	See UG-210462

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62	BCP - G	UG-210827	4a	Process for acquiring all conservation. i.) Process. Avista's obligation to identify and acquire all conservation measures that are available and cost-effective includes the following process: (1) Identify potential. Identify the cost-effective and available potential of possible technologies and conservation measures in Avista's service territory. (2) Develop portfolio. Develop a conservation portfolio that includes all available, cost-effective conservation. Avista must develop programs to acquire available conservation from all the types of conservation identified in (ii) of this subsection. The portfolio must include conservation programs and mechanisms intended to reduce the energy burden of low-income customers, including programs and mechanisms identified in Condition (4)(f) below or other utility planning processes. If no cost-effective conservation is available from one of the types of conservation, Avista is not obligated to acquire such a resource. (3) Implement programs. Implement conservation programs identified in the portfolio to the extent the portfolio remains cost-effective and available. Implementation methods shall not unnecessarily limit the acquisition of all available conservation that is cost-effective. (4) Adaptively manage. Continuously review and update as appropriate the conservation portfolio to adapt to changing market conditions and developing technologies. Avista must research emerging conservation technologies and assess the potential of such technologies for implementation in its service territory ii.) Types. Types of conservation include, but are not limited to: (1) End-use efficiency (2) Behavioral programs; and (3) Market transformation. (iii.) Pilots. Avista must consider, in consultation with the advisory group, implementing pilot projects when appropriate and expected to produce cost-effective savings within the current or immediately subsequent biennium if the overall portfolio remains cost-effective.	yes	Avista has followed the processes described herein and will include all relevant conservation acquisition information in its 2023 *ACR*/2022-2023 *BCR*.

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63	BCP - G	UG-210827	4b	Biennial conservation target. Beginning January 2022, and every two years thereafter, Avista must establish a biennial conservation target. i.) The biennial conservation target must identify, and quantify in therms, all conservation that is available and cost-effective. ii.) The biennial conservation target must be based on the CPA developed under Condition 3 above and include any adjustments for known or expected site-specific projects. Avista must consult with the advisory group in determining how to set its target. iii.) Excess conservation. No more than 25 percent of any biennial target may be met with excess conservation savings allowed by this condition. Excess conservation may only be used to mitigate shortfalls in the immediately subsequent two biennia and may not be used to adjust Avista's biennial target. The presence of excess conservation does not relieve Avista of its obligation to pursue the level of conservation in its biennial target. (1) Cost-effective conservation achieved in excess of a biennial conservation target may be used to meet up to 20 percent of each of the immediately subsequent two biennial targets. (2) Avista may use single large facility conservation savings achieved in excess of its biennial target to meet up to 5 percent of each of the immediately subsequent two biennial conservation targets. If Avista believes it has a project that may constitute a "single large facility," it should work with its advisory group to determine how to meet this condition. c) Prudence. Avista retains the responsibility to demonstrate the prudence of all conservation expenditures. d) Energy savings. When available, Avista must use unit energy savings values and standard protocols approved by the regional technical forum. Unit energy savings value or standard protocol should be: i.) Based on generally accepted methods, impact evaluation data, or other reliable and relevant data that includes verified savings levels; and ii.) Presented to its advisory group for review. The commission retains discretion to determine an appropriate value or protocol. e) Applicable sectors. Avista must offer a mix of conservation programs to ensure it is serving each customer sector, including programs targeted to the low-income subset of residential customers. f) Low-income conservation i.) Avista must fully fund low-income conservation measures that are determined by the implementing agency to be cost-effective consistent with either the Weatherization Manual maintained by the Washington State Department of Commerce or when it is cost-effective to do so using utility-specific avoided costs. For purposes of this subsection, "fully fund" does not prohibit the agency leveraging other funding sources, in combination with utility funds, to fund low-income conservation projects. Measures identified through the priority list in the Weatherization Manual are considered cost-effective. In addition, Avista may fully fund repairs, administrative costs, and health and safety improvements associated with cost-effective low-income conservation measures. Avista shall maintain a project cost allowance of up to 30 percent for Administrative/ Indirect Rate associated with the delivery of low-income conservation measures. ii.) Avista's biennial conservation plan must include low-income conservation programs and mechanisms identified. To the extent practicable, Avista must prioritize energy assistance to low-income households with a higher energy burden. iii.) Avista must exclude low-income conservation from portfolio-level cost- effectiveness calculations. Avista must account for the costs and benefits, including non-energy impacts, which accrue over the life of each conservation measure. iv.) Avista must count savings from low-income conservation toward meeting its biennial conservation target. Savings may be those calculated consistent with the procedures in the Weatherization Manual.	yes	

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64	BCP - G	UG-210827	5a	Biennial conservation plan i.) On or before November 15 of every odd-numbered year, Avista must file with the commission a biennial conservation plan. ii.) The plan must include, but is not limited to: (1) The extent of public participation in the development of the ten-year conservation potential and the biennial conservation target. (2) The ten-year conservation potential, the biennial conservation target, biennial program details, biennial program budgets, and cost-effectiveness calculations. (3) A description of the technologies, data collection, processes, procedures, and assumptions Avista used to develop the figures in Condition 5(a)(ii)(2). (4) A description of and support for any changes from the assumptions or methodologies used in Avista's most recent conservation potential assessment. (5) An evaluation, measurement, and verification plan for the biennium including, but not limited to: (a) The evaluation, measurement, and verification framework. (b) The evaluation, measurement, and verification budget; and (c) Identification of programs that will be evaluated during the biennium. iii.) For the purposes of this section, ten-year conservation potential is derived pursuant to Condition 3 above. iv.) Program details must be maintained and updated as necessary in Avista's conservation tariff throughout the biennium, in accordance with Condition 8 below.	yes	This is a standard practice at Avista, as the company's natural gas efficiency planning complies with the electric WAC 480-109-120(1), which is almost identical to this condition.
65	BCP - G	UG-210827	5b	Annual conservation report. i.) On or before June 15 of each year, Avista must file with the commission, in the same docket as its current biennial conservation plan, an annual conservation report regarding its progress in meeting its conservation target during the preceding year. ii.) The annual conservation report must include, but is not limited to: (1) The biennial conservation target. (2) Planned and claimed natural gas savings from conservation, including a description of the key sources of variance between the planned and actual savings. (3) Budgeted and actual expenditures made to acquire conservation through the conservation cost recovery adjustment described in Condition 12. (4) The portfolio- and program-level cost-effectiveness of the actual natural gas savings from conservation. (5) All program evaluations completed in the preceding year. (6) A discussion of the steps taken to adaptively manage conservation programs throughout the preceding year.	yes	This is a standard practice at Avista, as the company's natural gas efficiency planning complies with the electric WAC 480-109-120(3), which is almost identical to this condition (with the exception of 3(c) of the stated WAC).
66	BCP - G	UG-210827	5c	Biennial conservation report. i.) Beginning in 2024, on or before June 15 of each even-numbered year, Avista must file with the commission, in the same docket as its current biennial conservation plan, a biennial conservation report regarding its progress in meeting its conservation target during the preceding two years. ii.) The biennial conservation report must include: (1) The biennial conservation target. (2) Planned and claimed natural gas savings from conservation. (3) Budgeted and actual expenditures made to acquire conservation. (4) The portfolio-level cost-effectiveness of the actual natural gas savings from conservation. (5) An independent third-party evaluation of portfolio-level biennial conservation savings achievement. (6) A summary of the steps taken to adaptively manage conservation programs throughout the preceding two years; and (7) Any other information needed to justify the conservation savings achievement. iii.) Avista must provide a summary of the biennial conservation report to its customers by bill insert or other suitable method within 90 days of the commission's final action on the report. iv.) Avista may file the annual conservation report and the biennial conservation report together as one report, provided that the report includes all the information required in subsections (c) and (d) of this condition and states that it serves as both the annual conservation report and the biennial conservation report.	yes	This is a standard practice at Avista, as the company's natural gas efficiency planning complies with the electric WAC 480-109-120(4), which is almost identical to this condition.

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67	BCP - G	UG-210827	5d	Plan and report review. i.) Interested persons may file written comments regarding the biennial conservation plan and biennial conservation report within 30 days of Avista's filing. ii.) Upon conclusion of the commission review of Avista's biennial report or plan, the commission will issue a decision accepting or rejecting the calculation of Avista's conservation target; or determining whether Avista has acquired enough conservation resources to comply with its conservation target. If Avista does not meet its biennial conservation target described in Condition 1(a), the commission will determine the amount in therms by which Avista was deficient. iii.) Biennial plans and reports may be reviewed through the commission's open meeting process, as described in chapter 480-07 WAC. e) Publication of reports. Beginning with the 2022-2023 *BCP*, all conservation plans and reports required by commission order as well as a summary of planned and actual savings and expenditures reflected in the plans and reports, must be posted and maintained on Avista's website. Plans and reports must be posted on Avista's website within 30 days of commission acknowledgment of the plan or order approving the report. A copy of any such plan, report, or summary must be provided to any person upon request.	NA	This is a standard practice at Avista, as the company's natural gas efficiency planning complies with the electric WAC 480-109-120(5) and (6), which is almost identical to this condition.
68	BCP - G	UG-210827	6a	Avista must use its advisory group, initially created under Docket UE-941377 and UG-941378, to advise Avista on conservation issues including but not limited to: i.) Conservation programs and measures. ii.) Updates to Avista's evaluation, measurement, and verification framework. iii.) Modification of existing, or development of new evaluation, measurement, and verification methods. iv.) Independent third-party evaluation of portfolio-level biennial conservation achievement. v.) Development of conservation potential assessments. vi.) The methodology, inputs, and calculations for cost-effectiveness. vii.) The data sources and values used to develop and update supply curves. viii.) The need for tariff modifications or mid-biennium program corrections. ix.) The appropriate level of and planning for: (1) Marketing conservation programs. (2) Incentives to customers for measures and services; and (3) Impact, market, and process evaluations. x.) Programs for low-income residential customers. xi.) Establishment of the biennial conservation target and program achievement results compared to the target. xii.) Conservation program budgets and actual expenditures compared to budgets. xiii.) Development and implementation of new and pilot programs.	yes	Avista has consulted with its advisory group on all of these items over the course of the 2022-2023 biennium.
69	BCP - G	UG-210827	6b	Advisory group meetings. Avista must meet with its conservation advisory group at least four times per year. Conservation advisory group members may request additional meetings. Avista must provide reasonable advance notice of all conservation advisory group meetings.	yes	Avista held four advisory group meetings in 2022 as well as four in 2023.
70	BCP - G	UG-210827	6c	Advance notification of filings. Except for the conservation cost recovery adjustment filing required in Condition 12, Avista must provide its conservation advisory group an electronic copy of all conservation filings that Avista intends to submit to the commission at least 30 days in advance of the filing. The filing cover letter must document the amount of advance notice provided to the conservation advisory group.	yes	This is a standard practice at Avista, as the company already complies with this requirement for electric via WAC 480-109-110(3).
71	BCP - G	UG-210827	6d	Advance notification of meetings. Avista must notify its conservation advisory group of company and commission public meetings scheduled to address its conservation programs, its conservation tariffs, or the development of its conservation potential assessment.	yes	Avista's EEAG was notified of all company and commission public meetings in 2022 and 2023.
72	BCP - G	UG-210827	6e	Avista must notify advisory group members of all public meetings scheduled to address Avista's integrated resource plan. Avista must also coordinate a meeting with advisory group members and the entity conducting the conservation potential assessment (CPA) addressing the scope and design of the CPA. This meeting must be held early enough in the integrated resource plan public process to incorporate the group's advice. Avista must notify advisory group members of *IRP* advisory group meetings that present the company's natural gas price forecasts and resource cost assumptions used in the development of the company's integrated resource plan.	yes	Avista's EEAG was notified for all meetings pertaining to the CPA as well as the *IRP*.

Item	Source	Docket	Ref	Language	Cond. Met	Notes
73	BCP - G	UG-210827	6f	Avista must consult with the advisory groups starting no later than July 1, 2023, to begin to identify achievable conservation potential for 2024-2033 and to begin to set annual and biennial targets for the 2024-2025 biennium, including necessary revisions to program details.	yes	Avista held a meeting for this purpose on June 29, 2023.
74	BCP - G	UG-210827	6g	Avista must inform the advisory group members when its projected expenditures indicate that Avista will spend more than 120 percent or less than 80 percent of its annual conservation budget.	yes	Avista discussed current budget and tariff rider balances at its spring 2023 EEAG meeting. No rate revisions were recommended at that time.
75	BCP - G	UG-210827	6h	Prior to filing the *Biennial Conservation Plan*, Avista must provide the following information to the advisory group: draft ten-year conservation potential and two-year target no later than August 15, 2023; draft program details, including budgets, no later than September 15, 2023; and draft program tariffs no later than October 16, 2023.	yes	Avista shared this information with its EEAG at its June 29, 2023 meeting.
76	BCP - G	UG-210827	6h	Prior to filing the *Biennial Conservation Plan*, Avista must provide the following information to the advisory group: ...draft program details, including budgets, no later than September 15, 2023...	yes	Avista shared this information with its EEAG at its August 28, 2023 meeting, along with further plan details.
77	BCP - G	UG-210827	6h	Prior to filing the *Biennial Conservation Plan*, Avista must provide the following information to the advisory group: ...draft program tariffs no later than October 16, 2023...	yes	
78	BCP - G	UG-210827	7	Avista must provide its proposed budget to the advisory group in a detailed format with a summary page indicating the proposed budget and savings levels for each conservation program, and subsequent supporting spreadsheets providing further detail for each program and line item shown in the summary sheet. The proposed budget must also be filed in support of any cost recovery filing, along with any other necessary workpapers. Avista must allocate a reasonable amount of its program budget (as determined through consultation with the advisory group) towards pilot programs, research, and data collection.	yes	This information is included in Avista's 2024 *ACP* and in the 2024-2025 *BCP*.
79	BCP - G	UG-210827	8	Avista must maintain its conservation tariffs, with program descriptions, on file with the commission. Program details about specific measures, incentives, and eligibility requirements must be filed and updated in this docket. Avista must consult its advisory group in accordance with Condition 6 above before making changes to program details. Avista must notify the advisory group when it files updated measures, incentives, or eligibility requirements.	yes	Avista shared this information with its EEAG as an appendix to its draft *BCP*, which was circulated to the EEAG on October 2, 2023. Avista also discussed proposed program tariff revisions at its fall 2023 EEAG meeting.
80	BCP - G	UG-210827	9a	Avista has identified several potential conservation measures described in the *BCP*. The commission is not obligated to accept savings identified in the *BCP* for purposes of compliance with the targets detailed in this order.	NA	NA
81	BCP - G	UG-210827	9b	When Avista proposes a new or significant change to a program, pilot, or tariff schedule, it must present the program to the advisory group with program details fully defined, to the extent practicable. The advisory group, after consultation, may advise if a revision to the conservation plan in this docket is necessary.	yes	Avista consulted with its EEAG on all new programs introduced in 2022 and 2023, including its Midstream Program, and On-Bill Refinancing Program. Avista also consulted with its EEAG on proposed incentive increase for site specific and lighting programs to encourage customer participation.

Item	Source	Docket	Ref	Language	Cond. Met	Notes
82	BCP - G	UG-210827	9c	Avista must spend a reasonable (as determined through consultation with the advisory group) amount of its conservation budget on evaluation, measurement, and verification (EM&V), including a reasonable proportion on independent, third-party EM&V. Avista must perform EM&V annually on a maximum four-year schedule of selected programs such that, over the EM&V cycle, all major programs are covered. The EM&V function includes impact, process, market, and cost test analyses. The results must verify the level at which claimed energy savings have occurred, evaluate the existing internal review processes, and suggest improvements to the program and ongoing EM&V processes.	yes	Avista procured an independent third-party EM&V vendor to perform impact and process evaluations, as well as cost effectiveness analysis, for Avista's program portfolio.
83	BCP - G	UG-210827	9b	When Avista proposes a new or significant change to a program, pilot, or tariff schedule, it must present the program to the advisory group with program details fully defined, to the extent practicable. The advisory group, after consultation, may advise if a revision to the conservation plan in this docket is necessary.	yes	Avista consulted with its EEAG on all new programs introduced in 2022 and 2023, including its Midstream Program, it's On-Bill Refinancing Program; its Small Business Direct Install Program, and on its Named Communities Investment Fund Program. Avista also consulted with its EEAG on proposed incentive increase for site specific and lighting programs to encourage customer participation.
84	BCP - G	UG-210827	9c	Avista must spend a reasonable (as determined through consultation with the advisory group) amount of its conservation budget on evaluation, measurement, and verification (EM&V), including a reasonable proportion on independent, third-party EM&V. Avista must perform EM&V annually on a maximum four-year schedule of selected programs such that, over the EM&V cycle, all major programs are covered. The EM&V function includes impact, process, market, and cost test analyses. The results must verify the level at which claimed energy savings have occurred, evaluate the existing internal review processes, and suggest improvements to the program and ongoing EM&V processes.	yes	Avista procured an independent third-party EM&V vendor to perform impact and process evaluations, as well as cost effectiveness analysis, for Avista's program portfolio.
85	BCP - G	UG-210827	9d	A final report for the entire 2022-2023 biennium may be implemented in phases and delivered as a final product at an earlier date, as needed, by Avista.	in pro.	Avista filled its 2022 *ACR* on June 1, 2023. Avista will file its 2023 *ACR* as well as its 2022-2023 *BCR* on or before June 1, 2024.
86	BCP - G	UG-210827	10a	Modifications to the programs must be filed with the commission as revisions to tariffs or as revisions to Avista's current conservation plan, as determined in consultation with the advisory group.	yes	There were no modifications to Avista's conservation plan this biennium. Draft program tariff revisions for 2024 have been shared and circulated with Avista's EEAG.
87	BCP - G	UG-210827	10b	Incentives and Conservation Program Implementation – Programs, program services, and incentives may be directed to consumers, retailers, manufacturers, trade allies or other relevant market actors as appropriate for measures or activities that lead to gas energy savings. Avista must work with the advisory group to establish a balanced portfolio of measures that provides savings from a variety of savings types and meets the needs of a broad spectrum of Avista customers.	yes	no new action beyond what has been discussed with its EEAG and/ or filed in a plan or report.

Item	Source	Docket	Ref	Language	Cond. Met	Notes
88	BCP - G	UG-210827	10c	Conservation Efforts Without Approved EM&V Protocol – Avista may spend up to 10 percent of its conservation budget on programs whose savings impact has not yet been measured, if the overall portfolio of conservation passes the primary cost-effectiveness test used by the commission. These programs may include information-only, and pilot projects. Avista may ask the commission to modify this spending limit, following advisory group consultation. i.) Information-only services refers to those information services that are not associated with an active incentive program or that include no on-site technical assistance or on-site delivery of school education programs. Information-only services and behavior change services must be assigned no quantifiable energy savings value without full support of the advisory group. ii.) If quantifiable energy savings have been identified and commission-approved for any aspect of such programs, the budget associated with that aspect of the program will no longer be subject to this 10 percent spending restriction.	yes	done
89	BCP - G	UG-210827	11a	The cost-effectiveness analysis required by RCW 80.28.380 must include the costs of greenhouse gas emissions established in RCW 80.28.395.	yes	Incorporation of the social cost of greenhouse gas is standard practice for Avista as part of its least reasonable cost analysis and optimization within its resource planning process.
90	BCP - G	UG-210827	11b	For the 2022-2023 biennium, Avista must use the modified Utility Cost Test (UCT) as its primary cost-effectiveness test. Avista's portfolio must pass the UCT. All cost- effectiveness calculations will assume a Net-to-Gross ratio of 1.0, consistent with the Council's methodology. i.) In 2022-2023, Avista must participate in any stakeholder process where the appropriate cost-effectiveness test and discount rate to be used for gas conservation is debated. ii.) Beginning with the 2024-2025 biennium, Avista must either: (1) Employ the cost-effectiveness test developed through the stakeholder process described in Condition 11(b)(i); (2) Employ a properly balanced TRC, as described in the commission's 2013 natural gas conservation policy statement;4 or (3) Employ a different cost-effectiveness test as determined in conjunction with commission staff and the advisory group.	Yes	Avista followed the UCT methodology for the 2022-2023 biennium. Avista intends to follow option 2, a properly-balanced TRC, as described in the commissions 2013 natural gas conservation policy statement. Avista shared these plans with its advisory group in the fall 2023 EEAG meeting.
91	BCP - G	UG-210827	11c	Avista must also provide calculations of the modified Total Resource Cost (TRC) test. The modified TRC includes all quantifiable non-energy impacts, a risk adder, and a 10 percent conservation benefit adder.	yes	This is a standard practice at Avista.
92	BCP - G	UG-210827	11d	Avista must provide calculations of both the TRC and UCT in its plans and reports. In order to comply with RCW 80.28.380, the UCT must be modified to include non-utility costs of greenhouse gas emissions as stated in condition 11(a). 4 See Docket UG-121207, "Policy Statement on the Evaluation of the Cost-Effectiveness of Natural gas Conservation Programs," at ¶ 35.	yes	This is a standard practice at Avista.
93	BCP - G	UG-210827	11e	Conservation-related administrative costs must be included in portfolio level analysis.	yes	Included
94	BCP - G	UG-210827	12a	Utilities must file with the commission for recovery of all expected conservation cost changes and amortization of deferred balances. Avista must include its conservation cost recovery procedures in its tariff.	yes	This is a standard practice at Avista.
95	BCP - G	UG-210827	12b	Scope of Expenditures – Funds collected through the Natural Gas Conservation Service Rider must be used on approved conservation programs and their administrative costs.	yes	no action needed.
96	BCP - G	UG-210827	12c	Recovery for Each Customer Class – Rate spread, and rate design must match Avista's underlying base volumetric rates.	yes	This is a standard practice at Avista.
97	BCP - G	UG-210827	12d	Avista must file revisions to its cost recovery tariff (Schedule 191) by June 1 each year, with requested effective date of August 1 of that same year. If Avista files its cost recovery tariff early, a draft annual report with completed savings evaluations must accompany the filing.	yes	For 2022, see UG-220373; Avista did not request revisions to schedule 191 in 2023 and, in consultation with commission staff, confirmed that no requested exemptions from *BCP* Conditions were required.

Item	Source	Docket	Ref	Language	Cond. Met	Notes
98	BCP - G	UG-210827	12e	Avista may not accrue interest or incur carrying charges on deferred conservation cost balances. Utilities must base conservation recovery rates on forward-looking budgeted conservation program costs for the future year with revisions to recover only actual program costs of the prior year. Utilities must also include the effects of variations in actual sales on the recovery of conservation costs in the prior year.	yes	This is a standard practice at Avista.
99	BCP - G	UG-210827	13	Avista must demonstrate progress toward sustained energy burden reductions during the 2022-2023 biennium by, at a minimum, funding all eligible and cost-effective low-income conservation measures as described in Condition 4(f). (1) Avista's biennial report must include the contribution from low-income conservation programs toward sustained energy burden reductions. The report must include the number of participants and any other information that demonstrates progress as described above. The utility should include a discussion of barriers to success, options for overcoming these barriers, and potential uses for increased low-income conservation funding. (2) Energy savings from low-income conservation measures will be counted toward conservation goals. (3) Avista may, after consultation with advisory groups, fully fund repairs, administrative costs, and health and safety improvements associated with cost-effective low-income conservation measures. These costs are excluded from portfolio cost-effectiveness calculations.	yes	Avista has met conditions i) and ii) through its inclusion of low-income programs in its plans and reports. iii) Avista fully funds repairs, admin costs, and healthy and safety improvements as described in this condition.
100	BCP - G	UG-210827	14	Avista should consult with its advisory group to determine how it should implement RCWs 80.28.260(2) and 80.28.300. Such consultation should include, but is not limited to: whether and how to research and evaluate opportunities for cool roof and tree planting conservation, with special consideration given to highly impacted communities and vulnerable populations; whether and how to provide information to their customers regarding landscaping that includes tree planting for energy conservation; and what outreach and education efforts should be conducted to inform customers of the energy and non-energy benefits of cool roofs and strategic tree planting. Avista should utilize the department of health's environmental health disparities map and coordinate with the department of natural resources to identify areas within the utility's service territory that would benefit from heat island mitigation and strategic tree planting programs. i.) If Avista pursues such research, evaluation, and/or outreach, it should detail the research and evaluation results and outreach efforts in its conservation reporting.	yes	Avista has discussed tree canopy and cool roof opportunities with its advisory group at its fall 2022 meeting, its spring 2023 meeting, and its fall 2023 meeting.

APPENDIX H – SCHEDULE 90 PROPOSED CHANGES

Fifth Revision Sheet 90
Canceling
WN U-28 Fourth Revision Sheet 90 90

AVISTA CORPORATION
dba Avista Utilities

SCHEDULE 90
ELECTRIC ENERGY EFFICIENCY PROGRAMS
WASHINGTON

1. AVAILABILITY

The services described herein are available to specified residential, commercial, and industrial, retail electric distribution customers of Avista for the purpose of promoting the efficient use of electricity. Customers receiving electric distribution service provided under special contract and/or customers receiving electric services not specified under Tariff Schedule 91 (Energy 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 electric efficiency measures and may provide other services to customers for the purpose of identification and implementation of cost-effective electric efficiency or demand response measures as described in this schedule. These services are available to owners of facilities, and also may be provided to tenants who have obtained appropriate owner consent. (N)

Assistance provided under this schedule is limited to end uses where electricity is the primary energy source. Assistance may take the form of monetary incentives or non-monetary support, as further defined within this tariff. The Company shall strive to develop a portfolio of programs that is cost-effective on an aggregate basis. Customer participation under this schedule shall be based on eligibility requirements contained herein.

2. ELIGIBLE CUSTOMER SEGMENTS

All customers in all customer segments to whom this tariff is available are eligible for participation in electric 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 electric efficiency.

3. MEASURES

Electric efficiency measures with verifiable energy savings and demand response measures intended to achieve capacity reductions 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. Eligible technologies may include, but are not limited to, energy-efficient appliances, assistive technologies, controls, distributed renewable energy, motors, heating, ventilation and air-conditioning (HVAC) systems, lighting, maintenance, monitoring, new technologies, and shell. (T) (D) (D)

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 90 (continued)

Market transformation ventures will be considered eligible for funding to the extent that they improve the adoption of electric 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.

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 retail energy rates.

The Company shall pay an incentive up to a maximum of the measure's installed cost. With the exception of low-income programs and those for populations identified in RCW 19.405.020 as described herein, which are not subject to Total Resource Cost (TRC) thresholds, the Company shall make adjustments to the percent of cost paid to attempt to obtain the greatest energy savings while maintaining a TRC cost-effectiveness of 1.0 or higher at the portfolio level. (T) (T) (D) (D) (D)

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 electric efficiency measures with demonstrable energy savings.

4.1.3 Programs or services supporting or enhancing local, regional or national electric 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 program design and are not dependent on actual project cost relative to incentive caps. Incentives shall not exceed project costs.

4.1.5 Incentives for demand response programs shall be allowed with a calculated value based on event, schedule or other applicable factors and may not exceed the Federal Energy Regulatory Commission day-ahead market energy price cap.

4.1.6 On-Bill Repayment (OBR) Program interest rate buydowns for qualifying electric energy efficiency measure financing as provided through the Company's partner lender.

AVISTA CORPORATION
dba Avista Utilities

SCHEDULE 90 (continued)

4.1.7 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.

The Company will actively pursue electric efficiency opportunities that may not fit within the prescribed services and described in this tariff. In these circumstances the customer and the Company will enter into a site-specific services agreement.

4.2 Non-Monetary Assistance

Assistance without the granting of direct monetary incentives to the customer is available across all applicable segments and 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 electric efficiency. This may include, but is not limited to, technology or customer-segment specific seminars, literature, tradeshow or community events, advertising, or other approaches to increasing the awareness and adoption of resource efficient measures and behaviors. (T)

4.2.2. Financial activities intended to reduce or eliminate the financial barriers to the adoption of electric 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 with better than existing market terms and conditions.

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By Patrick Ehrbar, Director of Regulatory Affairs

SCHEDULE 90 continued

4.2.3. Product samples may be provided directly to the customer when energy efficiency 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 or services provided to the customer by, or under the direction of, Company staff. This may take the form of design reviews, product demonstrations, third-party bid evaluations, facility audits, measurement and evaluation analysis, staff augmentation 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.

5. BUDGET & REPORTING

The electric efficiency programs defined within this tariff will be funded by surcharges levied within Schedule 91. The Company will manage these programs to obtain resources that are cost-effective from a TRC perspective and achievable through utility intervention. Schedule 91 will be reviewed annually and revised as necessary to provide adequate funding for electric efficiency efforts. (T)

6. GENERAL RULES AND PROVISIONS

Service under this schedule is subject to the General Rules and Provisions contained in this tariff and is limited to facilities receiving electric 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 electric efficiency measures and modifications to be affected under this schedule and may conduct inspections to ensure that such specifications are met.

APPENDIX I – SCHEDULE 190 PROPOSED CHANGES

Third Revision Sheet 190
Canceling
Second Sheet 190

190

WN U-29

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 Company shall strive to develop a portfolio of programs that is cost-effective on an aggregate basis. Customer participation under this schedule shall be based on eligibility requirements contained herein. (T)(D) (T)(D)

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.

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

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. With the exception of low-income programs and those for populations identified in RCW 19.405.020 as described herein, which are not subject to Total Resource Cost (TRC) thresholds, the Company shall make adjustments to the percent of incremental cost paid to attempt to obtain the greatest energy savings while maintaining a TRC cost-effectiveness of 1.0 or higher at the portfolio level. (T) (T) (N) (N)

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

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.

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.

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Issued by Avista Corporation
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, but is not limited to, 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. (T)

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.

Issued November 1, 2023 Effective January 1, 2024

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 affected 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