

Energy Efficiency



2020-2021 Biennial Conservation Plan



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Avista 2017 Electric Integrated Resource Plan and Conservation Potential Assessment
Avista EM&V Framework
Avista Technical Reference Manual

I. EXECUTIVE SUMMARY

In compliance with RCW 19.285(1) and WAC 480-109-120(1), Avista presents its 2020-2021 Biennial Conservation Plan (BCP). The plan provides the Company's Biennial Conservation Target and a Ten-Year Achievable Conservation Potential in compliance with WAC 480-109-120(1). In its BCP, Avista states its targets and describes how these were developed consistent with RCW 19.285 and WAC 480-109-120. This BCP includes the Company's 2020 Energy Efficiency Annual Conservation Plan (ACP), provided as Appendix B, which provides how Avista will achieve these targets and how savings will be defined and presented. Reporting standards and stakeholder involvement are also described.

Based on the Company's Conservation Potential Assessment, over a ten-year horizon (2020 through 2029), the Company identified a potential acquisition of 361,700 Megawatt-hours (MWh) of qualifying energy efficiency in the state of Washington. The pro-rata share of Avista's 10-year conservation potential is 72,340 MWh, which the Company intends to acquire at least that level of qualifying energy efficiency during the 2020-2021 biennium. In addition, Avista will remove the forecasted Northwest Energy Efficiency Alliance (NEEA) savings within the Conservation Potential Assessment (CPA) and will increase the target as part of a previous settlement related to decoupling.¹

Avista's Washington I-937 conservation target² has historically been based on the forecasted conservation potential contained within the Company's Integrated Resource Plan ("IRP"). For the 2019 IRP, Avista, along with other Investor Owned Utilities ("IOUs") in Washington, were requested to delay the filing of their IRP to accommodate legislative changes occurring in 2019³. As such, the delay also effects the finalization of the Conservation Potential Assessment ("CPA") as it is a component within the IRP process. In Order 01 of Docket No. UE-180738, Avista was granted authorization to utilize data from its 2017 IRP, centered on its CPA,

¹ Pursuant to Order 5 of Docket Nos. UE-140188 and UG-140189, Avista must achieve 105 percent of its biennial conservation target. As this is not a requirement identifiable to the Energy Independence Act (EIA), this "decoupling" commitment is not subject to penalties under the EIA. However, staff considers this commitment to be subject to penalties at a level consistent with that of the EIA.

² RCW 19.285, Energy Independence Act (EIA), also known as Initiative Measure No. 937 or I- 937, mandates, among other requirements, that utility companies obtain fifteen 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.

³ House Bill 1444, per RCW 19.260, Senate Bill 5116, per RCW 19.405, House Bill 1257, per RCW 19.27

as the basis for its 2020-2021 biennial acquisition target⁴. As conditioned in this Order, Avista communicated its intention to provide an amendment to its ACP after the 2019 IRP is finalized and a new I-937 target is established.

In October 2019, Avista was notified that an additional delay would occur in the IRP process and an updated IRP was not expected until a time well past the initial February 2020 target date⁵. Avista intends to remain flexible throughout the process and for purposes of providing a well-informed I-937 target for this plan, Avista elected to include an I-937 target based on the Company’s updated CPA analysis.

Table 1 illustrates the Company’s 2020-2021 EIA target along with its decoupling and NEEA components.

Table No. 1: Washington 2020-2021 EIA Target and EIA Penalty Threshold

2020-2021 Biennial Conservation Target (MWh)	
CPA Pro-Rata Share	72,340
Distribution and Street Light Efficiency	504
EIA Target	72,844
Decoupling Threshold	3,642
Total Utility Conservation Goal	76,486
Excluded Programs (NEEA)	-12,896
Utility Specific Conservation Goal	63,590
Decoupling Threshold	-3,642
EIA Penalty Threshold	59,948

⁴ WAC 480-109-100(2)(b) This projection must be derived from the utility's most recent IRP, including any information learned in its subsequent resource acquisition process, or the utility must document the reasons for any differences. When developing this projection, utilities must use methodologies that are consistent with those used in the Northwest Conservation and Electric Power Plan.

⁵ Avista filed a progress report for the IRP in Docket No. 180738 on October 25, 2019.

II. BACKGROUND

RCW 19.285, Energy Independence Act (EIA), also known as Initiative Measure No. 937 or I-937, mandates, among other requirements, that utility companies obtain fifteen 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 effectuate RCW 19.285. (References to I-937 and WAC 480-109 are used interchangeably in this plan).

This process, and the 2020-2021 BCP, are consistent with prior Commission Orders, specifically the Commission's approval with conditions of Avista's previous BCP in Docket Nos. UE-100176, UE-111882, UE-132045, UE-152076 and UE-171091.

III. THE END-USE EFFICIENCY PLAN

1. I-937 Energy Efficiency Target Setting for the 2020-2021 Biennium

I-937 conservation targets have historically been set according to the forecasted CPA contained in the Company's IRP filed in the same year. As noted above, The EIA Penalty Threshold of 59,948 MWh is based on the CPA analysis that historically has accompanied the Company's IRP. Due to delays in the IRP process, the I-937 target is filed ahead of the IRP in order inform the Company's plan for the 2020-2021 biennium.

Avista's Total Utility Conservation Goal of 76,486 MWh is set according to the CPA and further informed by decoupling commitments and distribution efficiency savings. Avista projects a higher acquisition of conservation savings than this amount and has included in its plan an estimated 84,282 MWh of qualifying energy efficiency for the 2020-2021 biennium.

2. Overview of 2020-2021 Biennial Conservation Plan

This plan describes the efforts of Avista, in consultation with interested external stakeholders, to estimate a ten-year achievable conservation potential, ascertain a biennial acquisition target, identify qualifying measures to be counted towards 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, are provided in Appendix A. In addition, descriptions of eligible measures and evaluation requirements are described within the Company's 2020 Annual Conservation Plan (ACP), provided as Appendix B.

The Company's energy efficiency expectations over the 2020-2021 time period are founded upon the pursuit of achieving all cost-effective energy efficiency and operating within the prevailing market and economic conditions. Though advancements in energy efficient technologies continue to occur and the ability of utilities to apply innovative approaches to program implementation have accelerated, impacts from newly enacted appliance standards have presented challenges to the Company's Energy Efficiency portfolio. House Bill 1444 (HB 1444), for example, sets higher minimum efficiency standards for many programs offered by Avista, such as general service lighting, which has historically been a significant component of the Company's portfolio of savings⁶.

For 2020, the efficiency standards contained in HB 1444 mandate that general service lamps must meet efficiency standards set forth in RCW 19.260.040, which requires a lamp efficacy of 45 lumens per watt or higher. While this standard is, overall, a benefit for Avista's energy efficiency goals, it does reduce the potential savings derived from programs that incentivize customers to purchase high efficient LED lamps, as the high efficiency option will ultimately be the only option. Avista has committed to participating in future workshops concerning efficiency standards going into 2020.

3. 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. Although no acquirable potential relative to thermal efficiency was identified within Avista's IRP, the Company will continue to pursue cost-effective opportunities in this area and will claim any acquisition towards its target. The Company has included the estimated MWh savings and budget for the 2020-2021 Biennium with Appendix A. Within the CPA, 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

⁶ Referencing RCW 19.260.040 minimum efficiency standards

of all energy efficiency regardless of how it is delivered, regional savings that will be acquired through NEEA⁷ are inherently included.

During the prior biennium, a Statewide Advisory Group (SWAG) was assembled in response to the Commission's Order 01 in Docket No. UE-171087, with contributing members including Washington State electric and natural gas IOUs and their respective advisory groups, to discuss the CPA's treatment of NEEA savings. A Charter was then developed, to focus the group's efforts on specific issues identified by Commission Staff; one main topic was whether NEEA savings should be treated "in" or "out" of the penalizable target. As a result of these efforts, it was decided that "Program Measures" and "Codes and Standards" should be excluded from the EIA Penalty Thresholds. A copy of the SWAG report has been included as Appendix E.

In an effort to maintain consistency with the Council's 7th Power Plan, savings estimates referencing 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. It should be noted, that while the Council's 7th Power Plan includes UES values at the busbar, the UES list, shown in Appendix C, are included at the site. There is no restriction on measure or equipment eligibility or re-adoption based upon measure life. Programs delivering quantifiable savings based upon energy saving behaviors are eligible.⁸

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 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 done to provide better estimates.

Energy efficiency measures and equipment analyzed within the CPA were evaluated using the Power 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

⁷ 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 towards the Company's target. NEEA will report code changes, savings estimates and attribution linkages which Avista will use to report savings.

⁸ The Company will leverage existing protocols when evaluating and/or implementing a behavioral program and will incorporate such protocols within future targets to provide for symmetry between target setting and acquisition claims.

of gross acquisition. The avoided costs used to evaluate measures and equipment includes components for energy, carbon, capacity, risk and transmission and distribution losses.

4. Energy Efficiency Portfolio - Program Summary

The Company offers a wide range of electric and natural gas efficiency programs to our customers as well as supporting outreach, infrastructure and educational programs. These programs are comprehensively reviewed on an annual basis as part of the business planning process. The business planning process establishes an operational plan for achieving all cost-effective conservation through available or contemplated tools.

The business planning process establishes measurable metrics for the continuous management of the Energy Efficiency portfolio to include budgets, labor and physical equipment requirements and general infrastructure needs. 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.

Avista's 2020 ACP contains the results of these efforts and are incorporated by reference and attached in Appendix B. The ACP provides a bottom-up approach of how program implementation intends to drive participation and acquire savings to be counted toward the Company's target through existing programs, ramping of existing programs and the development of new programs. Avista is also providing a Two-Year Planning Summary in Appendix A of this BCP.

5. Energy Efficiency and Regional Stakeholder Engagement

Avista has had an ongoing active stakeholder involvement since 1992. Extensive stakeholder involvement opportunities have been provided for the development of this BCP and associated issues through multiple processes, including Avista's IRP Technical Advisory Committee (TAC) and the Energy Efficiency Advisory Group (Advisory Group).

Avista's Advisory Group consists of interested regulatory, consumer, and energy industry stakeholders.⁹ During the prior biennium, Avista worked alongside the members of the Advisory

⁹ The Advisory Group is Avista's non-binding oversight and advisory group for energy efficiency. The Advisory group is currently composed of fellow IOUs, the UTC staff, the IPUC Staff, OPUC Staff, the Washington Office of Public Counsel, Northwest Energy Coalition, SNAP, The Energy Project, Northwest Energy Efficiency Alliance, Northwest Power and Conservation Council, Northwest Energy Efficiency Council, Idaho Conservation League, Department of Commerce, Northwest Energy Efficiency Council, CAPAI and Rosauers Supermarkets.

Group to maintain a high level of communication among its members and to provide timely updates and opportunities for involvement in its program planning. In preparation for the 2020-2021 Biennial Conservation Plan and pursuant to Docket UE-171091, Order No. 01, issued by the Commission on January 12, 2018, Avista hosted webinars to inform the Advisory Group of its BCP progress and allow time for Advisory Group input and feedback. On June 28, 2019, the Company hosted a webinar to discuss the BCP plan in consideration of the delayed IRP process, and gained consensus that using the 2018-2019 I-937 conservation target was appropriate for planning purposes¹⁰. On August 29, 2019, the Company presented the draft plan and plan elements to the Advisory Group, with the draft program tariffs provided shortly thereafter, concurrent with the provision of the draft 2020-2021 Biennial Conservation Plan on October 1, 2019.

The status of target achievement and associated updates will be provided to interested parties in several ways over the compliance period. The Advisory Group is given opportunities to provide input into the Company's development of the Energy Efficiency Annual Conservation Plan, along with the Biennial Conservation Plan. This process guides the business operations for the following year, and is distributed to the Advisory Group at least thirty days prior to filing, for input regarding programs, outreach, measurement and evaluation, labor, and other necessary administration to achieve the conservation target.

Avista commits to hosting at least four Advisory Group meetings (either in-person or by webinar) in each year of the 2020-2021 biennium. During these meetings, or through other communications, the Advisory Group will be updated on, and have opportunity to review:

- (a) Conservation programs and measures.
- (b) CPA and I-937 updates
- (c) Program enhancements to Energy Assistance per Senate Bill 5116 (RCW 19.405.120)
- (b) Updates to the utility's evaluation, measurement, and verification framework.
- (c) Modification of existing, or development of new evaluation, measurement, and verification methods.
- (d) Independent third-party evaluation of portfolio-level biennial conservation achievement.
- (e) Development of conservation potential assessments, as required by RCW 19.285.040 (1)(a) and WAC 480-109-100(2).
- (f) The methodology, inputs, and calculations for cost-effectiveness.
- (g) The data sources and values used to develop and update supply curves.
- (h) The need for tariff modifications or mid-biennium program corrections.

¹⁰ This decision was made prior to the notification of an additional delay for the IRP. In order to better inform the Company's 2020-2021 BCP, the Company elected to include the current CPA in its 2020-2021 target.

- (i) The appropriate level of and planning for:
 - (i) Marketing conservation programs;
 - (ii) Incentives to customers for measures and services; and
 - (iii) Impact, market, and process evaluations.
- (j) Programs for low-income residential customers.
- (k) Establishment of the biennial conservation target and program achievement results compared to the target.
- (l) Conservation program budgets and actual expenditures compared to budgets.
- (m) Development and implementation of new and pilot programs.

In addition to meetings, the Company provides periodic newsletters and other documents with planning, programmatic, and statistical updates, tariff rider balances, updates on acquisition, and an annual Energy Efficiency report on final results for the year.

6. Energy Efficiency Program Descriptions

Avista has offered electric-efficiency programs continuously since 1978. The Company's current portfolio of efficiency programs is broadly applicable across all customer segments. The overall portfolio contains individual market segments for non-residential, general residential and low-income residential customers. Each portfolio applies a segment/project-specific strategy to deliver opportunities for cost-effective energy efficiency to that customer population. Efficiency programs are offered either through standard offer (also termed "prescriptive") as well as through a site-specific (also termed "custom") program for non-residential measures not otherwise available in a prescriptive program.

Detailed descriptions of the individual local programs are contained within the 2020 ACP. These programs are categorized into non-residential prescriptive, non-residential site-specific, residential prescriptive, direct install, partner programs, and low-income. These programs, and the Company's strategy for success within each market segment, are discussed in greater detail within the 2020 ACP.

The Company proposes to retain the option to develop and revise programs as necessary over the course of the 2020-2021 biennium in order to adaptively manage the programs and its elements. This on-going 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 is also a funder and an active participant in the achievement of energy efficiency through regional market transformation. This activity occurs through the Northwest

Energy Efficiency Alliance 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.

7. Reporting and Tracking Systems

Avista is currently transitioning to its iEnergy platform, which will drive business process management and enhance customer engagement. iEnergy administers and analyzes energy efficiency programs in a single, secure system of record. In addition, the Trade Ally Connect feature will assist Avista in managing contractors and communication of its energy efficiency programs. Currently, Avista has two main tracking systems for energy efficiency projects: Oracle's Customer Care and Billing (CC&B) and InforCRM. CC&B software was selected and implemented in early 2015, replacing Avista's legacy customer information system; the majority of Avista's residential prescriptive programs are tracked in CC&B. InforCRM, which contains project, rebate, and customer information for non-residential projects,¹¹ is utilized separately from CC&B due to the complexity of the projects, significant details, and project information that are necessary when tracking nonresidential projects from start to finish. In addition, a corporate financial system is used for tracking finances and expenditures across all areas of Avista. In 2020, Avista plans for iEnergy to be the lead tool for analysis and storage and will continue in 2020 to endeavor towards the goal of including all projects offered through the energy efficiency program.

The Company will continue to provide monthly reports to Commission Staff and Avista's Energy Efficiency Advisory Group covering targets, energy savings, budgets, actual expenses, revenue, and tariff rider balances. The Company will continue to make this report available to the Advisory Group throughout the 2020-2021 biennium, along with exploring new ways to evaluate its reporting and seek out improvements for communicating data to stakeholders.

Various internal reports are produced for Avista's program managers and other staff. The reports differ in content depending on the needs of those requiring the information, with data regarding energy savings acquisition, costs, details of rebates, location, customer, and other

¹¹ Nonresidential projects are inclusive of commercial, industrial, nonprofit, multi-family developments and government.

information as needed. These reporting and tracking systems are evolving to meet the needs of those involved in managing the programs, measures, and energy efficiency activities as well as those involved in advisory groups and external regulatory groups.

Avista is committed to the following reporting schedule for its 2020-2021 biennium:

- Revisions (if any) to the cost recovery tariff will be filed on or before June 1, 2020, with a requested effective date of August 1, 2020.
- 2021 Energy Efficiency Annual Conservation Plan, containing program details and an annual budget, will be filed on or before November 15, 2020.
- A 2020 Annual Report on Conservation Acquisition on evaluated results, including an evaluation of cost effectiveness and comparing budgets to actual, will be filed on or before June 1, 2021.
- A 2020-2021 Two-Year Report on Conservation Acquisition Achievement on evaluated results will be filed by June 1, 2022.

8. Adaptive Management and Implementation Strategies

Despite the best efforts of all of those involved in planning for the achievement of the Company's acquisition and cost-effectiveness targets, there will be the frequent need for revisions and mid-course corrections during the biennium.

The Company's 2020 Energy Efficiency ACP outlines a strategy for the upcoming calendar year. The Company regularly consults with its Advisory Group on matters pertaining to its Energy Efficiency program to gain advice and guidance on issues as they arise. Additionally, the Company 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 2021 activities.

The Company will continue to evaluate potential efficiency measures throughout the biennium. Measures that have the potential for delivering cost-effective savings will be considered for incorporation into the Energy Efficiency portfolio. The quantifiable acquisition from all eligible measures, whether they are included in the current portfolio or not, will count towards the achievement of the portion of the BCP target subject to penalty.

If the Company's tracking and management of efficiency acquisition indicates that it is likely that the portfolio will fail to achieve an acquisition equal to the BCP target stated in this filing, the Company will immediately notify the Commission. This notification will include an

estimate of the shortfall, the causes of the deficiency and the steps taken or being contemplated by Avista to address the issue.

It is fully recognized that the Company bears the responsibility for achieving the acquisition targets established within this BCP, and that the Company will need to make revisions, from time to time, to the portfolio within the boundaries of the current or future tariff language to meet these obligations.

9. 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 2020-2021 biennium, NEEA forecasts that Avista will receive 14,016 MWh, which includes 6,658 MWh from Program Measures and 7,358 MWh from Codes and Standards. These values net out the NEEA forecast of saving from BPA, the Energy Trust of Oregon, and savings from utilities' local programs.

For the purposes of including NEEA in the Company's I-937 target, the Company has removed 1,139 MWh from the NEEA estimate related to codes outside of the Washington Jurisdiction. The total NEEA estimate, net of those code adjustments, is 12,896 MWh.

Avista participates in many 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 programs, rebate programs, direct install programs, and 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 No. 2 identifies the NEEA programs that Avista participates in from a local and regional level.

Table No. 2: Avista Participation in NEEA Programs and Initiatives

Sector	Programs	Markets	Avista Participation
Residential	Ductless Heat Pumps	Single family Electric (existing buildings)	Locally and through regional efforts
		Single-family Zonal (existing buildings)	Locally and through regional efforts
		Multifamily (existing buildings)	Locally and through regional efforts
	Heat Pump Water Heaters	Existing Single Family or Manufactured Homes	Locally and through regional efforts
		New Single Family or Manufactured Homes (not counted under Residential New Construction)	Locally and through regional efforts
	Residential Lighting	General Purpose	Locally and through regional efforts
		Specialty	Locally and through regional efforts
	Residential New Construction/Next Step Homes	Single-family above Code	Supported through the Company's allocated share of regional NEEA funding
	Retail Product Portfolio	Retail Sales-Clothes Washers (2017+)	Locally and through regional efforts
		Retail Sales-Refrigerators/Freezers	Supported through the Company's allocated share of regional NEEA funding
Retail Sales-Room Air Conditioners		Supported through the Company's allocated share of regional NEEA funding	
Super-Efficient Dryers	Retail Sales-Dryers	Locally and through regional efforts	
Commercial	Building Operator Certification	Commercial Building Operators	Supported through the Company's allocated share of regional NEEA funding
	Commissioning Buildings	New Buildings	Locally and through regional efforts
		Existing Buildings	Locally and through regional efforts
	Desktop Power Supplies	Commercial Desktops	Supported through the Company's allocated share of regional NEEA funding
	Luminaire Level Lighting Controls	Lighting Controls	Locally and through regional efforts
Reduced Wattage Lamp Replacement	Replacement Market	Locally and through regional efforts	
Industrial	Certified Refrigeration Energy Specialist (CRES)	Refrigerator Service Operators	Supported through the Company's allocated share of regional NEEA funding
	Drive Power	Motor Rewinds	Locally and through regional efforts
	Commissioning Buildings	New Buildings	Locally and through regional efforts
		Existing Buildings	Locally and through regional efforts
Reduced Wattage Lamp Replacement	Replacement Market for Industrial Buildings	Locally and through regional efforts	

Avista will continue to monitor NEEA activity and for offerings that fit its local program portfolio during the 2020-2021 biennium.

In addition to these programs, Avista is also committed to providing support for NEEA studies and assessments. Avista has recently participated in the Commercial Building Stock Assessment (CBSA), the Residential Building Stock Assessment (RBSA) and also the End-Use

Load Research Study. Avista did not participate in the MFSA however, as future opportunities arise and housing stock continues to evolve, the Company will evaluate the value of participating in this study.

10. Regional Market Transformation

Continuing its commitment to the advancement of energy efficiency technologies for the region, Avista is investigating new Market Transformation efforts for Washington and Idaho customers within its service territory. This engagement will focus market transformation efforts towards energy efficiency measures and solutions that are specific to Eastern Washington and Northern Idaho. While larger Market Transformation efforts from NEEA focus on the region as a whole, this engagement will be complementary to those efforts.

Also from this engagement, Avista will gain a better understanding of its customers' needs given the climate, economic and social landscapes in our service territories. In 2020, Avista will work with its vendor to determine the feasibility of new technologies and how they could lead to energy conservation for Avista customers. Specifically, the Company will investigate climate specific technologies for ductless heat pumps, water heating and liberty homes. Avista will work with its advisory group as this engagement develops and will allow stakeholders to provide feedback.

11. Implementation of Senate Bill 5116

Senate Bill 5116, or the Clean Energy Transformation Act (CETA), in accordance with RCW Chapter 19.405, provides some guidance to utilities for expanding their Energy Efficiency efforts towards hard to reach markets. For Avista, this emphasis is consistent with the Company's efforts towards expanding our Energy Efficiency efforts so all customers can participate in our programs.

Along with other utilities in the state of Washington, Avista will be developing its Clean Energy Action Plan (CEAP) which is a ten-year action plan for implementing RCW 19.405.030 through 19.405.050, addressing coal-fired resources, greenhouse gas neutrality, and clean energy implementation.

RCW 19.405.040(8) states that an "electric utility must, consistent with the requirements of 19.280.030 and 19.405.140, ensure that all customers are benefiting from the transition to clean energy. Through the equitable distribution of energy and non-energy benefits and reduction of

burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits and reduction of cost and risk; and energy security and resiliency.”

Ensuring that the transition to clean energy benefits all customers poses a challenge, and also an exciting opportunity, for Avista in that it is consistent with the Company’s focus on putting the customer first. Throughout the biennium, Avista will work with its stakeholder group to identify potential new avenues to reach more customers through its Energy Efficiency offerings, and also look to develop new offerings to ensure that all customers are benefiting from the clean energy transition.

Avista will also remain engaged in the Department of Commerce and Washington UTC rulemaking processes by participating on workshops, open meetings, and other forums where the transition to clean energy is discussed.

Pursuant to RCW 19.405.060, Avista will develop and submit to the Commission its four-year clean energy implementation plan, by January 1, 2022, for the standards established under RCW 19.405.040(1) and 19.405.050(1) that proposes specific targets for energy efficiency, demand response, and renewable energy. Throughout the development of this plan, Avista will seek input from its Advisory Group, key stakeholders, and representatives from the WUTC.

Section 12 specifically addresses the equitable distribution of energy benefits and reduction of burdens to low-income customers. While the definitions of these customer segments are still being developed, Avista will work closely with its Advisory Group, UTC Staff and members of the Company’s community action agencies to tailor its approach towards these markets. Currently, Avista serves its low-income populations with several programs:

- a) Residential Rural Community Initiatives: For residential customers, the Energy Resource Van is a mobile outreach initiative that provides on-site education to heighten awareness about energy assistance, online tools, billing and payment options, along with providing energy saving items and tips to all rural and urban communities in Avista’s service territory. For commercial customers, the Business Partner Program initiative launched in August 2019, targets the business customers in rural communities by providing an assessment of their buildings’ energy use, educating about energy efficiency opportunities and providing an overall awareness of online tools and billing and payment options. Refer to section (b) below, CEEP Partnership, for additional information.
- b) Low-Income Rate Assistance Program (LIRAP): Transitional grant program that provides bill assistance for Heat and Emergency.

- c) Senior and Disabled Customer Rates Discount Program: Provides customers with a percentage discount on their elected fuel.
- d) Weatherization Assistance: Provides income qualified customers with energy efficiency improvements for the home that may include the following items: air sealing, insulation, space and water heating equipment, window replacement, as well as any necessary home repairs to preserve the integrity of the measure or the safety of the home's occupants.
- e) CEEP Partnership: Community Energy Efficiency Program (CEEP) is a Washington state program that supports homeowners and small businesses in hard to reach markets to make energy efficiency improvements. The Company has been a CEEP partner during the last three biennium to utilize these funds in Eastern Washington. When awarded, the Company provides a financial match, as well as in-kind support to reach a variety of customer groups. The current Avista/CEEP effort is aimed at reaching customers in both rural and urban communities, with two areas of focus: 1) providing energy efficiency improvements in multifamily properties that may include space heating equipment and controls, weatherization improvements and lighting, and 2) identifying income qualified homes that use an alternative heat source (e.g. wood, oil) to provide the option of switching to a heat pump system. A third program concept is currently under review that works in conjunction with the Business Partner Program initiative mentioned above and would assist the small, rural businesses owner in Washington with the identification, coordination and installation of energy efficiency improvements.
- f) Avista Outreach: In partnership with the Company's Energy Efficiency efforts, Avista's Consumer Affairs department conducts conservation education and outreach for our low income, senior and vulnerable customers. The Company reaches the target population through workshops, energy fairs, mobile and general outreach. Each of these methods include demonstrations and distribution of low-cost and no-cost materials with a focus on energy efficiency, conservation tips and measures, and information regarding energy assistance that may be available through agencies.
- g) Avista Multifamily Direct Install Program: Avista has contracted with SBW to recruit and treat multifamily units. Multifamily is a hard to reach market that also has a split incentive challenge to overcome. The direct install approach provides benefits to the landowner and tenants as well as delivering cost-effective savings.

12. Coordination Between Utilities

The prior biennium brought several opportunities for Avista to coordinate between other utilities within the state of Washington. Avista believes there is benefit to the Company, stakeholders and, most importantly, its customers by coordinating efforts to provide consistencies

across the industry where appropriate. While Avista recognizes that the eastern side of the state has a different climate zone and customer base, increased communication with other IOUs helps to identify alternative program designs that could further the penetration of Energy Efficiency for Avista customers.

During 2020-2021, Avista is committed to pursuing further efforts to align best practices and recognize potential opportunities among utilities. The Company plans to attend Advisory Group meetings of partner utilities, as well as to extend invitations for those partners to attend Avista's Advisory Group meetings. Avista will also investigate where its service territory overlaps with other utility companies and seek out ways to collaborate with those utilities in order to offer customers a more holistic opportunity for energy efficiency programs at their homes. The Company is open to additional inspiration for how it might collaborate with other utilities in this upcoming biennium, and will seek further feedback on this matter from its Advisory Group throughout this timeframe.

IV. 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 stakeholders that adequately determines the energy efficiency acquisition of Avista's Energy Efficiency programs as well as provide real-time information for program management. EM&V, as described below and taken as a whole, are 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, annual EM&V plans and individual program EM&V guidelines, will be reviewed and updated as necessary to improve their benefit to the Energy Efficiency programs and Avista's customers. Furthermore, Avista's TRM has been evaluated by an independent, third-party evaluator and savings estimates are updated annually based on on-going impact evaluation findings and other appropriate sources.

The RTF, as an advisory committee to the Northwest Power and Conservation Council (the Council), is a valued source of information relating to the measurement of energy savings, but is not the only source of information. 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 which would be applied to the associated UES. RTF assumptions may be updated with Avista specific assumptions (e.g. actual purchases versus forecasted purchases) to come up with an RTF-consistent UES 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 7th 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, estimated useful lifetimes, and measure sunset 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.

Baselines for cost-effectiveness and the measurement of energy savings will be modified during the biennium to be consistent with code or standard revisions that become effective during the biennium. In the unlikely event that unanticipated revisions to codes and standards occur between the applicable BCP and IRP, Avista will claim energy saving credit relative to the baselines consistent with the effective date anticipated within the establishment of the I-937 targets for any documented projects.

For performance contract projects that extend across annual or biennial periods, acquisition, cost-effectiveness and incentive expenditures will be based on the date of the final incentive payment associated with the project. The payment date will establish the effective date of the acquisition for all purposes of the BCP, including the prudence of the incentive.

The Company will apply, as the primary cost effectiveness test, the TRC test as modified by the Council. The Council-modified calculation of TRC includes quantifiable non-energy benefits, 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 will provide calculations

of the Program Administrator Cost test (also called the Utility Cost Test, or UCT), Ratepayer Impact Measure test, and Participant Cost Test.

Overall conservation cost-effectiveness will be evaluated at the portfolio level, electric and natural gas combined. Costs included in the portfolio level analysis include conservation-related administrative costs. Avista will continue to evaluate measure and program level cost tests. Avista will seek the best information available for accurate and applicable savings for electricity measures and will look first to the Council's RTF. If Avista utilizes 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, and be presented to the Advisory Group for comment.

For the 2020-2021 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. 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.

V. COMPLIANCE AND OTHER KEY ISSUES

In this 2020-2021 Biennial Conservation Plan, 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 to this BCP, the Company provides the programs designed to achieve these targets, as well as how these savings will be defined and presented. Reporting standards and stakeholder 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 2020-2021 Biennial Conservation Report. Avista will file supporting evidence to demonstrate the prudence of its electric Energy Efficiency expenditures for its 2020 and 2021 program years. Avista has the full responsibility to manage its Energy Efficiency portfolio so as 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.

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. WUTC Commission Staff has worked closely with the

National Efficiency Screening Project to explore and develop the National Standard Practice Manual (NSPM), which provides a thoughtful review of the challenges associated with traditional conservation cost-effectiveness tests and provides a framework to guide Conservation Program Administrators and Regulators as they seek to address these challenges going forward.

Section 10(b) of the conditions to Avista's 2018-2019 Biennial Conservation Plan¹² required that, "to avoid double-counting of efficiency savings achieved at electric power production facilities owned in whole or in part by Avista, the Company will develop a protocol for how savings will be claimed, with advice and review provided by the Advisory Group. If a protocol is established, Avista will consult with the Advisory Group prior to modifying it."

In consideration of this requirement, Avista established a protocol that will institute the annual review of any energy efficiency projects performed at energy production sites. The goal of the annual review is to ensure that energy efficiency savings are accurately accounted for, and to avoid the double counting of those savings that may also be included in the Company's local program offerings.

As part of this protocol, members of the Energy Efficiency department will meet with representatives of Avista's GPSS (Generation, Production, and Substation) department to identify and itemize any energy efficiency projects that occurred throughout the given year, to identify the associated kWh savings from those efforts. More specifically, the Energy Efficiency team will inquire to determine if Avista participated in any project at energy production facilities that:

1. Resulted in the reductions of kWh usage where those kWh savings are quantifiable
2. Received a monetary incentive (rebate) through an energy efficiency program
3. Was partially or fully funded through the Energy Efficiency Tariff Rider
4. Involved any energy efficiency measures that were part of an upstream or midstream program offered by the Company

Meetings will occur after the close of the calendar year to ensure that all projects that took place within the time period reviewed are known, completed and measureable. If deemed necessary by the Company's third-party EM&V vendor, these projects will also be reviewed as part of the Company's EM&V process.

¹² attachment A of Docket UE-171091 Order No. 01

The Company will ensure that savings recognized at any production site are counted towards generation efficiencies and are not also counted elsewhere for the purposes of avoiding double counting. This will be accomplished through an annual review of all non-residential projects with service agreements, physical addresses and customer names being analyzed. Any incentive amounts paid, or kWh savings recorded resulting from projects at Avista sites, will be marked for further review. For projects that have been identified, the following procedures will be applied:

1. Avista will ensure that those savings are counted towards either generation or local programs, but not both.
2. If the savings from the project have been counted towards the Company's Local Achievement, Avista will deduct the amount of kWh/Therms derived from the project at the energy production site and recognize the kWh/Therm savings as part of its Generation Efficiencies achievement for annual reporting purposes.
3. If the savings have not been recognized in the Company's Local Achievement savings, no adjustment will be necessary and the Company will recognize the savings in its Generation Efficiencies Achievement.

VI. DISTRIBUTION EFFICIENCY

Targets for distribution energy efficiency capture first year energy savings consistent with the end-use energy efficiency protocols. The 2020-2021 Biennial Conservation Target in Table No. 1 includes 504 MWh of distribution efficiency savings. The table below summarizes the distribution efficiency estimates for the 2020-2021.

Table No. 3: Distribution Efficiency

Distribution Efficiency	2020-2021 Estimated MWh
Street Light LED Change Out Program	83
Grid Modernization Program	421
Total Distribution Efficiency	504

Avista manages street light fixtures for many local and state governments. As an element of its 2013 Street Light Asset Management Plan, Avista's Asset Management group replaced approximately 21,640 high pressure sodium fixtures, of which 15,148 are in Washington, with comparable LED fixtures. This project began in in 2015, with the vast majority of lights replaced

by the end of 2019. For 2020-2021, it is expected that a small number of outstanding lights will be converted, resulting in distribution efficiencies of 83 MWh for the biennium.

Grid Modernization technology has been designed to improve the power grid's reliability and performance by optimizing the push and pull from supply and demand. Ultimately, these projects will move the region and nation closer to establishing a more efficient and effective electricity infrastructure that's expected to help contain costs, reduce emissions, incorporate more wind power and other types of renewable energy, increase power grid reliability, and provide greater flexibility for consumers.

Table No. 4 below displays the various distribution efficiency projects that have already been completed in previous bienniums along with the current and future projects. The Company is expecting two Washington feeder upgrades in 2020-2021 including a 269 MWh project for Feeder BEA12F2 (Beacon, Spokane, WA) occurring in 2020 and a 152 MWh project for Feeder ROS12F5 (Ross Park, Spokane, WA) occurring in 2021.

Table No. 4: Planned and Historic Feeder Upgrades

	Feeder	Area	Year Complete	Annual MWh Savings
Complete	9CE 12F4	Spokane, WA	2009	601
	BEA 12F1	Spokane, WA	2012	972
	F&C 12F2	Spokane, WA	2012	570
	BEA 12F5	Spokane, WA	2013	885
	CDA 121	Coeur d'Alene, ID	2013	438
	WIL 12F2	Wilbur, WA	2015	1,403
	OTH 502	Othello, WA	2015	21
	M23 621	Moscow, ID	2015	576
	RAT 231	Rathdrum, ID	2015	149
	WAK 12F2	Spokane, WA	2016	176
	MIL 12F2	Millwood, WA	2017	186
	ORO 1280	Orofino, ID	2017	112
	PDL 1201	Clarkston, WA	2017	189
	TUR 112	Pullman, WA	2018	233
	HOL 1205	Lewiston, ID	2018	66
	SPI 12F1	Northport, WA	2019	115
	RAT 233	Rathdrum, ID	2019	472
	SPR 761	Sprague, WA	2019	106
	F&C 12F1	Spokane, WA	2019	260

Planned	BEA 12F2	Spokane, WA	2020	269
	ROS 12F5	Spokane, WA	2021	152
	SIP 12F4	Spokane, WA	2022	283
	MIS 431	Cataldo, ID	2023	257
	M15 514	Moscow, ID	2023	246

Avista's movement towards Advanced Meter Infrastructure (AMI) presents multiple opportunities for both the Company and its customers. With the increase in availability and frequency of data from the end user, Avista is able to leverage this information into meaningful insights for our systems and customers. As of October 1, 2019, Avista has installed 168,322 AMI meters and has 260,275 remaining to be installed. This places the implementation schedule at 39.27% complete. The AMI rollout will continue throughout 2020, and Avista will begin to identify areas where AMI data could be leveraged to provide a higher benefit to distribution system savings.

A particular area of interest for the Company is how AMI data might inform a differential between the line voltage at the feeder compared to the voltage at the customer or site. AMI meters are able to provide real-time data that could be analyzed against feeder level data to identify potential efficiencies; this, in turn, could help Avista recognize any potential modifications or optimizations. As previously stated, Avista is still in the process of deploying the AMI meters and will continue to evaluate potential areas of efficiency savings as this implementation progresses. Please see section V of the attached 2020 Annual Conservation Plan for more details regarding the future of Avista's AMI implementation.

VII. GENERATION EFFICIENCIES

Avista periodically audits its facilities for energy efficiency improvements. This includes its approximately fifteen generating facilities. Unlike its Main Office Building most generating facilities draw power from its adjacent power plant and are not metered as a typical "Avista customer." This is known as a "parasitic load." As a non-metered service (not contributing to Schedule 91), Avista intends to capture the costs associated with these projects through its normal rate-making process. For the 2020-2021 biennium, Avista does not anticipate generation projects or retrofits that would lead to generation efficiencies, however will continue to put forth effort to identify and pursue these efficiencies in future BCPs.

VIII. CONCLUSION

Table No. 5 below summarizes the expected target acquisition from the electric-efficiency portion of Avista’s Energy Efficiency portfolio and distribution efficiency measures. The Company's proposed energy efficiency acquisition for the 2020-2021 biennium is based upon a CPA completed by a third-party consultant, applying a methodology consistent with the Council's 7th Power Plan. Additionally, expectations regarding distribution efficiency are based upon estimates of the annual acquisition from projects anticipated to be completed within the biennium. The potential for the acquisition of electric-efficiency within generating stations is based on measures similar to Avista’s site-specific or custom programs.

Table No. 5: Washington 2020-2021 EIA Target and EIA Penalty Threshold

2020-2021 Biennial Conservation Target (MWh)	
CPA Pro-Rata Share	72,340
Distribution and Street Light efficiency	504
EIA Target	72,844
Decoupling Threshold	3,642
Total Utility Conservation Goal	76,486
Excluded Programs (NEEA)	-12,896
Utility Specific Conservation Goal	63,590
Decoupling Threshold	-3,642
EIA Penalty Threshold	59,948

Avista's energy efficiency programs are funded through “tariff rider” Schedule 91 for electric service and Schedule 191 for natural gas. For the 2020-2021 compliance period, proposed "true-up" changes to Schedule 91 are not proposed at this time. The Company and its Advisory Group will continue to monitor these balances, and propose any modifications to the Commission as necessary.

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Appendix A:
Washington Two-Year Planning Summary

Appendix A: 2020-2021 Washington Savings Goals and Budgets

Programs	MWh Savings	Estimated Electric Budget	Therm Savings	Estimated Gas Budget	Total Budget
Low-Income Programs					
Low-Income Program	883	\$1,712,985	51,487	\$3,292,071	\$5,005,056
Low-Income Total	883	\$1,712,985	51,487	\$3,292,071	\$5,005,056
Residential Programs					
Residential Prescriptive	5,023	\$1,190,000	1,283,717	\$5,985,400	\$7,175,400
Multifamily Direct Install	6,234	\$3,623,582	1,733	\$20,786	\$3,644,368
Residential Total	11,257	4,813,582	1,285,450	6,006,186	10,819,768
Non-Residential Programs					
Interior Pres Lighting	15,592	\$2,263,600	-	\$0	\$2,263,600
Exterior Pres Lighting	18,157	\$3,509,400	-	\$0	\$3,509,400
Site Specific	33,200	\$5,112,800	302,000	\$906,000	\$6,018,800
Prescriptive Shell	1,070	\$230,000	52,000	\$108,131	\$338,131
Green Motors	104	\$17,893	-	\$0	\$17,893
NonRes HVAC	-	\$0	69,240	\$192,000	\$192,000
Variable Frequency Drives	1,935	\$195,000	-	\$0	\$195,000
Fleet Heat	800	\$52,050	-	\$0	\$52,050
Grocer	884	\$158,524	-	\$0	\$158,524
Food Services	316	\$49,280	114,214	\$223,800	\$273,080
AirGuardian	84	\$20,160	-	\$0	\$20,160
Non-Residential Total	72,142	\$11,608,707	537,454	\$1,429,931	\$13,038,637
Regional Efficiency Programs					
NEEA Electric (WA Portion)	12,896	\$2,716,000			\$2,716,000
NEEA Gas (WA Portion)				\$410,000	\$410,000
Regional Total	12,896	\$2,716,000	-	\$410,000	\$3,126,000
Portfolio Support					
Estimated EM&V		\$1,386,000		\$154,000	\$1,540,000
Memberships		\$140,189		\$15,577	\$155,765
Outreach		\$1,097,870		\$121,986	\$1,219,855
Training/Travel		\$6,300		\$700	\$7,000
Regulatory		\$6,300		\$700	\$7,000
CPA Development		\$210,000		\$14,000	\$224,000
Software		\$287,885		\$31,987	\$319,872
Studies and Research		\$63,000		\$7,000	\$70,000
General Implementation		\$571,523		\$63,503	\$635,026
CEEP Matching & Pilot Programs		\$3,500,000		\$0	\$3,500,000
Labor		\$3,861,577		\$429,064	\$4,290,642
Portfolio Support Total		\$11,130,644		\$838,516	\$11,969,160
Totals included in cost effectiveness	84,282	\$27,669,918	\$1,874,392	\$11,398,703	\$39,068,621
Portfolio Totals	97,178	\$35,481,918	\$1,874,392	\$11,976,703	\$43,958,621
Estimated EM&V Percentages		3.91%		1.29%	

Supplemental Budget Items

Appendix B:
2020 Energy Efficiency Annual Conservation Plan
(Electric and Natural Gas)

Energy Efficiency



Washington Electric
Energy Efficiency
Annual Conservation Plan

2020



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Appendix Summary

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Appendix C: Summarization of Cost-Effectiveness Methodology

Appendix D: Schedules 90 and 190, Washington

Appendix E: Program Summary

I. EXECUTIVE SUMMARY

Avista Utilities' Annual Conservation Plan ("ACP" or "Plan") is provided consistent with RCW 19.285.040(1), WAC 480-109-120(2)¹, as well as requirements outlined in Commission Order No. 01 in Docket No. UE-171091, approving Avista's 2018-2019 Biennial Conservation Plan ("BCP") with conditions.

For 2020, Avista continues its commitment to its customers by delivering reliable energy service along with the choices that matter most to our customers. With the priorities set to the customers we serve, 2020 and 2021 will focus on exploring new and innovative ways to provide energy efficiency benefits to our customers along with reaching customers that have not been served before.

Newly-enacted Senate Bill 5116 (the "Clean Energy Transformation Act", or "CETA") aligns with the history of Avista's efforts in serving hard-to-reach markets and providing more outreach to our communities². During the 2020-2021 biennium, Avista will focus on expanding its program design to ensure that vulnerable populations and highly impacted communities have access to low-cost energy efficiency resources and conservation education. Our communities are our priority and Avista is excited about the new opportunities that come with CETA's emphasis on energy assistance.

The 2020 Plan represents program efforts made by the Company to achieve its expected eligible acquisition savings for the first year of the 2020-2021 biennium. For the 2020 ACP, Avista has identified planned conservation savings, of 42,889 Megawatt-hours (MWh) from local efforts and a total of 49,376 MWh after including regionally acquired savings from the Northwest Energy Efficiency Alliance ("NEEA")³.

Avista has planned expenses of \$2.2 million of fully loaded labor funding across electric and natural gas programs in Washington. The proportion of total utility expenditures returned to customers in the form of direct benefit is 68%, which approximates the 70% in the 2019 Annual

¹ On or before November 1st of each odd-numbered year, a utility must file with the commission, in the same docket as its current biennial conservation plan, an annual conservation plan containing any changes to program details and annual budget.

² Section 12 of SB 5116 per RCW 19.405.120

³ To achieve consistency with other Washington IOUs, Avista has included "Program Measures" and savings from "Codes & Standards Measures."

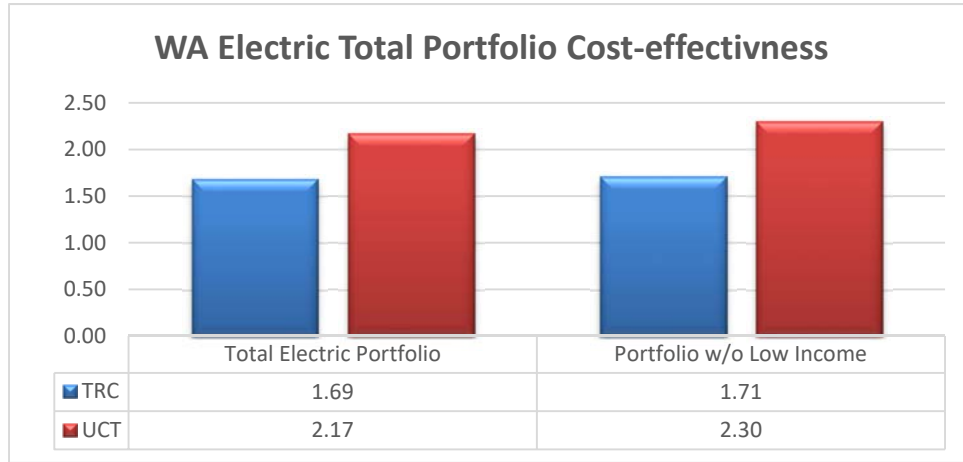
Conservation Plan. As Compared with the 2019 ACP, the estimated 42,889 MWh from local efforts is a slight decrease in energy savings, primarily due to the suspension of the Company’s LED buy down program. Table 1 below illustrates the estimated conservation savings and total budget per sector for the 2020 program year.

Table 1: 2020 Savings and Budget by Sector

Sector	MWh	Budget
Low Income	441	\$906,243
Residential	6,377	\$3,413,958
Non-Residential	36,071	\$8,199,587
CPA & EM&V	-	\$798,000
CEEP, Pilots, & Studies	-	\$1,750,000
Total Before NEEA	42,889	\$15,067,789
NEEA Savings	6,487	\$1,358,000
Total	49,376	\$16,425,789

Cost-effectiveness is a key indicator of Avista’s energy efficiency portfolio performance, and while the Company pursues all cost-effective measures, the company retains flexibility in its program design so that meaningful energy efficiency can be achieved by all customers. Avista’s energy efficiency program is inclusive of a segment that targets efforts towards low-income qualified customers, providing a higher level of benefit (incentive) to these more vulnerable populations. Some of these efforts result in a lower overall cost-effectiveness, therefore, the Company evaluates its cost-effectiveness both inclusive and exclusive of the low-income program. See Figure 1 for the summary of the portfolio cost-effectiveness with and without the effect of the low income program.

Figure 1: Portfolio Cost-effectiveness



Avista’s Washington I-937 conservation target⁴ has historically been based on the forecasted conservation potential contained within the Company’s Integrated Resource Plan (“IRP”). For the 2019 IRP, Avista, along with other Investor Owned Utilities (“IOUs”) in Washington, were requested to delay the filing of their IRP to accommodate legislative changes occurring in 2019⁵. As such, the delay also effects the finalization of the Conservation Potential Assessment (“CPA”) as it is a component within the IRP process. In Order 01 of Docket No. UE-180738, Avista was granted authorization to utilize data from its 2017 IRP, centered on its CPA, as the basis for its 2020-2021 biennial acquisition target⁶. As conditioned in this Order, Avista communicated its intention to provide an amendment to its ACP after the 2019 IRP is finalized and a new I-937 target is established.

In October 2019, Avista was notified that an additional delay would occur in the IRP process and an updated IRP was not expected until a time well past the initial February 2020 target date⁷. Avista intends to remain flexible throughout and the process and for purposes of providing

⁴ RCW 19.285, Energy Independence Act (EIA), also known as Initiative Measure No. 937 or I- 937, mandates, among other requirements, that utility companies obtain fifteen 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.

⁵ House Bill 1444, per RCW 19.260, Senate Bill 5116, per RCW 19.405, House Bill 1257, per RCW 19.27

⁶ WAC 480-109-100(2)(b) This projection must be derived from the utility’s most recent IRP, including any information learned in its subsequent resource acquisition process, or the utility must document the reasons for any differences. When developing this projection, utilities must use methodologies that are consistent with those used in the Northwest Conservation and Electric Power Plan.

⁷ Avista filed a progress report for the IRP in Docket No. 180738 on October 25, 2019.

a well-informed I-937 target for this plan, Avista elected to include an I-937 target based on the Company's updated CPA analysis. The updated CPA has identified 72,340 MWh of qualifying energy efficiency for the 2020-2021 biennial target in order to fulfill the I-937 requirements⁸. Over a ten-year horizon, the Company's CPA identified 361,700 MWh of conservation potential.

As a result of collaborative efforts between Avista and its advisory group, the Company has taken steps to adaptively manage its program by proposing the removal of incentive caps identified in the Company's tariff schedules. These restrictions, which limit the amount of rebate to be paid to customers for participating in energy efficiency projects, have been modified, with the proposed tariff revisions submitted as Appendix D to this ACP, so that Avista can better achieve the most customer participation at the lowest cost to the program. The proposed modifications to tariff Schedules 90 and 190 are further discussed in Section III(d) of this Plan.

For the 2020 program year, Avista will continue its innovative efforts in exploring new avenues to serve hard-to-reach customers. Avista's Multi-Family Direct Install (MFDI) program concluded its first program year in 2019 and created new avenues to reach customers outside of the traditional rebate program offering. The MFDI program is a direct install and audit offering that provides customer energy efficiency opportunities through installing measures at the customer site, conducting a brief on-site audit to identify prospective improvements, and providing materials and contact information for follow up. The program is available only to customer who receive electric service from Avista and have a multifamily property containing five-units or more. For 2020, the Company expects to see more customers served through this MFDI program.

Also in 2020, Avista will engage with customers through a residential Home Energy Audit (HEA) program. The program is designed to provide customers with an evaluation of their home, to identify opportunities to improve the home's energy use. The program will also provide customers with low-cost energy saving products such as LED lamps, door sweeps, v-seals and other measures. The HEA program will be instrumental in Avista's efforts to expand the Company's options for customers with higher energy burdens, in addition to those looking to make the most efficient use of their heating and cooling equipment.

⁸ See Table No. 5 for the 2020-2021 Biennial Conservation Target including the CPA Pro-Rata Share, the Utility Specific Conservation Goal and the EIA Penalty Threshold.

II. INTRODUCTION

The 2020 Annual Conservation Plan outlines Avista’s conservation offerings, its approach to energy efficiency, and details on verifying and reporting savings. The Company’s plan is based on two key principles. The first is to pursue all cost-effective kilowatt hours and therms by offering financial incentives for energy saving measures, with a simple financial payback of over one year. The second key principle is to use the most effective “mechanism” to deliver energy efficiency services to customers. These mechanisms are varied and include 1) prescriptive programs (or “standard offers” such as high efficiency appliance rebates), 2) site-specific or “customized” analyses at customer premises, 3) “market transformational,” or regional, efforts with other utilities, 4) low-income weatherization services through local Community Action Partner agencies (“CAP” or “Agencies”), 5) low-cost/no-cost advice through a multi-channel communication effort, and 6) support for cost-effective appliance standards and building codes.

This “Annual Conservation Plan” is intended to be a continuous planning process. The Company is committed to maintaining and enhancing meaningful stakeholder involvement within this process. Over the course of the following year, revisions and updates to the plan are to be expected as part of adaptively managing the Energy Efficiency portfolio.

The Company’s programs are delivered across a full customer spectrum. Virtually all Avista customers have had the opportunity to participate, and a great many have directly benefited from the program offerings. All customers are indirectly benefited through enhanced cost-efficiencies as a result of this portfolio approach.

The business planning process builds upon the electric and natural gas IRP and CPA processes. These processes are an overall resource planning process completed every two years that integrate 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 & verification (EM&V) plan
- identification of outreach requirements
- organization of a marketable customer-facing portfolio

The budgetary projections established within the Plan are applied in a separate mid-year process to revise the conservation tariff rider funding mechanisms contained within the Schedule 91 electric and Schedule 191 natural gas tariffs. The tariff rider surcharges are periodically adjusted with the objective of moving these balances toward zero.

III. KEY CONSIDERATIONS

a. Program Changes and Enhancements

For the 2020 program year, Avista has incorporated several changes into its residential and non-residential programs, with the intention to reach more customers, expand its measure offerings, and make energy efficient choices more accessible and affordable. Avista made the following modifications to its program:

1. Revision of Tariff Schedules 90 and 190 in order to remove restrictions on incentives paid to customers for energy efficiency. (See section III(d) for details).
2. Discontinuation of incentives for lighting contained under the definition of General Service Lamps, per the January 1, 2020 Energy Independence & Security Act (EISA) standards.
3. Commitment to engage with third parties, customers, and vendors to ensure our customers stay informed on House Bill 1257 requirements⁹.
4. Determination to seek out new resources, approaches, and enhancements to further serve populates in an equitable way, to ensure they are not environmentally burdened as the Company moves towards clean energy.
5. Discontinuation of the fuel-efficiency program for 2020.

⁹ Building energy efficiency requirements for commercial buildings per RCW 19.27

b. Evaluation, Measurement and Verification (EM&V) Commitments

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 comprehensive analyses and assessments necessary to supply useful information to management and stakeholders that adequately identifies 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 and Process, and taken as a whole, are analogous with other industry standard terms such as Portfolio Evaluation or Program Evaluation.

A primary responsibility of Avista's EM&V resources is to support the ongoing activities of the third-party EM&V consultants and evaluators performing the various analyses required to substantiate the conservation acquisition, determine market saturation and penetration, and process evaluations. The 2020 EM&V budget provides for third-party EM&V services that provide an evaluation of 2020 program year portfolio, along with consolidating these findings with results obtained for reporting requirements associated with the Energy Independence Act (EIA) and the 2020-2021 biennium.

To support planning and reporting requirements, several guiding EM&V documents are maintained and published. This includes the Avista 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 required, to inform and benefit the Energy Efficiency activities. These documents are reviewed and updated as necessary, serving to improve the processes and protocols for energy efficiency measurement, evaluation and verification.

EM&V efforts will also be applied to evaluating emerging technologies and applications in consideration of potential 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.

Avista and its customers benefit from regional activities and resources in the energy efficiency and conservation domain. To engage with and contribute to regional efforts, one Avista staff member has a voting role and a second member has a corresponding member role on the Regional Technical Forum (RTF) that serves as an advisory committee to the Northwest Power and Conservation Council (NPCC). The RTF is a primary source of information relating to the 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 that are 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. Application of the principles of the International Performance Measurement and Verification Protocol serves as the guidelines for measurement and verification plans applied to Avista programs. Additionally, the compilation of EM&V protocols released under the U.S. Department of Energy's Uniform Methods Project will be considered and applied where possible to support consistency and credibility of the reported results. The verification of a statistically significant number of projects is often extrapolated to verify and 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 utility and public interests.

c. Cost-Effectiveness Metrics, Methodology and Objectives

The Company's planning approach aims to maximize cost-effective conservation acquired by analyzing the cost-effectiveness of each segment (residential, low income and non-residential) and how the measures within the 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 the Company is appreciative of the valuable work the RTF has done to quantify NEIs for the region. In this plan, where NEIs are calculated and the delivery method is consistent with what is required by the RTF, the calculated NEIs are included in the appropriate cost-effectiveness tests (Total Resource Cost (TRC) and Participant Cost Test (PCT)). Since the RTF does not currently have Unit Energy Savings (UES) or NEI values for commercial lighting, a similar methodology is used to calculate the NEI value of efficient lighting measures that have longer measure lives than the baseline technology. The Company will continue to follow and participate in RTF activities around NEIs, and will include NEIs in the cost-effectiveness calculation when appropriate.

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 and 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 also form UES values that are more specific to Avista's service territory.

Details regarding how Avista applies the avoided costs and cost-effectiveness methodologies to the estimation of the 2020 portfolio are contained in Appendix C – Cost Effectiveness Methodology. The results of the TRC and Utility Cost Test (UCT) tests are summarized by program and portfolio in Appendix A – Program Plans.

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

d. Schedule 90 and 190 Revisions

Avista's electric Energy Efficiency operations are governed by Schedule 90 tariff requirements and natural gas Energy Efficiency operations are governed by Schedule 190. These tariffs (attached within Appendix D) 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.

During the Spring 2019 Advisory Group meeting, Avista proposed modifications to its Energy Efficiency tariffs that would lift the three restrictions for incentive level settings from the Schedule 90 and Schedule 190 tariffs. These restrictions include:

1. Incentives are limited to \$0.20 per first year kWh savings and \$3 per first year Therm savings.
2. Incentives are limited to 70% of the customer incremental cost of the measure installed.
3. Measures are restricted to a simple payback of 15 years or less.

The Company identified that for several measures in its portfolio, the number of customers participating in the program could be increased if the amount of the rebate was higher. However, a higher throughput could not be achieved because of the stated restrictions on the incentive amount. The Advisory Group found that the proposed changes had merit, and removing the restrictions would allow Avista more flexibility in achieving the most throughput in their program at the lowest possible expense while maintaining a positive cost-effectiveness benefit to cost ratio.

While the removal of the restrictions were seen as an appropriate adjustment, the group acknowledged the importance of having incentive guidelines that would inform the Company's decisions on setting appropriate incentive levels. To address these comments, the Advisory Group agreed to include language within its Standard Operating Procedures (SOP), clarifying that these metrics would serve as the starting points from which incentive setting would be based.

e. Schedule 91 and 191 Revisions

WAC 480-100-130(2) requires the utility to file on or before June 1st every year to “true up” the rider balance with an August 1st effective date. On May 21, 2019, the Company filed Docket No. UE-190406, revising schedule 91 to reflect a decrease in the customer rate collected to fund Avista’s Energy Efficiency program; this filing was the fifth revision of Sheet 91A of the tariff rider. The chief reason for the revision was the Company’s discontinuation of its Fuel Efficiency program beginning January 1st, 2020. This filing was approved by the Commission on July 26, 2019 and rates became effective on August 1, 2019.

f. Washington Energy Independence Act Standards for the 2020-2021 Biennium

Washington EIA requirements establish a minimum electric acquisition standard for conservation resources for each designated biennium. The acquisition requirement can be met in a variety of ways per WAC 480-109-100(1)(b). Please note that energy savings acquisition attributed to Avista through regional market transformation have been included in the acquisition target, however, they have been excluded from the EIA Penalty Threshold.

The Biennial Conservation Target is based on the CPA analysis that historically has accompanied the Company’s IRP. Due to delays in the IRP process, the 2020-2021 target is filed ahead of the IRP in order inform the Company’s plan for the 2020-2021 biennium. The 2020-2021 EIA Target is 72,844 MWh, which represents the overall conservation to be obtained by Avista before the additional 5% Decoupling Threshold¹⁰. After applying the Decoupling Threshold of 3,642 MWh, the Total Utility Conservation Goal is 76,486 MWh. The Utility Specific Conservation Goal, which removes 12,896 MWh in savings derived from NEEA, is 63,590 MWh. After removing the Decoupling Threshold of 3,642, the total 2020-2021 EIA Penalty Threshold is 59,948 MWh. The scope of the Annual Conservation Plan covers the majority of the acquisition eligible to achieve these goals, however, does not include efficiencies achieved through distribution or generation facilities.

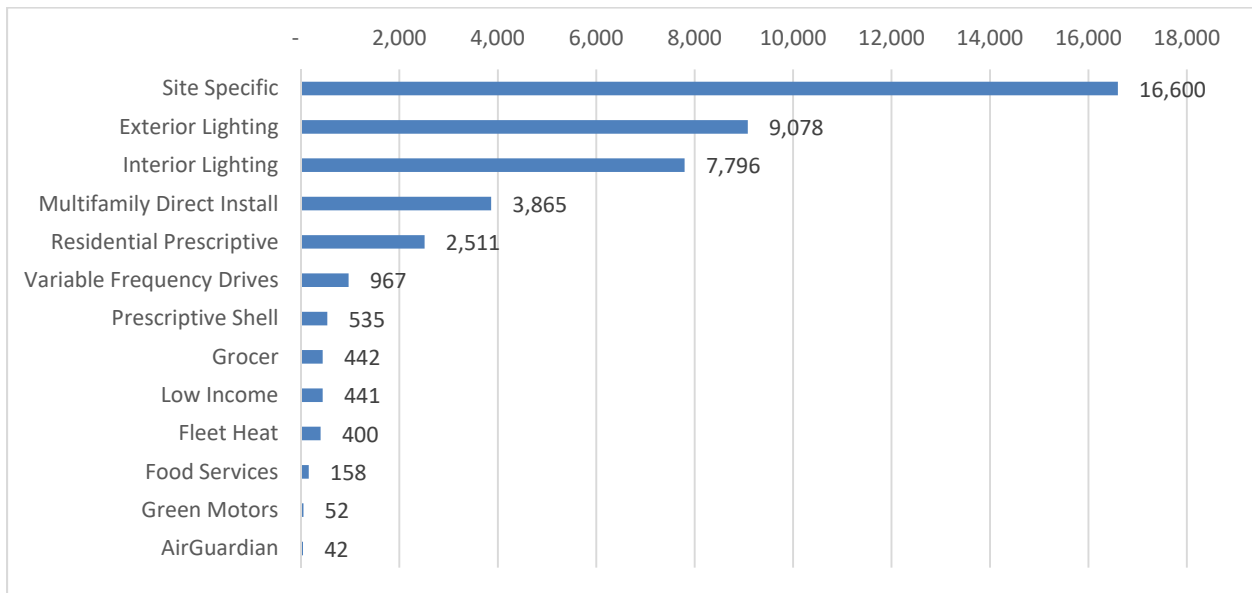
¹⁰ As part of the General Rate Case Settlement Agreement in Docket Nos. UE-140188 and UG-140189, the Company agreed, in consideration of receiving a full electric decoupling mechanism, to increase its electric energy conservation achievement by 5% over the conservation target approved by the Commission, beginning with the 2016-2017 biennial target.

Since the Washington EIA target was established based upon Northwest Power and Conservation Council methodologies and the Council's RTF 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 so as to generate the best prediction of how 2020 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. However, the relationship between the regional utilities and the RTF is 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.

IV. ENERGY EFFICIENCY PORTFOLIO OVERVIEW

Avista’s Energy Efficiency portfolio is comprised of residential, low income and non-residential programs. For the 2020 program year, the Company anticipates approximately 42,889 MWh of I-937 qualified savings from its program offerings. These savings are derived from utility-specific conservation and do not include regional efforts from NEEA. Figure 2 illustrates the major categories from which those savings are achieved.

Figure 2: 2020 MWh Savings from Energy Efficiency Programs



a. Residential Portfolio Overview

The Company’s residential portfolio is composed of several approaches to engage and encourage customers to consider energy efficiency improvements within their home. Prescriptive rebate programs are the main component of the portfolio, augmented by other interventions such as our Multi-family Direct-Install program.

Prescriptive rebate programs use financial incentives to encourage customers to adopt qualifying energy efficiency measures. Customers must complete installation and apply for a rebate, submitting proper proof of purchase, installation and/or other documentation to Avista,

typically within 90 days from project completion. Customers can submit this form in hard copy and several prescriptive measures are also available to submit online at www.myavista.com.

Residential prescriptive programs typically cover single family homes up to a four-plex. For multifamily situations (five-plex or larger), owners/developers may choose to treat the entire complex with an efficiency improvement. In these unique cases, the projects are treated as a commercial project and are evaluated within the site-specific portfolio.

For 2020, Avista will suspend its engagement with its third-party contracted buy-down program. This decision was made in response to the lighting standards contained in both the EISA and House Bill 1444¹¹, which set requirements on minimum efficiency of LED lighting. Traditionally, the Simple Steps program has served customers through providing an incentive for LED lighting at the retail level, however, the new standards will require that all lighting has a minimum efficiency of 45 lumens per watt for lamps manufactured after January 1, 2020. In general, most incandescent lighting fails to meet the 45 lumens per watt standard and from a buy down program perspective, would not be an appropriate baseline.

The Simple Steps program has typically returned approximately 8,000 to 10,000 MWh of energy efficiency savings per year, which represents roughly 20% of the Company's portfolio. In the 2020-2021 biennium, Avista will look to explore new avenues to further engage with residential customers.

A measure-by-measure evaluation of the incremental contribution to the TRC test is the primary guidance in reaching decisions regarding eligibility for measures as well as overall cost-effectiveness of the portfolio. For natural gas, the UCT is applied. In the event that a previously offered measure is no longer cost-effective, the Company may initiate a transition plan to equitably treat customers who were in or about to commit to participating in the program. Typically a minimum 90-day notice is provided prior to the termination of a program.

Residential programs have a strong presence and coordination with regional efforts, such as those offered by NEEA. Currently there are significant regional efforts active in the markets for consumer electronics, ductless heat pumps and standard improvements for new heat pump water heating technologies. Avista has offered local rebates in support of many of the NEEA market

¹¹ RCW 19.260.040(16)(d)

transformation ventures and will continue to do so where opportunities for local leveraging of these programs are cost-effective options.

The manufactured home segment is an important component within the residential portfolio and many of our 2020 program offerings are designed to be inclusive of this segment. Avista provide incentives through our ENERGY STAR Homes incentive for Eco-Rated manufactured homes. The Company also offers a ductless heat pump and a heat pump water heater incentive that offers manufactured homes additional options especially when natural gas is not available. In addition, high efficiency natural gas incentives for qualifying furnaces and tankless water heaters are offered. As another example of Avista’s efforts that may benefit manufactured housing, Avista provides approximately \$3.05 million annually (\$2.35 million in Washington, \$700,000 in Idaho) to contracted Community Action Partner agencies to treat and improve income-qualified homes. Customers in manufactured homes are an area of focus where the CAPs bring a wealth of experience to assist these customers. These are just some highlights of continued efforts to focus on and serve manufactured homes along with stick built residential dwellings.

b. Low Income Portfolio Overview

The Company utilizes the infrastructure of seven CAP agencies to deliver low income energy efficiency programs. The Agencies have the ability to income-qualify customers and have access to a variety of funding resources, including Avista funding, which can be applied to meet customer needs. The seven Agencies serving Avista’s entire Washington service territory receive an aggregate annual funding of \$2,350,000. The distribution of these funds is represented in the following table:

Table 2: 2020 Estimated Low Income Funding by CAP Agency

CAP Agency	County	Funding
SNAP	Spokane	\$1,545,125
Rural Resources Community Action	Ferry, Lincoln, Pend Oreille, Stevens	\$227,950
Community Action Center	Whitman	\$171,550
Opportunities Industrialization Council	Adams, Grant	\$88,125
Spokane Indian Housing Authority	Stevens County	\$23,500
Washington Gorge Action Program	Klickitat, Skamania	\$11,750
Community Action Partnership	Asotin	\$282,000
	Total Funding	\$2,350,000

The Agencies may spend their annual allocated funds on either electric or natural gas efficiency measures, at their discretion, as long as the home demonstrates a minimum level of the Avista fuel for space heating use. Agencies have included in their annual funding a 15% reimbursement for administrative costs. Health and human safety measures may also be completed with the amount spent on these improvements not to exceed 15% of the agency's total annual contract amount.

The list of measures offered is derived from the Department of Commerce's Weatherization Manual. To guide the agency toward projects that are most beneficial to the Company's energy efficiency efforts, an "Approved" list of measures is provided that allows for full reimbursement.

Higher costs per weatherized household over the same fixed amount of Low-Income funds available has over-time resulted in a decrease in low-income participation. An actual participant goal would be difficult to determine given that the number of treated homes depends upon the depth and cost of weatherization required by the participating homes. The CAP agencies receive other non-utility funds that they may also use to treat an Avista home. Washington CAP agencies typically weatherize between 200 and 250 homes in a given year with Avista funding.

In addition to the traditional Low-Income programs, Avista is partnering with CEEP (Community Energy Efficiency Program) to deliver energy efficiency offerings for hard-to-reach markets such as rental properties, homes with alternative heat and households that are considered low to moderate income. CEEP is a program that is unique to Washington State and was created by the Washington State Legislature in 2009. Initially funded by the American Recovery and Reinvestment Act, CEEP has developed into a mature program with support from the Washington State Capital Budget. The Washington State University (WSU) Energy Program executes and manages the program to provide support to homeowners and small businesses across the state so they can make energy efficiency upgrades to existing residences and commercial buildings. CEEP has allocated up to \$750,000 for projects in the Company's service territory which Avista has agreed to match. The primary focus of the CEEP funds is to target building improvements for multifamily housing that may include but are not limited to: improvements to HVAC systems and controls, building envelope, weatherization measures and lighting. A secondary initiative of the CEEP funding allocation is to convert income-qualified, single family, alternative heat homes

(e.g.: oil and wood) to high efficiency electric space heat, or where available, to natural gas space heat. Avista's \$750,000 match has been included in the Company's 2020 budget as a line item under Avista's pilot programs.

c. Non-Residential Program Overview

The nonresidential energy efficiency market is delivered through a combination of prescriptive and site-specific offerings. Any measure not offered through a prescriptive program is automatically eligible for treatment through the site-specific program, subject to the criteria for participation in that program. Prescriptive paths for the nonresidential market are preferred for measures that are relatively homogenous in scope and uniform in their energy efficiency characteristics.

Prescriptive paths do not require pre-project contracting, as the site-specific program does, and thus lend themselves to streamlined administrative and marketing efforts. Incentives are established for these prescriptive programs following the Company'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 utilize RTF UES.

When the prescriptive path is not available, Avista offers nonresidential 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 upon the projects individual characteristics as they apply to the Company's guidelines and SOPs.

The site-specific program has historically been one of the more cost-effective portions of the Energy Efficiency portfolio, and generates a substantial share of the energy savings. The year-to-year program performance can be somewhat variable due to the timing of large projects.

Program marketing relies heavily upon the Account Executive infrastructure and commercial and industrial energy efficiency outreach. Outreach includes print advertising, customer newsletters, customer meetings and vendor outreach. Account Executives have actively managed accounts, but are also available to any customer based upon the geographic location or

industry, and serves as their liaison for all energy needs. A portion of the Account Executives 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.

The site-specific program savings can be difficult to predict due to the large nature of the projects, along with long sales cycles. General economy shifts may also impact customer willingness to fund efficiency improvements. Increases in process and eligibility complexity, increases in 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.

d. Regional Market Transformation

Avista's local Energy Efficiency portfolio seeks to influence the decision of customers towards the purchase of 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 to a degree do, create permanent changes in how our customers make energy choices, it is generally not feasible for Avista to design local programs so as to influence markets that are often regional or national in scale.

Market transformation is an alternate approach to those markets and are 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 geared towards 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, will enter its sixth funding cycle during 2020 for the 2020-2024 program years. Efforts are underway now to develop and finalized the 2020-2024 Business Plan. Avista has been an active participant and funder of this collaborative effort since its inception.

It is recognized that the future NEEA portfolio may not be as cost-effective as it has been in the past. NEEA's very 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 Avista's Washington customers continue to benefit from these efforts.

For 2020, the Company's portion of NEEA's Electric budget is expected to be approximately \$1,358,000 for Washington. The NEEA funding requirements are incorporated within the budget, but are considered to be supplementary expenditures outside of the scope of the current year's local portfolio. The NEEA portfolio has not been incorporated within either the acquisition projection or the cost-effectiveness of the 2020 local portfolio developed within this Plan.

As identified in the Company's BCP, Avista is investigating new Market Transformation efforts for Washington and Idaho customers within its service territory. This engagement will focus market transformation efforts towards energy efficiency measures and solutions that are specific to Eastern Washington and Northern Idaho. While larger Market Transformation efforts from NEEA focus on the region as a whole, this engagement will be complementary to those efforts. Avista will work with its advisory group as this engagement develops and will allow stakeholders to provide feedback.

V. PILOT PROJECTS

As described in WAC 480-109-100(1)(c), utilities must engage in adaptive management of conservation portfolios, to ensure that portfolios appropriately respond to changing market conditions during a biennium. Adaptive management of a conservation portfolio includes conducting pilot programs of new technologies or new approaches to engage customers in conservation.

Avista is continuously evaluating new technologies and new approaches for attaining energy conservation. As the Company pursues all cost-effective kilowatt hours and therms, piloting new programs allows the Company and its customers to explore new avenues for obtaining energy savings. For 2020, the Company is exploring multiple pilot programs for both residential and non-residential customers. The progress of these pilot programs is shared regularly with the Advisory Group. The below sections outline and describe Avista's current pilots; budgets and expected participation numbers are yet to be determined.

a. Active Energy Management (AEM)

Consistent with the goals to be carbon-neutral by 2030 and carbon-free by 2045 and also aligning efficiency requirements on commercial buildings, the Active Energy Management pilot focuses on the exploration clean energy transformation for commercial buildings. As an example of Avista's commitment to leadership in innovation and clean energy, Avista is leveraging its resources to design, own and operate an "eco-district development" in Spokane's University District. The eco-district development, which is funded by shareholder investment, illustrates how net-zero and carbon free developments can be economically sustainable. In addition, the "Catalyst building" located in the eco-district will house the best and brightest from private industry and academia to test and certify new technologies and create jobs which enable a clean energy future.

Avista recognizes the challenges that come with the new legislation on renewables and that the risk of cost pressures may have on our customers' energy rates. To address these concerns, a third-party vendor was selected to perform a regional analysis of the impacts associated with these legislative changes along with the broad effects the proposed changes would have on system

reliability. The study concluded that the region would incur an incremental cost of approximately \$9 billion to convert the existing generation fleet to 100% clean energy resources.

To be proactive to the exposure to increased energy costs, Avista is pursuing a strategy to limit the potential rate impact of renewables by aggressively identifying new methods to achieve energy efficiency. In addition to currently defined eligible renewable resources, Avista aims to explore new technologies and approaches to achieving clean energy goals. While energy efficiency programs are an integral part of Avista's clean energy plan, energy efficiency programs could be further leveraged by continuously monitoring and improving building performance. To address this opportunity and to fulfill the mandate for renewables, Avista is proposing a new program referred to as Active Energy Management (AEM).

The AEM pilot program will procure a technology platform license as well as services to deploy and operate the program. The AEM program will utilize the eco-district communication networks, cloud services and data mining algorithms to capture, process and disseminate actionable information to participants in the program including buildings outside of the eco-district. The technology platform will provide a framework to evaluate building performance with or without the deployment of AEM. The technology platform will keep a running total of performance matrix of measureable outcomes.

The HUB building, located in the South Landing District, contains the central plant that consists of heat pumps, boilers, chillers, solar generation and electric and thermal storage. In addition to the central plant, the HUB Building will house the operations center for the central plant, Energy Efficiency Demonstration area, and other tenants. Avista will occupy a portion of a HUB Building floor and locate an energy efficiency lab and staff to evaluate, demonstrate and train customers in the latest energy efficiency appliances and tools. The vision is to use this building and its HVAC building systems as a learning center for customers to understand and optimize their own energy consumption.

The HUB central plant will provide heating and chilled water to campus buildings participating in the eco-district. A staffed control center will operate the central plant as well as monitor in near real-time load and generation resources in the HUB. The HUB building is jointly owned by Avista Development, a subsidiary of Avista Utilities and with McKinstry, a private company.

The HUB building space for energy efficiency will provide the public with access to Energy Efficiency Engineers to assist with energy savings programs. The space is expected to have a lighting lab for builders, specifiers, and suppliers to showcase the best available technology for both lighting and controls. In addition, this location will be home to the Energy Efficiency Tool library, much like the program in Seattle at NEEC, there will be tools available for check out that will help customers identify energy savings opportunities.

As a proof of concept pilot, Avista aims to evaluate the program by providing sufficient information to better understand the potential energy savings of implementing AEM, the associated cost per kWh saved compared to alternative approaches to acquiring savings, and the resources needed to adequately and effectively engage with customers. To determine the economic performance of the AEM program it will require the development of key metrics to compare the investment against adoption as well as building performance. The AEM pilot program will establish a set of metrics to baseline as well as a set of quarterly reports to illustrate the effectiveness of the program.

In addition to being a clean energy development, the eco-district facilities will combine private industry and university research institutes to become a center of excellence on clean energy. The Inland Northwest region is currently the headquarters for energy focused companies from Avista, Itron, Engie Insight and Schweitzer Engineering Laboratories, as well as the home to leading research institutions on energy like Pacific Northwest National Labs and Washington State University. The collaboration of leading energy experts inside the eco-district, combined with stem student resources from Eastern Washington University and Community Colleges of Spokane, will become the “center of mass” for industry and university innovation on product and job creation in the clean energy sector. These students will be located in the Catalyst building, providing a pathway from college or university to clean energy jobs.

b. Business Partner Program (BPP)

The Business Partner Program is a new outreach effort designed to target Avista’s rural small business customers in Washington and Idaho, by bringing awareness of utility programs and services that can assist customers in managing their energy bill. When it comes to actually

participating in Energy Efficiency programs, small businesses are chiefly focused on ways to save money and often do not have enough time or capital to do any improvements. The BPP program provides advice and tools customers can use to educate and empower the business owner and their employees to use less energy.

This high-touch initiative provides a free energy efficiency assessment, along with awareness about other services such as billing options and energy efficiency rebates. Once the customer is educated about potential improvements, the challenge is to encourage them to act on these enhancements. Small business owners typically only have time to run their business and do not focus on improvements that may assist with their energy bill. Living in a rural community often does not provide the same choices or amenities as one would find in an urban environment. To further support the BPP, a proposal is currently under review with CEEP for financial assistance. If the CEEP proposal is accepted, the funding would be used towards assisting only small, rural business customers in Washington with financing the coordination and installation of identified energy efficiency measures (e.g. lighting retrofit) that may have been identified during the energy assessment. With the customer participating in the energy assessment, understanding their utility bill and seeing the results of an energy efficiency improvement, this program will provide a comprehensive approach to serving this hard-to-reach customer.

c. Residential Behavioral Pilot Program

In 2018, Avista began a behavioral program using web-enabled devices. Avista utilizes a 3rd party vendor to connect with the device manufacturer's servers in order to pull electric data for participating customers. This data was analyzed to determine the impact that space heating and cooling loads have against whole house usage. Those results were also shared with participating customers along with any actionable suggestions the customer could make to improve their home energy profile.

The pilot program includes residential customers in Washington and Idaho with primary heating fuel options of electric (forced air & air source heat pump) and natural gas (forced air & boilers). Energy savings are expected to be the result of behavior changes.

Avista began marketing to eligible customers on May 1, 2018 and all connected devices were installed by July 1, 2018. A sunset date for this pilot program was anticipated to be approximately one year after launch (July 1, 2019) in order to evaluate energy savings for both the heating and cooling seasons. Pilot goals include:

- Load disaggregation with primary focus on machine learning and energy efficiency insights.
- Smart Phone and web application providing customers with auditory and visual alerts on energy usage.
- Allow customers to set goals and get notifications as they track to those goals.
- Whole home and device-specific efficiency and comparison data.
- “Home check” unexplained power outage, flickering lights, malfunction appliance.
- Weekly Actives (i.e. did the customer use the app in a given week?)
- Weekly Usage (i.e. how many app sessions did the customer engage in this week?)
- Retention (i.e. how many customers are still using the app 3mo & 1yr after installation?)
- Potential energy efficiency savings will be reviewed by 3rd party evaluators.
- Appliance fault detection. (i.e. refrigerators are leaking coolant, when an AC condenser's fan is clogged or when the run capacitor has failed.)
- Energy Threshold events (i.e. "Alert me if my Freezer is ON for 20 min".)

After the conclusion of the pilot period, Avista compiled the resulting data to determine trends in usage for its test group. It was observed that a variety of behavioral changes occurred for those who participated in the plot, with some customers seeing a decrease in overall energy use after installing the Sense device while other customers experienced an energy usage increase. However, the aggregation of all savings data showed that there was an overall energy increase in customer energy use for those that participated in the pilot program.

While the data that supports the pilot program took into consideration many factors, Avista is continuing to review the methodology used in evaluating the pilot program. Further, Avista engaged with Cadmus to do a 3rd party review of the pilot, data, and methodologies to see if alternative learnings and results could be determined. The preliminary analysis performed by Cadmus indicated that customers that were in the “High/Medium Engagement” range experienced energy use reductions of 7.0% while customers that were in the “Low Engagement” range saw energy use reductions of 0.8%. For the entire population, the overall energy use reduction was 4.7% and the per-customer average kWh savings is estimated to be

1.62 kWh per day or 591.3 kWh annually. See the table below provided by Cadmus for further details on the participant savings amounts. Avista anticipates receiving the final results of the study by the end of 2019.

Table 3: 2019 Sense Behavioral Pilot Results

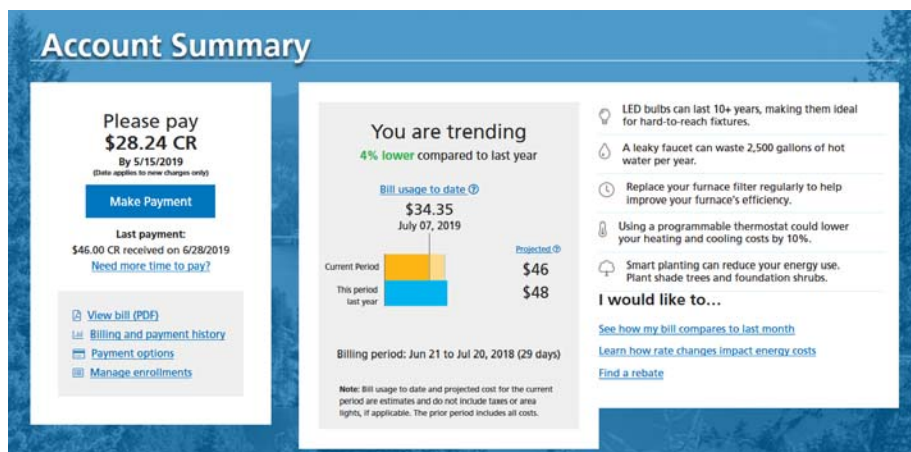
Model	n	Average Daily Baseline Usage (kWh)	Modeled Daily Savings Estimate (kWh)	Std Err.	Lower Bound CI at 90%	Upper Bound CI at 90%	Relative Precision at 90%	Percent Savings (Savings as a percent of Baseline Usage)
Engagement Model Savings [Hi/Med (n = 43) vs Low Engagement (n = 27)]	70	32.83	2.08	1.23	0.05	4.11	98%	6.30%
Overall Sense Savings	83	34.35	1.62	2.16	-1.94	5.17	220%	4.70%
Low Engagement Sense Savings	30	34.75	0.29	2.3	-3.49	4.07	1295%	0.80%
High/Medium Engagement Sense Savings	53	34.13	2.37	2.61	-1.92	6.66	181%	7.00%

The Residential Behavioral Pilot using the Sense platform showcased how engaging with an off-the-shelf load disaggregation technology has the ability to generate behavioral savings by providing customers with usage data based on their actual behaviors. For Avista behavioral program going forward, the goal is to provide customers with timely energy use and budget information so that the customer is better informed on their current and expected monthly usage.

Avista’s movement towards Advanced Meter Infrastructure presents numerous opportunities for both the Company and its customers. One benefit to energy conservation efforts is that customers will be able to receive faster feedback on their energy usage and have the opportunity to adapt their energy use based on the data received. Another such customer benefit is an improved understanding of how the customer uses energy and, subsequently, insight into how that energy use impacts their Avista bill. AMI is currently being implemented in Avista’s Washington service territory for both electric and natural gas customers. The implementation of AMI meters involves the removal of the existing analog meter and the replacement with a digital meter that provides functionality for high resolution read rates and automated communication protocols. Avista began the installation of AMI meters in its Washington service territory in September of 2018 and as of October 2019, is approximately 39% complete.

In coordination with multiple internal departments, Avista was able to deliver its first customer facing functionality to leverage AMI data on May 1, 2019. Specifically, the Company began offering a new feature on its website, myavista.com, which calculates a customers projected bill based on their average daily usage. This feature is made possible by leveraging daily AMI meter reads that we were not able to obtain prior to the implementation of the AMI project. Customers now also have the ability to ‘drill down’ to view five minute interval data, which allows them to understand their energy usage profile in more detail. Avista’s goal is to better inform our customers of their energy usage throughout the billing period, thus allowing them an opportunity to reduce their usage to lower their monthly bill.

Additionally, Avista officially kicked off a project that will send proactive notifications to customers when their user-defined budget threshold is projected to be exceeded. Customers will be able to log into myavista.com or call customer service to define a budget threshold (e.g. \$125.00) and if the “projected bill amount” is predicted to exceed their chosen amount, then Avista will alert the customer, via email or text, thus giving them an opportunity to adjust their usage to lower their monthly bill. This functionality is planned to be delivered in Q1 of 2020.



For the 2020-2021 Biennium, the level of savings acquired through the behavioral program heavily relies on the AMI deployment and its progress towards being 100% deployed and also the level of engagement by Avista customers. The preliminary results from the sense pilot provided that the average customer that participated in the program saw an energy savings of 4.7%, however, other analysis has showed that 1%-3% energy savings is more typical of behavioral programs in general. Based on the preliminary analysis of the AMI technology, the Company anticipates

approximately 3,000 MWh of acquired energy efficiency savings from the behavioral pilot program and 6,000 MWh for the 2020-2021 Biennium. These estimates assume a customer participation level ranging from 1% to 3% which could vary depending on an opt-in versus an opt-out approach to the energy management tools. It is also assumed that the savings reduction will approximate 3% for participating customers, however, depending on the level of engagement from customers, this amount could vary. The table below summarizes the assumptions supporting the estimated savings of 3,000 MWh for residential customers participating in the behavioral pilot program.

Table 4: 2020 Behavioral Program Estimated Participation and Savings

Monthly Use	Number of Customers	Percentage Participating in Pilot	Percentage of Energy Reduced	2020 Estimated kWh Reduction
Under 500 kWh	46,061	1%	3%	46,334
500-1,000 kWh	85,416	3%	3%	686,491
Over 1,000 kWh	81,121	5%	3%	2,346,819
Total	212,598			3,079,644

d. Residential In-Home Energy Audit and Weatherization

Avista is currently developing an in-home audit with direct install pilot program for residential customers in Spokane County Washington and Kootenai County Idaho. This program targets High-Bill Concern (HBC) customers, Income Based Payment Plan (IBPP) customers, and homes with a high Energy Use Intensity (EUI). This program will be available to Avista customers that either rent or own residential single family properties, up to a four-unit multi-family property.

Customers that participate in the program can expect a comprehensive evaluation of the home to be performed, along with the direct installation of the following energy saving measures when needed and permitted by the customer.

- General service LED lamps (40, 60, 75 and 100 watt equivalencies)
- Low-flow faucet aerators and shower heads

In addition to the items directly installed at the customer's site, the following low-cost energy saving measures are provided to the customer, with the auditor providing an installation demonstration when needed.

- Outlet and switch plate gaskets
- Door weather-stripping
- Door sweeps
- Plastic window kits
- Advanced Power Strips
- Rope and tube caulk

The customer also receives a report of the audit that is easy to read and follow; this report containing recommendations to save energy and provide more comfort in the home. Eligibility for Avista rebates are also communicated in the report, which is then followed-up by communication from the Avista program administrator to champion the implementation of the recommended energy efficiency measures.

e. Small Business Lighting Direct Install Pilot

The Small Business Lighting Direct Install Pilot is designed to service hard-to-reach small business customers within Avista's service territory. The criteria for participation is still in development, however, it will have a similar criteria as Avista's Multifamily Direct Install program for area lighting. Initially, the pilot will select 25 customers to participate in the program and its cost-effectiveness will be evaluated.

f. Luminaire Level Lighting Control (LLLC)/Networked Lighting Pilot

Avista will pilot Luminaire Level Lighting Controls for 20 customers in order to determine if additional efficiencies can be gained by fine tuning lighting within a nonresidential building. Avista will work with the customers to add LLLC or Networked lighting in a space in the customer's building prior to a lighting upgrade of 50% or greater. The goal of the pilot is to show the additional energy savings that are derived from the additional network controls.

g. Energy Use Index (EUI) Retrofit Pilot

The EUI pilot will encompass encouraging the customer to have a more efficient use of their energy. The pilot will utilize a pay for performance (P4P) approach with the goal of achieving 50% of the customer's previous energy use. Facility must do at least 25% of their ft2 and there must be a way to accurately measure at a sub-panel for performance. The pilot will be limited to five customers.

h. Tool Lending Pilot

The Tool Lending Pilot will be a two-year program allowing tool lending to Avista customers from a public space in the Eco District. The library of tools will include our current stock of Energy Efficiency related equipment but will also include some newer technologies that provide more insight into energy use. The pilot will include training on the tools and shipping the tools and training materials to customers who are not in the immediate area.

VI. AVISTA-SPECIFIC METHODOLOGIES & ANALYTICAL PRACTICES

Over time, Avista has evolved approaches to calculating the various metrics applied within the planning effort to meet the needs of our portfolio and regulation. Care has been taken to ensure that these approaches are consistent with the intent of the Northwest Power and Conservation Council methodologies for the analysis of Energy Efficiency. Avista completes an Annual Conservation Report (ACR) in the spring of each year, based upon 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 C – Summarization of Cost Effectiveness Methodology). Since the TRC and UCT tests are the basis for optimizing the portfolio (for reasons previously explained), the explanation of Avista’s methodologies, for planning purposes, focus upon 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)
- Cost to perform Conservation Potential Assessment studies
- Costs related to Evaluation, Measurement and Verification

Individual measures are aggregated into programs composed of similar measures. At the program level, non-incentive portfolio costs are allocated based upon direct assignment to the extent possible and costs are allocated based upon a programs 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 all of 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 rate¹². Future costs and benefits are discounted to the

¹² During the late summer of 2016, the Company presented to the Advisory Group a proposal to use a real Weighted Average Cost of Capital (WACC), instead of a nominal figure. This suggestion received positive feedback, therefore a real discount rate was used. For 2020, the Company is using separate discount rates for residential and for non-residential. The non-residential rate will continue at the WACC while the residential discount rate is set at a rate equal to the daily Treasury Bill rate at 07.09.19.

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

Avista's Energy Efficiency portfolios are built from the bottom up, starting with the identification of prospective efficiency measures based upon 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.

VII. ANALYTICAL REVIEW OF ENERGY EFFICIENCY PROGRAMS

The annual planning process begins with a “blank slate” approach to maximizing the value of the Energy Efficiency portfolio to customers. The process ends when the portfolio meets or exceeds the desired objectives and goals. Within this section is a summary of the composition and performance of the planned 2020 portfolio.

The basis for incorporating a measure within a program being offered to customers are primarily, but not exclusively, an evaluation of the contribution of each individual measure to the portfolio cost-effectiveness. Factors other than cost-effectiveness that are considered in the measure status include consistency with other measures, the incentive relative to both the incremental and total customer cost, the marketability and expected customer satisfaction of the measure and the element of uncertainty surrounding all of the inputs to the planning process. For purposes of reviewing the contributions of these programs, the portfolio is categorized as follows:

- Residential Programs
- Low Income Programs
- Non-Residential Prescriptive Programs
- Non-Residential Site-Specific Programs

a. Residential Programs

Avista’s Residential Energy Efficiency program is comprised of two main segments. Note that for 2020, Avista suspended its residential lighting program due to state efficiency standards. The remaining two programs include:

1. Residential Prescriptive
2. Multifamily Direct Install

Residential Prescriptive: Prescriptive measures do not require a pre-installation contract and offer a fixed incentive amount for eligible measures. Measures offered through prescriptive programs are evaluated based upon 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. Measure level data for the Residential Prescriptive programs, which includes TRC and UCT cost-effectiveness, can be found in Appendix A – Program Plans.

The 2020 electric residential portfolio consists of the below prescriptive programs:

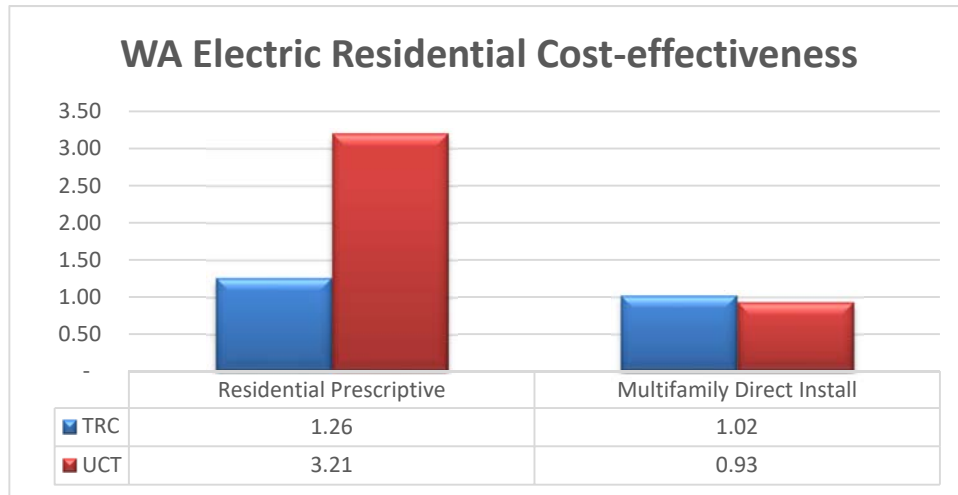
- ENERGY STAR Homes
- HVAC
- Shell
- Water Heat
- Residential Appliances

Throughout 2020 and 2021, Avista intends to focus in on its prescriptive offerings as it considers opportunities from the expanded “energy assistance” definitions in Section 12 of Senate Bill 5116 and RCW 19.405.120. Avista will work with its Advisory Group on any proposed program modifications or enhancements.

Multifamily Direct Install Program: Through the Multifamily Direct Install Program, Avista provides free gas and electric direct-install measures to multifamily residences (of five units or more) and common areas in its service territory. SBW Consulting, Inc., the program implementer, contacts the property managers and schedules appointments to conduct audits and install energy-saving products in all of the units and in common areas. These products include faucet aerators, showerheads, LED light bulbs, smart power strips, vending misers, and common area lighting retrofits. The implementer also conducts energy audits to identify other savings opportunities at the property and to gauge the property manager’s interest in other Avista program offerings. This program certainly serves the hard-to-reach customer segment as well as Avista’s low and limited income population.

The program-by-program cost-effectiveness of the portfolio is graphically represented in Figure 3:

Figure 3: Residential Programs Cost-Effectiveness



b. Low Income Programs

Avista’s low income programs are offered in a cooperative effort with Community Action Partner agencies under annual contract to Avista. The funding contracts allow for considerable flexibility for the Agencies to deliver to each individual low-income client a mix of measures customized to that particular home. For purposes of establishing a projection of program performance for 2020, Avista has defined 30 electric and natural gas measures available to Washington CAPs. Additionally, the CAP agencies are permitted to expend up to 15% of their funding on health and human safety measures on homes receiving Avista-funded treatment. Additionally, CAP agencies may charge Avista up to 15% of the total installed cost of the measures for reimbursement of administrative costs.

The list of measures offered is derived from the Department of Commerce’s Weatherization Manual. To guide the agency toward projects that are most beneficial to the Company’s energy efficiency efforts, an “Approved” list of measures is provided that allows for full reimbursement. Measures reimbursed at 100% have a TRC of 1.0 or better. Per WAC 480-109-100(10)(a), measures identified through the priority list in the Weatherization Manual are considered cost-effective. For efficiency measures with a TRC less than 1.0 and not included on the priority list, a “Rebate” that is equal to the Company’s avoided cost of energy is provided as the reimbursement to the Agency.

Both the “Approved” and “Rebate” lists are made available to the Agencies during the contracting process so they are aware of the eligible measures and the designated amounts if applicable. Should the Agency have an efficiency opportunity that is not on the “Rebate” list, the Company will review each project individually to determine an appropriate funding amount. The Agencies may choose to utilize their Health and Human Safety allotment towards covering the full cost of the “Rebate” measure if they do not have other funding sources to cover the difference. In 2019, some measures, particularly weatherization, have decreased TRCs below 1.0, however, most are included on the Weatherization Manual priority list and therefore reimbursed at 100%.

Avista does not include the application of non-Avista co-funding for the installation of energy measures as a cost for purposes of calculating the TRC test. Avista defines two major non-energy benefits uniquely applicable to the low income program. These are:

1. End-use non-energy benefit - CAPs fund the entire cost of the installation of the measure in a customer home, not just the incremental cost of the higher efficiency value. To maintain consistency with how the utility is invoiced and with programmatic budgets, the Company includes the full invoiced cost within the TRC test. However, the energy efficiency value of the measure corresponds only to the incremental cost of the efficiency measure. Thus, Avista values the cost associated with the baseline end-use as a non-energy benefit being provided to the customer.
2. Health and human safety non-energy benefit - The 15% health and human safety allowance permitted under the Company’s funding contracts with the CAP is assumed to create, on a dollar-for-dollar basis, a quantifiable non-energy benefit. It is assumed that the CAP would only make these investments in an individually reviewed home if the benefits were equal, or in excess of, the cost. Therefore, Avista recognizes a non-energy benefit for health and human safety expenses that is equal to the amount expended.

Other non-energy benefits associated with individual measures are quantified and included within the low income portfolio analysis in a similar manner to any other measure within the Avista Energy Efficiency portfolio.

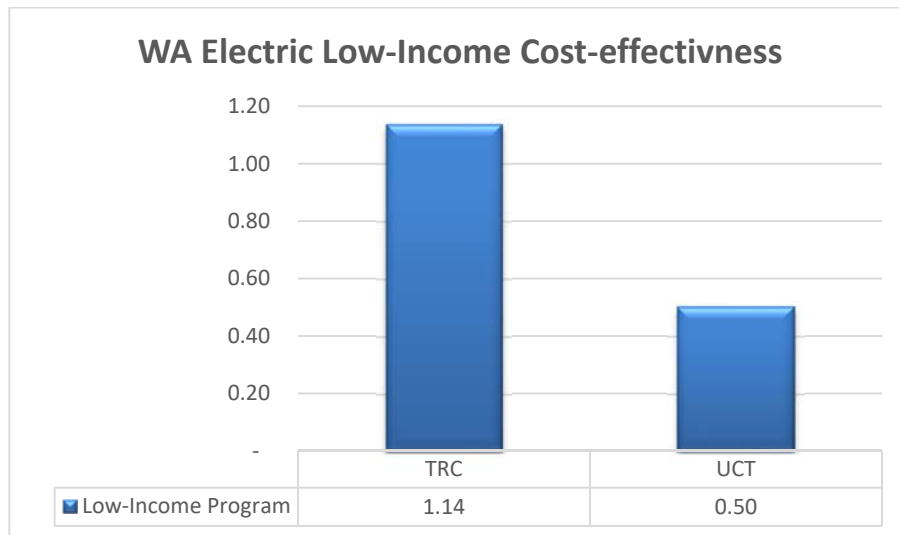
The UCT is calculated based upon the authorized expenditure of Avista funds, whereas the TRC cost is based upon the cost of the installation without regard to how that cost is paid. Since

the authorized expenditures for a measure are potentially less than the full cost, due to the cap on funding available for most measures at the value of the energy savings, the portfolio UCT costs are lower than the TRC cost. Both the UCT and TRC costs include all assigned and allocated non-incentive utility costs.

Since there are often multiple measures installed at the same time, and these measure packages frequently consist of similar measures, it is statistically difficult to separate the individual measure savings. As a result, Avista has developed adjusted engineering estimates of UES for this program that align with actual impact evaluations for participating homes. While there is confidence that the homes achieved a certain level of savings, it is difficult to determine an individual measure’s contribution to the energy savings.

Figure 4 below identifies the TRC and UCT cost-effectiveness for the Low-Income programs.

Figure 4: Low Income Cost-Effectiveness



c. Non-Residential Prescriptive Programs

Nonresidential prescriptive programs are similar to residential prescriptive programs in that they do not require a pre-installation contract and offer a fixed incentive amount for eligible measures. Measures offered through prescriptive programs are evaluated based upon the typical application of that measure by program participants. Measures that are eligible through the

prescriptive program are not eligible for the otherwise all-inclusive site-specific program. 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.

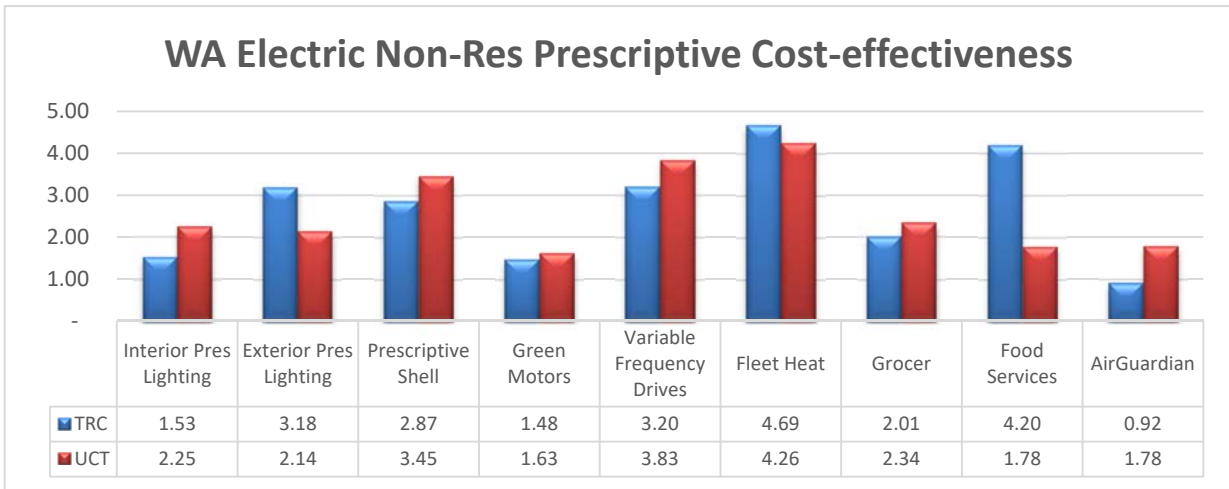
The 2020 Electric portfolio consists of the below prescriptive programs:

- Interior Prescriptive Lighting
- Exterior Prescriptive Lighting
- Prescriptive Shell
- Green Motors
- Motor Control HVAC (VFD)
- HVAC
- Fleet Heat
- Food Services
- Grocer
- AirGuardian

Two of the above listed programs (Air Guardian and Green Motors) are offered to customers through third-party implementation staff while the other programs are fielded by Avista Energy Efficiency staff.

Quantifiable non-energy benefits are included in the TRC calculation including, but not limited to, reductions in maintenance, water, and sewer and non-utility energy costs. All assigned and allocated non-incentive utility costs have been incorporated into the cost-effectiveness calculation. Figure 5 identifies the TRC and UCT cost-effectiveness for the Prescriptive Non-Residential Program.

Figure 5: WA Non-Residential Prescriptive Programs Cost-Effectiveness

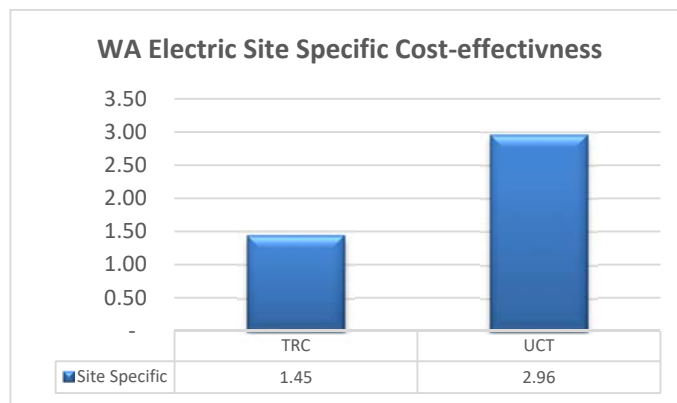


d. Non-Residential Site-Specific Program

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.

Estimated savings from Site Specific projects for 2020 are based off of the year-to-date 2019 savings and then annualized for a 12 month period. Figure 6 identifies the cost-effectiveness for the Site-Specific Programs.

Figure 6: Site-Specific Program Cost-effectiveness



VIII. SECTOR COST-EFFECTIVENESS PROJECTIONS AND RELATED METRICS

Figures 7 and 8 below represent cost-effectiveness and portfolio savings for the Low-Income, Residential and Non-Residential sectors. Figure 9 provides the total budget for each of these sectors. The total expense for the 2020 program year is estimated to be \$12,519,789. In addition to this amount, the Company also anticipates approximately \$1,000,000 for new pilot programs, \$750,000 for CEEP funding, an additional \$1,358,000 to fund NEEA and \$798,000 related to EM&V and the CPA. The total budget, including these items, is \$16,425,789.

Figure 7: Sector Portfolio Cost-Effectiveness

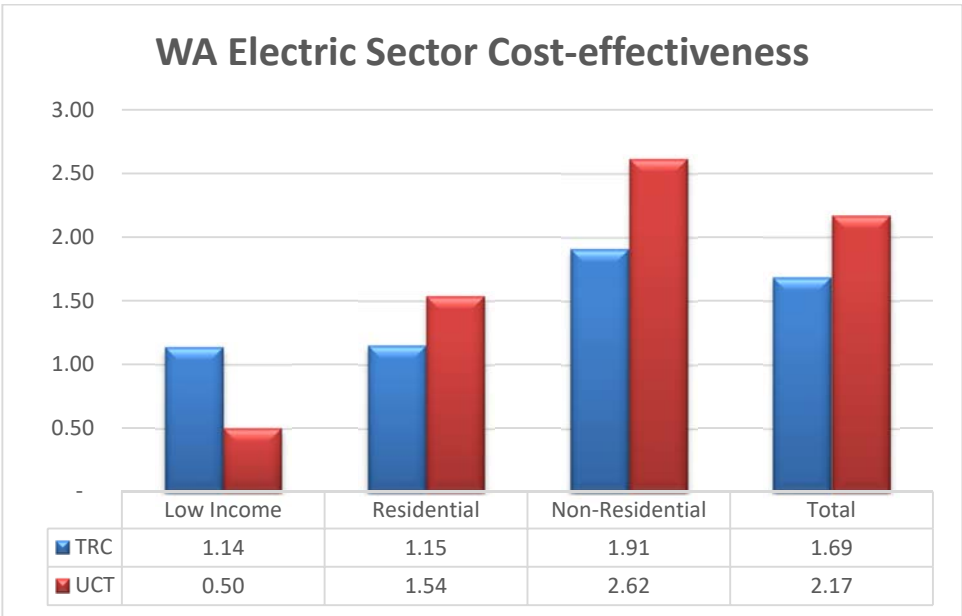


Figure 8: Sector Portfolio Savings

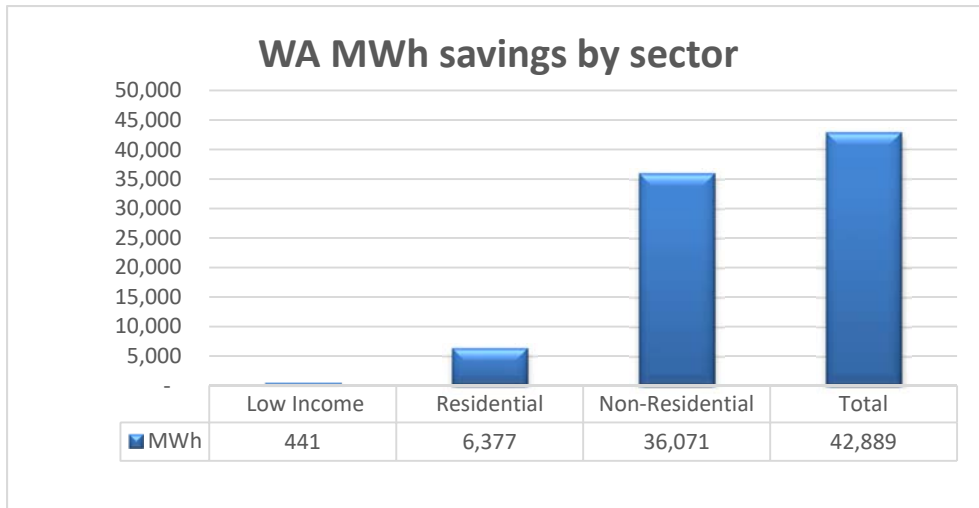
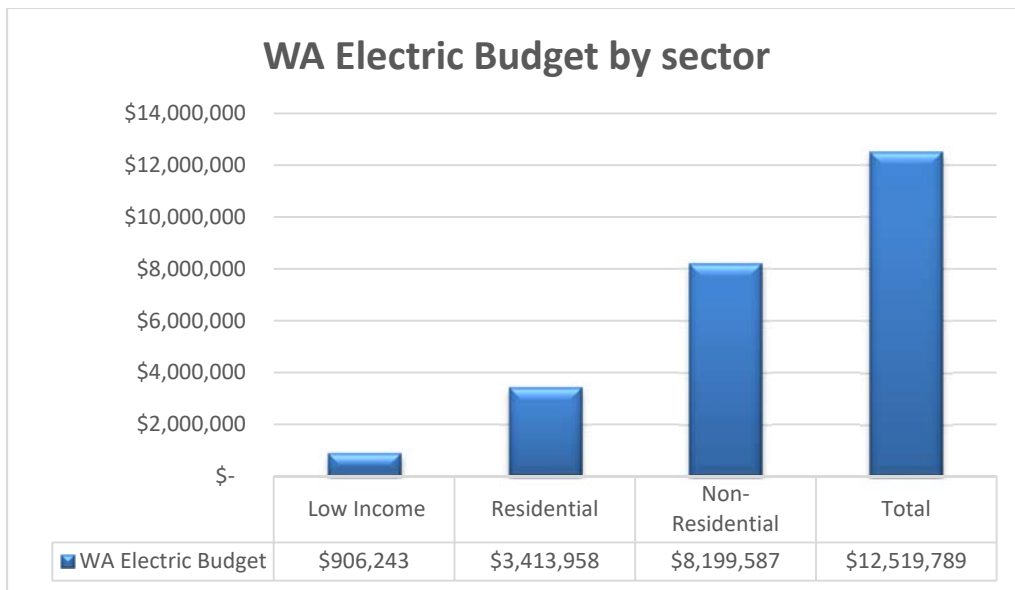


Figure 9: Sector Portfolio Budget



IX. WASHINGTON I-937 ACQUISITION TARGET

The 2020-2021 Washington I-937 Energy Efficiency Utility-Specific Conservation Goal is 63,590 MWh. To fulfill the total biennium conservation target, the 2020 Annual Conservation Plan’s expected eligible acquisition is 42,889 MWh from local programs and 49,376 MWh in combination with NEEA. The below table illustrates the details of the I-937 acquisition target for the biennium.

Table 5: Washington 2020-2021 EIA Target and EIA Penalty Threshold

2020-2021 Biennial Conservation Target (MWh)	
CPA Pro-Rata Share	72,340
Distribution and Street Light efficiency	504
EIA Target	72,844
Decoupling Threshold	3,642
Total Utility Conservation Goal	76,486
Excluded Programs (NEEA)	-12,896
Utility Specific Conservation Goal	63,590
Decoupling Threshold	-3,642
EIA Penalty Threshold	59,948

X. SUMMARY OF 2020 BUDGET

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.

The expectations in 2020 indicate \$3.06 million of fully loaded labor funding across electric and gas programs in both Washington and Idaho. This amount will fund 25 FTE (Full Time Equivalent), spread across 33 different individuals compared to 26 FTE spread across 33 individuals in 2019.

a. Overall Energy Efficiency Budget Projections

Based upon all of the preceding planning, 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 sufficiently timely so as to maintain a materially neutral tariff rider balance. Thus the budget is 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 2020 budget projection is summarized below. The table 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 (NEEA) and the cost to perform conservation potential assessment studies and evaluation measurement & verification.

Table 6: Summary of the 2020 Energy Efficiency Budget

	2020 Washington Electric Budget	Supplemental Budget	Non-Supplemental Budget
Total Incentives	\$9,181,456	\$0	\$9,181,456
Administrative Labor	\$1,388,070	\$0	\$1,388,070
Direct Benefit to Customer Labor	\$542,719	\$0	\$542,719
Total non-labor/non-incentive	\$5,313,544	\$2,156,000	\$3,157,544
Total	\$16,425,789	\$2,156,000	\$14,269,789

The Company 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 towards 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 that is spent on customized projects for energy efficiency participants. While labor costs are generally not included as a direct customer benefit, the inclusion of the Energy Efficiency 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 7: Proportion of funds returned to customers through direct benefits

% of utility expenditures returned to customers via direct benefits	68%
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The program-by-program details of the expected incentive expenditures for 2020 are provided in greater detail in Table 8. 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 highly correlated to program’s throughput and energy acquisition and based on customer participation, the amounts are subject to change.

Table 8: Customer Direct Incentive Expenditure Detail

Energy Efficiency Program	Direct Incentive Expenditure
Low Income Programs	
Low-Income	\$538,088
Total Low Income Incentives	\$538,088
Residential Programs	
Residential Prescriptive	\$595,000
Multifamily Direct Install	\$2,246,621
Simple Steps	\$0
Total Residential Incentives	\$2,841,621
Non-Residential Programs	
Interior Pres Lighting	\$1,131,800
Exterior Pres Lighting	\$1,754,700
Site Specific	\$2,556,400
Pres Shell	\$115,000
Variable Frequency Drives	\$97,500
Pres Green Motor	\$6,340
Fleet Heat	\$26,025
Grocer	\$79,262
Food Services	\$24,640
AirGuardian	\$10,080
Total Non-Residential Incentives	\$5,801,747
Total of all incentives	\$9,181,456

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

Table 9: Non-Incentive Utility Expense Detail

Expense Type	Washington electric portfolio	Supplemental budget	Non-Supplemental budget
Third Party non-incentive payments	\$321,011	\$0	\$321,011
Labor	\$1,930,789	\$0	\$1,930,789
EM&V	\$693,000	\$693,000	\$0
Memberships	\$70,094	\$0	\$70,094
Outreach	\$548,935	\$0	\$548,935
Training/Travel	\$3,150	\$0	\$3,150
Regulatory	\$3,150	\$0	\$3,150
Studies and Research	\$31,500	\$0	\$31,500
Software	\$143,942	\$0	\$143,942
CPA	\$105,000	\$105,000	\$0
General Implementation	\$285,762	\$0	\$285,762
CEEP, Pilots, & Studies	\$1,750,000	\$0	\$1,750,000
NEEA	\$1,358,000	\$1,358,000	\$0
Total	\$7,244,332	\$2,156,000	\$5,088,332

XI. STUDIES AND OTHER ITEMS

a. iEnergy DSM Enterprise Software Integration

During 2019, Avista began utilizing the iEnergy software platform for several functions. The DSM Central module will be used internally to process, and track Energy Efficiency projects. Commercial rebate submissions are the priority for inclusion to increase our access to the data elements collected. Residential project details may also begin to be migrated into the software if resources become available. In addition, the Trade Ally module will be used to improve communications with regional vendors, and installers. This program is a purpose-built, data management, analytics and customer engagement platform that assists utilities in managing their business processes. The platform includes an end-to-end management module that tracks and reports energy efficiency savings and expenses along with providing timely reporting for internal and external stakeholders.

b. Particulate Matter 2.5

Using a nationwide network of monitoring sites, EPA has developed ambient air quality trends for particle pollution, also called Particulate Matter (PM). PM^{2.5} describes fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller. Under the Clean Air Act, EPA sets and reviews national air quality standards for PM. Avista has received results from ABT Consulting for the development of PM 2.5 non-energy values for offering wood burning on a measure BTU basis. Avista discussed these results with their Advisory Group at the Fall 2018 meeting to determine an agreed upon value for non-energy benefits. Consensus was reached to use the median values and take an average of the high and the low values which results in \$0.0065 (\$ per kWh of electricity saved) by ductless heat pump replacing zonal heat and \$0.0041 (\$ per kWh of electricity saved) by replacing zonal heat with natural gas furnaces.

c. Demand Response

Throughout the 2020-2021 biennium, Avista will continue to evaluate the need for a Demand Response (“DR”) program in its service territory. Demand Response offers an innovative approach for empowering customers to control their energy use, while also providing benefits to Avista’s system. With this opportunity, however, comes challenges ranging from customer education, program implementation, as well as the on-going administration associated with a customer-wide offering.

Consistent with CETA requirements to pursue all cost-effective, reliable, and feasible demand response, Avista anticipates an increased involvement in DR-related discussions with its stakeholders and regulators. From the Company’s perspective, DR programs, while not considered “conservation”, are akin to Energy Efficiency programs in the regard that they are instrumental in reducing capacity need and deferring investments in more expensive resources. With regards to planning and reporting, Avista recognizes the benefits of including Demand Response in its 2-year cycle, however, depending on the complexity of the DR program, the efforts to streamline the process may be unduly burdensome within the BCP process. As the Company looks towards implementation of DR programs, it remains open to discussions related to partially funding potential DR programs through the Energy Efficiency tariff rider (Schedule 91/191). The Company

will work closely with its stakeholder group to facilitate these discussions in the upcoming biennium.

XII. CONCLUSION AND CONTACT INFORMATION

This 2020 Annual Conservation Plan represents program efforts by the Company in order to achieve its expected eligible acquisition savings for the 2020-2021 biennium. For additional supporting information please see the corresponding appendices:

Appendix A: Program Plans

Appendix B: Evaluation, Measurement and Verification Plan

Appendix C: Summarization of Cost-Effectiveness Methodology

Appendix D: Schedules 90 and 190, Washington

Appendix E: Program Summary

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Energy Efficiency



Washington Natural Gas
Energy Efficiency
Annual Conservation Plan

2020



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Appendix Summary

Appendix A: Program Plans

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Appendix D: Schedule 90 and 190, Washington

Appendix E: Program Summary

I. EXECUTIVE SUMMARY

This Natural Gas Annual Conservation Plan (ACP or the Plan) is intended to be a continuous planning process for Avista’s Natural Gas Energy Efficiency program. The Company is committed to maintain and enhance meaningful stakeholder involvement within this process. Over the course of the coming year, revisions and updates to the Plan are to be expected as part of adaptively managing the Energy Efficiency portfolio. Based on the 2018 Natural Gas Integrated Resource Plan (IRP), the Washington natural gas conservation potential for 2020 is 936,350 therms. The 2020 Annual Conservation Plan’s (“ACP”) expected acquisition is 937,402 therms. The cost-effectiveness of the portfolio is graphically represented in the figure below:

Figure 1: Portfolio Cost-effectiveness

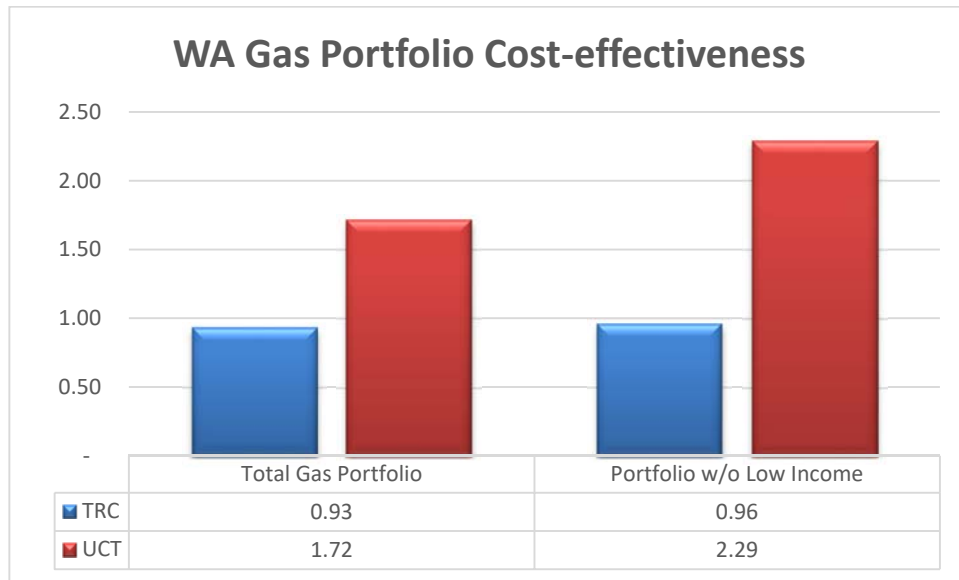


Table 1 below illustrates the savings and total budget per sector for the 2020 program year. Note that budgeted numbers below are inclusive of Non-Incentive Utility Costs (NIUC).

Table 1: Savings and Budget by Sector:

Washington Gas by Sector	Therms	Budget
Low Income	25,743	\$ 1,664,688
Residential	642,933	\$ 3,262,199
Non-Residential	268,727	\$ 774,959
Total	937,402	\$ 5,701,846

II. INTRODUCTION

The 2020 Annual Conservation Plan outlines Avista’s conservation offerings, its approach to energy efficiency, and details on verifying and reporting savings. The Company’s plan is based on two key principles. The first is to pursue all cost-effective kilowatt hours and therms by offering financial incentives for energy saving measures, with a simple financial payback of over one year. The second key principle is to use the most effective “mechanism” to deliver energy efficiency services to customers. These mechanisms are varied and include 1) prescriptive programs (or “standard offers” such as high efficiency appliance rebates), 2) site-specific or “customized” analyses at customer premises, 3) “market transformational,” or regional, efforts with other utilities, 4) low-income weatherization services through local Community Action Partner agencies (“CAP” or “Agencies”), 5) low-cost/no-cost advice through a multi-channel communication effort, and 6) support for cost-effective appliance standards and building codes.

This “Annual Conservation Plan” is intended to be a continuous planning process. The Company is committed to maintaining and enhancing meaningful stakeholder involvement within this process. Over the course of the following year, revisions and updates to the plan are to be expected as part of adaptively managing the Energy Efficiency portfolio.

The Company’s programs are delivered across a full customer spectrum. Virtually all Avista customers have had the opportunity to participate, and a great many have directly benefited from the program offerings. All customers are indirectly benefited through enhanced cost-efficiencies as a result of this portfolio approach.

The business planning process builds upon the electric and natural gas IRP and CPA processes. These processes are an overall resource planning process completed every two years that integrate 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 & verification (EM&V) plan

- identification of outreach requirements
- organization of a marketable customer-facing portfolio

The budgetary projections established within the Plan are applied in a separate mid-year process to revise the conservation tariff rider funding mechanisms contained within the Schedule 91 electric and Schedule 191 natural gas tariffs. The tariff rider surcharges are periodically adjusted with the objective of moving these balances toward zero.

III. KEY CONSIDERATIONS

a. Conservation Targets for Natural Gas Companies

Avista, along with other Washington Utilities offering natural gas service, will be required to establish a two-year natural gas target which includes the effect of greenhouse gas emissions. Per RCW 80.28.380, “Each gas company must identify and acquire all conservation measures that are available and cost-effective. Each company must establish an acquisition target every two years and must demonstrate that the target will result in the acquisition of all resources identified as available and cost-effective. The cost-effectiveness analysis required by this section must include the costs of greenhouse gas emissions established in RCW 80.28.395. The targets must be based on a conservation potential assessment prepared by an independent third party and approved by the commission. Conservation targets must be approved by order by the commission. The initial conservation target must take effect by 2022.”

b. Washington House Bill 1257

The newly enacted House Bill 1257¹ (“HB 1257”) issues new efficiency and reporting requirements for building and building operators that heat with natural gas and have a building size of over 50,000 square feet. Throughout 2020 and 2021, Avista will continue to work with outside stakeholders, members of its account executive team, representatives from Department of Commerce, and the Washington Commission to stay well informed on the rule making for HB 1257.

¹ Per RCW 19.27

c. Evaluation, Measurement and Verification Commitments

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 comprehensive analyses and assessments necessary to supply useful information to management and stakeholders that adequately identifies 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 and Process, and taken as a whole, are analogous with other industry standard terms such as Portfolio Evaluation or Program Evaluation.

A primary responsibility of Avista's EM&V resources is to support the ongoing activities of the third-party EM&V consultants and evaluators performing the various analyses required to substantiate the conservation acquisition, determine market saturation and penetration, and process evaluations. The 2020 EM&V budget provides for third-party EM&V services that provide an evaluation of 2020 program year portfolio, along with consolidating these findings with results obtained for reporting requirements associated with the Energy Independence Act (EIA) and the 2020-2021 biennium.

To support planning and reporting requirements, several guiding EM&V documents are maintained and published. This includes the Avista 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 required, to inform and benefit the Energy Efficiency activities. These documents are reviewed and updated as necessary, serving to improve the processes and protocols for energy efficiency measurement, evaluation and verification.

EM&V efforts will also be applied to evaluating emerging technologies and applications in consideration of potential 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.

Avista and its customers benefit from regional activities and resources in the energy efficiency and conservation domain. To engage with and contribute to regional efforts, one Avista staff member has a voting role and a second member has a corresponding member role on the Regional Technical Forum (RTF) that serves as an advisory committee to the Northwest Power and Conservation Council (NPCC). The RTF is a primary source of information relating to the 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 that are 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. Application of the principles of the International Performance Measurement and Verification Protocol serves as the guidelines for measurement and verification plans applied to Avista programs. Additionally, the compilation of EM&V protocols released under the U.S. Department of Energy's Uniform Methods Project will be considered and applied where possible to support consistency and credibility of the reported results. The verification of a statistically significant number of projects is often extrapolated to verify and 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 utility and public interests.

d. Cost-Effectiveness Metrics, Methodology and Objectives

The Company's planning approach aims to maximize cost-effective conservation acquired by analyzing the cost-effectiveness of each segment (residential, low income and non-residential) and how the measures within the 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 the Company is appreciative of the valuable work the RTF has done to quantify NEIs for the region. In this plan, where NEIs are calculated and the delivery method is consistent with what is required by the RTF, the calculated NEIs are included in the

appropriate cost-effectiveness tests (Total Resource Cost (TRC) and Participant Cost Test (PCT)). Since the RTF does not currently have Unit Energy Savings (UES) or NEI values for commercial lighting, a similar methodology is used to calculate the NEI value of efficient lighting measures that have longer measure lives than the baseline technology. The Company will continue to follow and participate in RTF activities around NEIs, and will include NEIs in the cost-effectiveness calculation when appropriate.

Details regarding how Avista applies the avoided costs and cost-effectiveness methodologies to the estimation of the 2020 portfolio are contained in Appendix C – Cost Effectiveness Methodology. The results of the TRC and Utility Cost Test (UCT) tests are summarized by program and portfolio in Appendix A – Program Plans.

e. Schedule 90 and 190 Revisions

Avista's electric Energy Efficiency operations are governed by Schedule 90 tariff requirements and natural gas Energy Efficiency operations are governed by Schedule 190. These tariffs (attached within Appendix D) 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.

During the Spring 2019 Advisory Group meeting, Avista proposed modifications to its Energy Efficiency tariffs that would lift the three restrictions for incentive level settings from the Schedule 90 and Schedule 190 tariffs. These restrictions include:

1. Incentives are limited to \$0.20 per first year kWh savings and \$3 per first year Therm savings
2. Incentives are limited to 70% of the customer incremental cost of the measure installed.
3. Measures are restricted to a simple payback of 15 years or less.

The Company identified that for several measures in its portfolio, the number of customers participating in the program could be increased if the amount of the rebate was higher. However, a higher throughput could not be achieved because of the stated restrictions on the incentive amount. The Advisory Group found that the proposed changes had merit, and removing the

restrictions would allow Avista more flexibility in achieving the most throughput in their program at the lowest possible expense while maintaining a positive cost-effectiveness benefit to cost ratio.

While the removal of the restrictions were seen as an appropriate adjustment, the group acknowledged the importance of having incentive guidelines that would inform the Company's decisions on setting appropriate incentive levels. To address these comments, the Advisory Group agreed to include language within its Standard Operating Procedures (SOP), clarifying that these metrics would serve as the starting points from which incentive setting would be based.

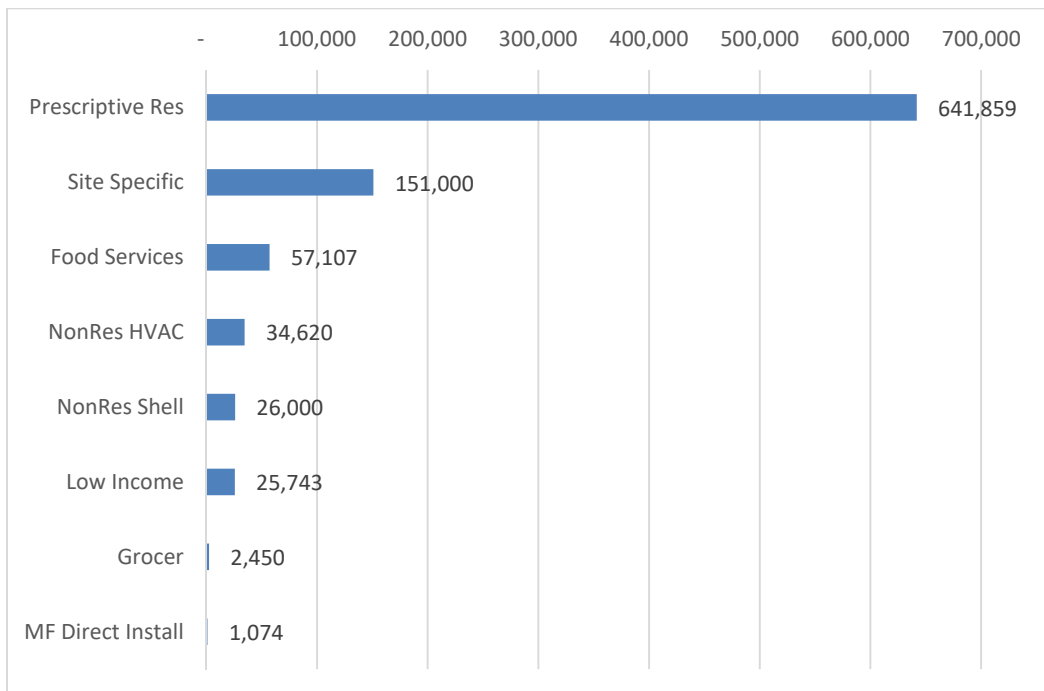
f. Schedule 91 and 191 Revisions

WAC 480-100-130(2) requires the utility to file on or before June 1st every year to “true up” the rider balance with an August 1st effective date. On May 21, 2019, the Company filed Docket No. UE-190406, revising schedule 91 to reflect a decrease in the customer rate collected to fund Avista's Energy Efficiency program; this filing was the fifth revision of Sheet 91A of the tariff rider. The chief reason for the revision was the Company's discontinuation of its Fuel Efficiency program beginning January 1st, 2020. This filing was approved by the Commission on July 26, 2019 and rates became effective on August 1, 2019.

IV. ENERGY EFFICIENCY PORTFOLIO OVERVIEW

Avista’s Energy Efficiency portfolio is comprised of residential, low income and non-residential programs. For 2020, the Company anticipates approximately 937,402 therm savings from its program offerings. The figure below illustrates the major categories from which savings are achieved.

Figure 2: 2020 Therm Savings



a. Residential Portfolio Overview

The Company’s residential portfolio is composed of several approaches to engage and encourage customers to consider energy efficiency improvements within their home. Prescriptive rebate programs are the main component of the portfolio, augmented by other interventions such as our Multi-family Direct-Install program.

Prescriptive rebate programs use financial incentives to encourage customers to adopt qualifying energy efficiency measures. Customers must complete installation and apply for a rebate, submitting proper proof of purchase, installation and/or other documentation to Avista,

typically within 90 days from project completion. Customers can submit this form in hard copy and several prescriptive measures are also available to submit online at www.myavista.com.

Residential prescriptive programs typically cover single family homes up to a four-plex. For multifamily situations (five-plex or larger), owners/developers may choose to treat the entire complex with an efficiency improvement. In these unique cases, the projects are treated as a commercial project and are evaluated within the site-specific portfolio.

A measure-by-measure evaluation of the incremental contribution to the UCT test is the primary guidance in reaching decisions regarding eligibility for measures as well as overall cost-effectiveness of the portfolio. For electric, the TRC is applied. In the event that a previously offered measure is no longer cost-effective, the Company may initiate a transition plan to equitably treat customers who were in or about to commit to participating in the program. Typically a minimum 90-day notice is provided prior to the termination of a program.

b. Low Income Portfolio Overview

The Company utilizes the infrastructure of seven CAP agencies to deliver low income energy efficiency programs. The Agencies have the ability to income-qualify customers and have access to a variety of funding resources, including Avista funding, which can be applied to meet customer needs. The seven Agencies serving Avista’s entire Washington service territory receive an aggregate annual funding of \$2,350,000. The distribution of these funds is represented in the following table:

Table 2: 2020 Estimated Low Income Funding by CAP Agency

CAP Agency	County	Funding
SNAP	Spokane	\$1,545,125
Rural Resources Community Action	Ferry, Lincoln, Pend Oreille, Stevens	\$227,950
Community Action Center	Whitman	\$171,550
Opportunities Industrialization Council	Adams, Grant	\$88,125
Spokane Indian Housing Authority	Stevens County	\$23,500
Washington Gorge Action Program	Klickitat, Skamania	\$11,750
Community Action Partnership	Asotin	\$282,000
	Total Low Income Funding	\$2,350,000

The Agencies may spend their annual allocated funds on either electric or natural gas efficiency measures, at their discretion, as long as the home demonstrates a minimum level of the Avista fuel for space heating use. Agencies have included in their annual funding a 15% reimbursement for administrative costs. Health and human safety measures may also be completed with the amount spent on these improvements not to exceed 15% of the agency's total annual contract amount.

The list of measures offered is derived from the Department of Commerce's Weatherization Manual. To guide the agency toward projects that are most beneficial to the Company's energy efficiency efforts, an "Approved" list of measures is provided that allows for full reimbursement.

Higher costs per weatherized household over the same fixed amount of Low-Income funds available has over-time resulted in a decrease in low-income participation. An actual participant goal would be difficult to determine given that the number of treated homes depends upon the depth and cost of weatherization required by the participating homes. The CAP agencies receive other non-utility funds that they may also use to treat an Avista home. Washington CAP agencies typically weatherize between 200 and 250 homes in a given year with Avista funding.

In addition to the traditional Low-Income programs, Avista is partnering with CEEP (Community Energy Efficiency Program) to deliver energy efficiency offerings for hard-to-reach markets such as rental properties, homes with alternative heat and households that are considered low to moderate income. CEEP is a program that is unique to Washington State and was created by the Washington State Legislature in 2009. Initially funded by the American Recovery and Reinvestment Act, CEEP has developed into a mature program with support from the Washington State Capital Budget. The Washington State University Energy Program executes and manages the program to provide support to homeowners and small businesses across the state so they can make energy efficiency upgrades to existing residences and commercial buildings. CEEP has allocated up to \$750,000 for projects in the Company's service territory which Avista has agreed to match. The primary focus of the CEEP funds is to target building improvements for multifamily housing that may include but are not limited to: improvements to HVAC systems and controls, building envelope, weatherization measures and lighting. A secondary initiative of the CEEP funding allocation is to convert income-qualified, single family, alternative heat homes (e.g.: oil and wood) to high efficiency electric space heat, or where available, to natural gas space heat.

Avista's \$750,000 match has been included in the Company's 2020 budget as a line item under Avista's pilot programs.

c. Non-Residential Program Overview

The nonresidential energy efficiency market is delivered through a combination of prescriptive and site-specific offerings. Any measure not offered through a prescriptive program is automatically eligible for treatment through the site-specific program, subject to the criteria for participation in that program. Prescriptive paths for the nonresidential market are preferred for measures that are relatively homogenous in scope and uniform in their energy efficiency characteristics.

Prescriptive paths do not require pre-project contracting, as the site-specific program does, and thus lend themselves to streamlined administrative and marketing efforts. Incentives are established for these prescriptive programs following the Company'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 utilize RTF UES.

When the prescriptive path is not available, Avista offers nonresidential 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 upon the projects individual characteristics as they apply to the Company's guidelines and SOPs.

The site-specific program has historically been one of the more cost-effective portions of the Energy Efficiency portfolio, and generates a substantial share of the energy savings. The year-to-year program performance can be somewhat variable due to the timing of large projects.

Program marketing relies heavily upon the Account Executive infrastructure and commercial and industrial energy efficiency outreach. Outreach includes print advertising, customer newsletters, customer meetings and vendor outreach. Account Executives have actively managed accounts, but are also available to any customer based upon the geographic location or industry, and serves as their liaison for all energy needs. A portion of the Account Executives 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.

The site-specific program savings can be difficult to predict due to the large nature of the projects, along with long sales cycles. General economy shifts may also impact customer willingness to fund efficiency improvements. Increases in process and eligibility complexity, increases in 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.

d. Regional Market Transformation

Avista's local Energy Efficiency portfolio seeks to influence the decision of customers towards the purchase of 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 to a degree do, create permanent changes in how our customers make energy choices, it is generally not feasible for Avista to design local programs so as to influence markets that are often regional or national in scale.

Market transformation is an alternate approach to those markets and are 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 geared towards 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, will enter its sixth funding cycle during 2020 for the 2020-2024 program years. Efforts are underway now to develop and finalized the 2020-2024 Business Plan. Avista has been an active participant and funder of this collaborative effort since its inception.

It is recognized that the future NEEA portfolio may not be as cost-effective as it has been in the past. NEEA's very 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 Avista's Washington customers continue to benefit from these efforts.

For 2020, the Company's portion of NEEA's Natural Gas budget is expected to be approximately \$205,000 for Washington. The NEEA funding requirements are incorporated within the budget, but are considered to be supplementary expenditures outside of the scope of the current year's local portfolio. The NEEA portfolio has not been incorporated within either the acquisition projection or the cost-effectiveness of the 2020 local portfolio developed within this Plan.

As identified in the Company's BCP, Avista is investigating new Market Transformation efforts for Washington and Idaho customers within its service territory. This engagement will focus market transformation efforts towards energy efficiency measures and solutions that are specific to Eastern Washington and Northern Idaho. While larger Market Transformation efforts from NEEA focus on the region as a whole, this engagement will be complementary to those efforts. Avista will work with its advisory group as this engagement develops and will allow stakeholders to provide feedback.

V. 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 our portfolio and regulation. Care has been taken to ensure that these approaches are consistent with the intent of the Northwest Power and Conservation Council methodologies for the analysis of Energy Efficiency. Avista completes an Annual Conservation Report (ACR) in the spring of each year, based upon 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 C – Summarization of Cost Effectiveness Methodology). Since the TRC and UCT tests are the basis for optimizing the portfolio (for reasons previously explained), the explanation of Avista’s methodologies, for planning purposes, focus upon 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)
- Cost to perform Conservation Potential Assessment studies
- Costs related to Evaluation, Measurement and Verification

Individual measures are aggregated into programs composed of similar measures. At the program level, non-incentive portfolio costs are allocated based upon direct assignment to the extent possible and costs are allocated based upon a programs 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 all of 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 rate². 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.

² During the late summer of 2016, the Company presented to the Advisory Group a proposal to use a real Weighted Average Cost of Capital (WACC), instead of a nominal figure. This suggestion received positive feedback, therefore a real discount rate was used. For 2020, the Company is using separate discount rates for residential and for non-residential. The non-residential rate will continue at the WACC while the residential discount rate is set at a rate equal to the daily Treasury Bill rate at 07.09.19.

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

Avista's Energy Efficiency portfolios are built from the bottom up, starting with the identification of prospective efficiency measures based upon 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.

VI. ANALYTICAL REVIEW OF MEASURES AND PROGRAMS

The annual planning process begins with a "blank slate" approach to maximizing the value of the Energy Efficiency portfolio to customers. The process ends when the portfolio meets or exceeds the desired objectives and goals. Within this section is a summary of the composition and performance of the planned 2020 portfolio.

The basis for incorporating a measure within a program being offered to customers are primarily, but not exclusively, an evaluation of the contribution of each individual measure to the portfolio cost-effectiveness. Factors other than cost-effectiveness that are considered in the measure status include consistency with other measures, the incentive relative to both the incremental and total customer cost, the marketability and expected customer satisfaction of the

measure and the element of uncertainty surrounding all of the inputs to the planning process. For purposes of reviewing the contributions of these programs, the portfolio is categorized as follows:

- Residential Programs
- Low Income Programs
- Non-Residential Prescriptive Programs
- Non-Residential Site Specific Programs

a. Residential Programs

Avista's Residential Energy Efficiency program is comprised of two main segments. The two programs include:

1. Residential Prescriptive
2. Multifamily Direct Install

Residential Prescriptive: Prescriptive measures do not require a pre-installation contract and offer a fixed incentive amount for eligible measures. Measures offered through prescriptive programs are evaluated based upon 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. Measure level data for the Residential Prescriptive programs, which includes TRC and UCT cost-effectiveness, can be found in Appendix A – Program Plans.

The 2020 natural gas residential prescriptive portfolio consists of the below programs:

- Prescriptive HVAC
- Prescriptive Shell
- Energy STAR Homes

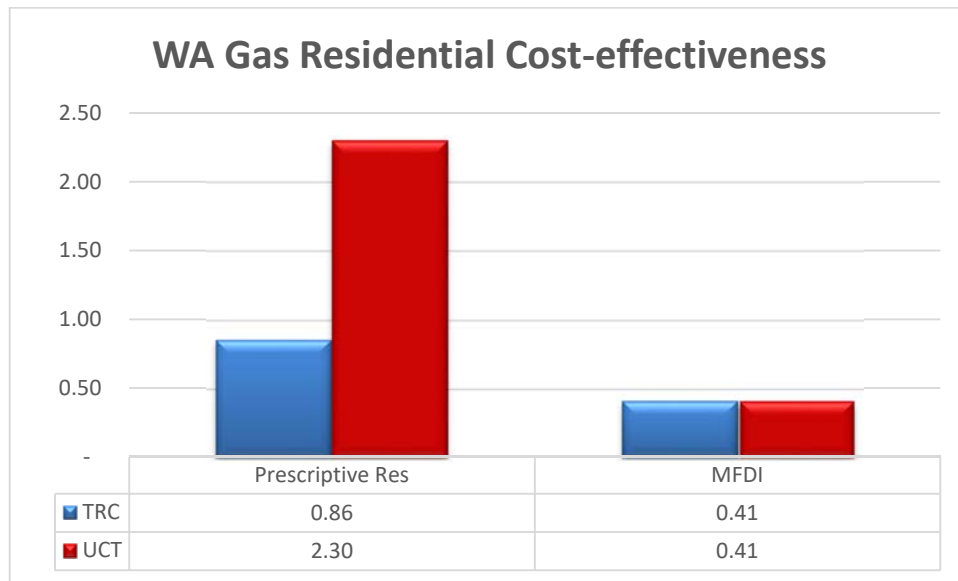
Measure level data for the Residential Prescriptive programs which includes TRC and UCT cost-effectiveness can be found in Appendix A – Program Plans.

Multifamily Direct Install Program: Through the Multifamily Direct Install Program, Avista provides free direct-install measures to multifamily residences (of five units or more) and common areas in its service territory. SBW Consulting, Inc., the program implementer, contacts the property managers and schedules appointments to conduct audits and install energy-saving products in all of the units and in common areas. These products include faucet aerators, showerheads, LED light bulbs, smart power strips, vending misers, and common area lighting retrofits. The implementer also conducts energy audits to identify other savings opportunities at

the property and to gauge the property manager’s interest in other Avista program offerings. This program certainly serves the hard-to-reach customer segment as well as Avista’s low and limited income population.

The program-by-program cost-effectiveness of the residential portfolio is graphically represented in the figure below:

Figure 3: Residential Programs Cost-Effectiveness



b. Low Income Programs

Avista’s low income programs are offered in a cooperative effort with Community Action Partner agencies under annual contract to Avista. The funding contracts allow for considerable flexibility for the Agencies to deliver to each individual low-income client a mix of measures customized to that particular home. For purposes of establishing a projection of program performance for 2020, Avista has defined 30 electric and natural gas measures available to Washington CAPs. Additionally, the CAP agencies are permitted to expend up to 15% of their funding on health and human safety measures on homes receiving Avista-funded treatment. Additionally, CAP agencies may charge Avista up to 15% of the total installed cost of the measures for reimbursement of administrative costs.

The list of measures offered is derived from the Department of Commerce’s Weatherization Manual. To guide the agency toward projects that are most beneficial to the

Company's energy efficiency efforts, an "Approved" list of measures is provided that allows for full reimbursement. Measures reimbursed at 100% have a TRC of 1.0 or better. Per WAC 480-109-100(10)(a), measures identified through the priority list in the Weatherization Manual are considered cost-effective. For efficiency measures with a TRC less than 1.0 and not included on the priority list, a "Rebate" that is equal to the Company's avoided cost of energy is provided as the reimbursement to the Agency.

Both the "Approved" and "Rebate" lists are made available to the Agencies during the contracting process so they are aware of the eligible measures and the designated amounts if applicable. Should the Agency have an efficiency opportunity that is not on the "Rebate" list, the Company will review each project individually to determine an appropriate funding amount. The Agencies may choose to utilize their Health and Human Safety allotment towards covering the full cost of the "Rebate" measure if they do not have other funding sources to cover the difference. In 2019, some measures, particularly weatherization, have decreased TRCs below 1.0, however, most are included on the Weatherization Manual priority list and therefore reimbursed at 100%.

Avista does not include the application of non-Avista co-funding for the installation of energy measures as a cost for purposes of calculating the TRC test. Avista defines two major non-energy benefits uniquely applicable to the low income program. These are:

1. End-use non-energy benefit - CAPs fund the entire cost of the installation of the measure in a customer home, not just the incremental cost of the higher efficiency value. To maintain consistency with how the utility is invoiced and with programmatic budgets, the Company includes the full invoiced cost within the TRC test. However, the energy efficiency value of the measure corresponds only to the incremental cost of the efficiency measure. Thus, Avista values the cost associated with the baseline end-use as a non-energy benefit being provided to the customer.
2. Health and human safety non-energy benefit - The 15% health and human safety allowance permitted under the Company's funding contracts with the CAP is assumed to create, on a dollar-for-dollar basis, a quantifiable non-energy benefit. It is assumed that the CAP would only make these investments in an individually reviewed home if the benefits were equal, or in excess of, the cost. Therefore, Avista recognizes a non-energy benefit for health and human safety expenses that is equal to the amount expended.

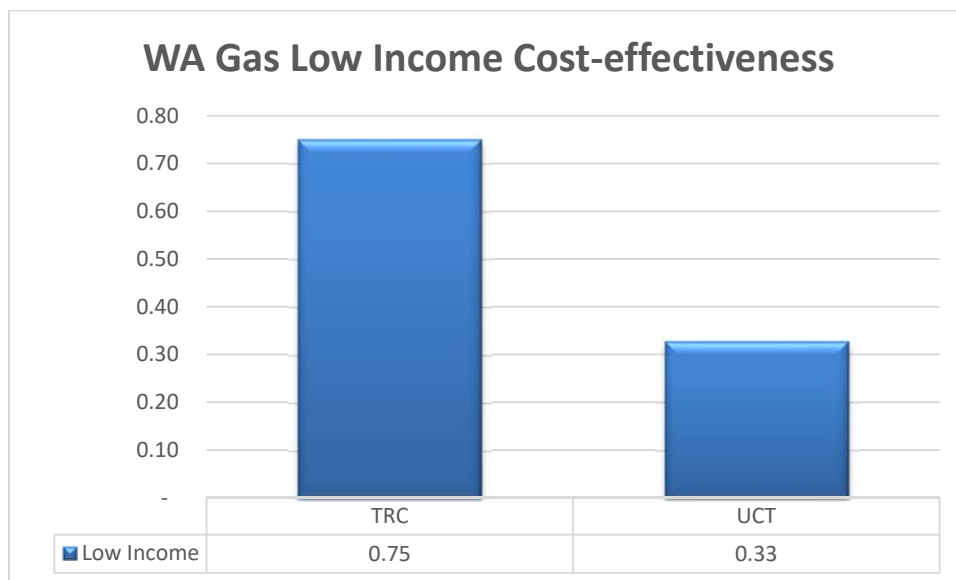
Other non-energy benefits associated with individual measures are quantified and included within the low income portfolio analysis in a similar manner to any other measure within the Avista Energy Efficiency portfolio.

The UCT is calculated based upon the authorized expenditure of Avista funds, whereas the TRC cost is based upon the cost of the installation without regard to how that cost is paid. Since the authorized expenditures for a measure are potentially less than the full cost, due to the cap on funding available for most measures at the value of the energy savings, the portfolio UCT costs are lower than the TRC cost. Both the UCT and TRC costs include all assigned and allocated non-incentive utility costs.

Since there are often multiple measures installed at the same time, and these measure packages frequently consist of similar measures, it is statistically difficult to separate the individual measure savings. As a result, Avista has developed adjusted engineering estimates of UES for this program that align with actual impact evaluations for participating homes. While there is confidence that the homes achieved a certain level of savings, it is difficult to determine an individual measure's contribution to the energy savings.

Figure 4 below identifies the TRC and UCT cost-effectiveness for the Low-Income programs.

Figure 4: Low Income Cost-Effectiveness



c. Non-Residential Prescriptive Programs

Nonresidential prescriptive programs are similar to residential prescriptive programs in that they do not require a pre-installation contract and offer a fixed incentive amount for eligible measures. Measures offered through prescriptive programs are evaluated based upon the typical application of that measure by program participants. Measures that are eligible through the prescriptive program are not eligible for the otherwise all-inclusive site-specific program. 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.

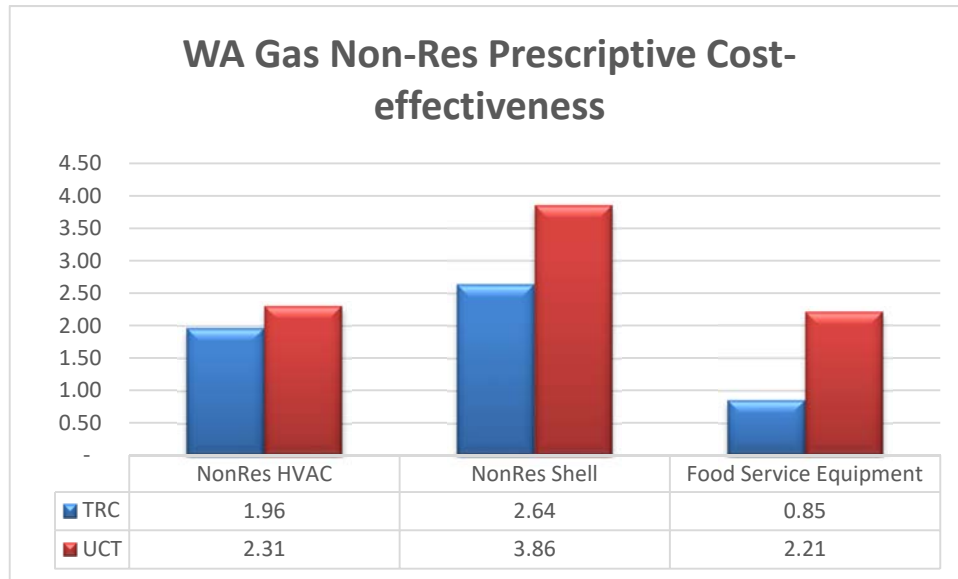
The Gas portfolio consists of the below non-residential prescriptive programs:

- Non-Residential HVAC
- Prescriptive Shell
- Food Services
- Grocer

Quantifiable non-energy benefits are included in the TRC calculation including, but not limited to, reductions in maintenance, water, and sewer and non-utility energy costs. All assigned and allocated non-incentive utility costs have been incorporated into the cost-effectiveness calculation.

Figure 5 identifies the cost-effectiveness for the Non-Residential Prescriptive Programs.

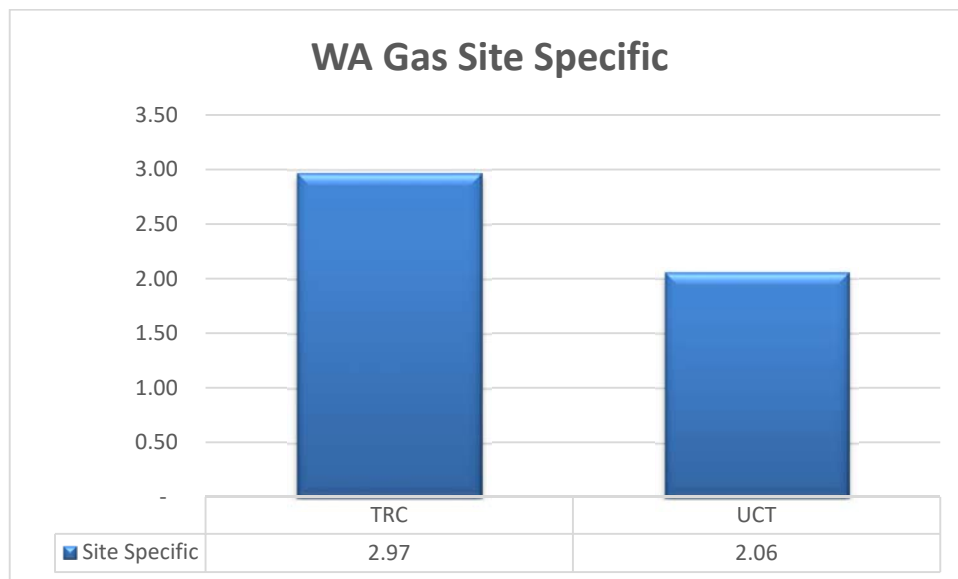
Figure 5: Non-Residential Prescriptive Programs Cost-Effectiveness



d. Non-Residential Site-Specific Program

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.

Figure 6: Site-Specific Program Cost-Effectiveness



VII. SECTOR COST-EFFECTIVENESS PROJECTIONS AND RELATED METRICS

Figure 7: Sector Portfolio Cost-Effectiveness

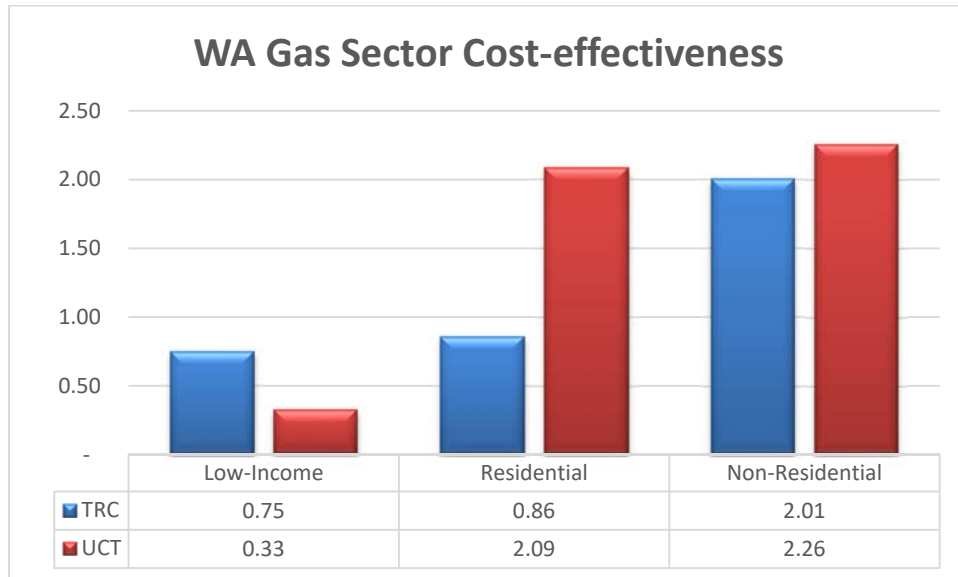


Figure 8: Sector Portfolio Savings

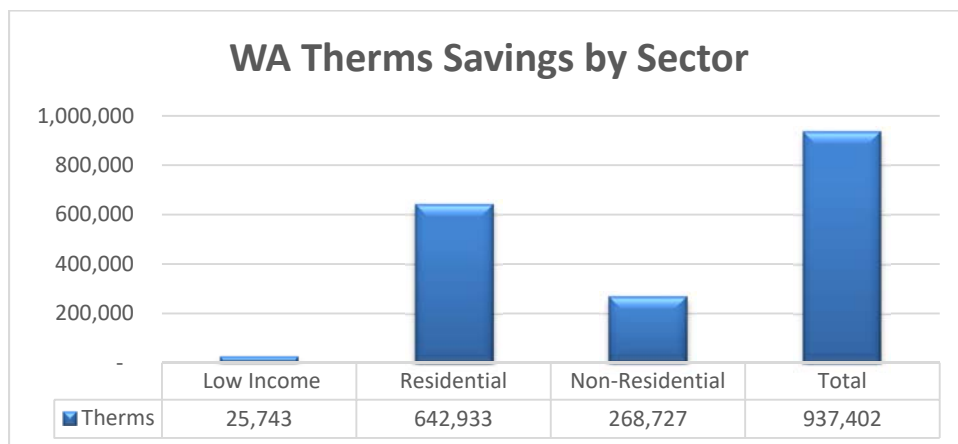
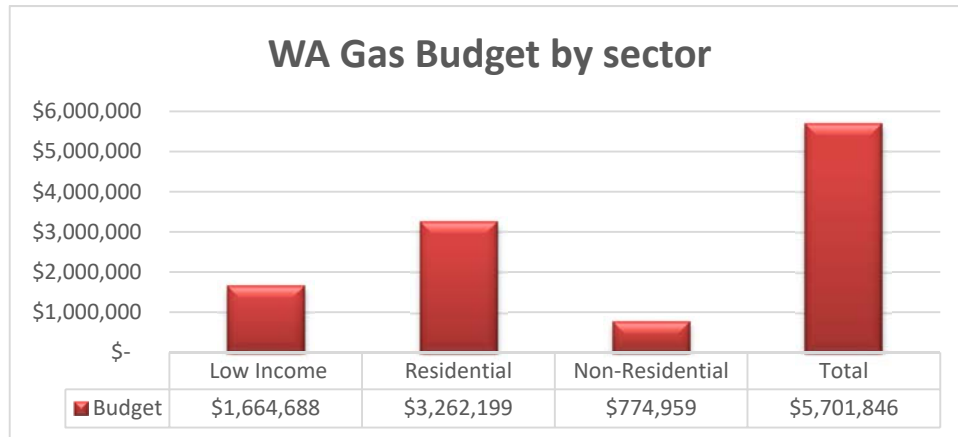


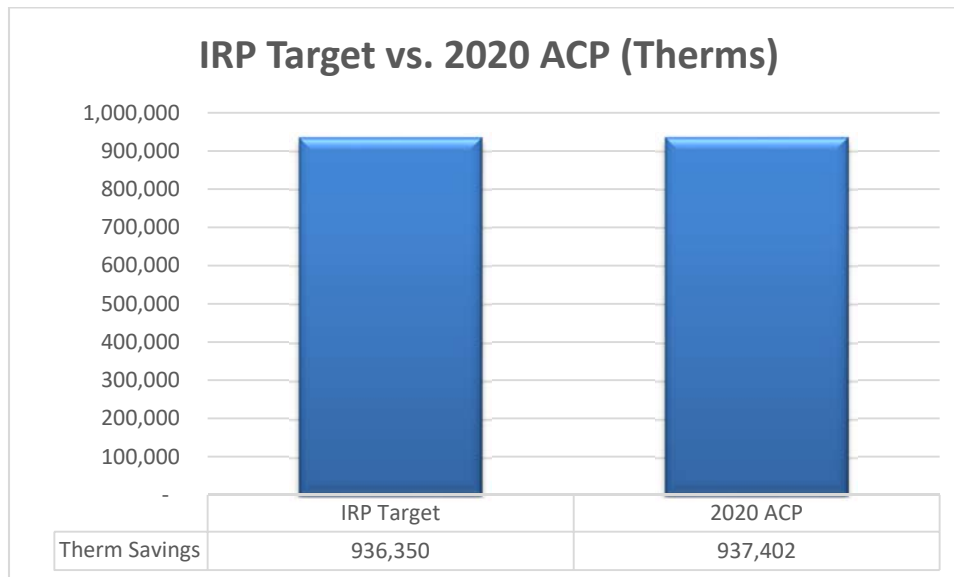
Figure 9: Sector Portfolio Budgeted Cost



a. Washington Natural Gas IRP Target acquisition

From the 2018 Natural Gas IRP the Washington natural gas conservation potential for 2020 is 936,350 therms. The 2020 Annual Conservation Plan’s expected acquisition is 937,402 therms.

Figure 10: Local 2020 IRP Target vs. 2020 Annual Conservation Plan Goal



b. Energy Efficiency Labor Requirements

Projections of expected labor requirements by job classification are made by managers within the Energy Efficiency team. Labor is allocated to a class of programs it is done on the basis of the weighted value of benefits the program brings to the overall portfolio.

The expectations in 2020 indicate \$3.06 million of fully loaded labor funding across electric and gas programs in both Washington and Idaho. This amount will fund 25 FTE (Full Time Equivalent) spread across 33 different individuals compared to 26 FTE spread across 33 individuals in 2019.

c. Overall Energy Efficiency Budget Projections

Based upon all of the preceding planning, 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 sufficiently timely so as to maintain a materially neutral tariff rider balance. Thus the budget is 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 2020 budget projection is summarized below. The table 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 (NEEA) and the cost to perform conservation potential assessment studies and evaluation measurement & verification.

Table 3: Summary of the 2020 Energy Efficiency Budget

	2020 Washington Gas Budget	Supplemental Budget	Non-Supplemental Budget
Total Incentives	\$5,062,757	\$0	\$5,062,757
Administrative Labor	\$154,230	\$0	\$154,230
Direct Benefit to Customer Labor	\$60,302	\$0	\$60,302
Total non-labor/non-incentive	\$914,557	\$490,000	\$424,557
Total	\$6,191,846	\$490,000	\$5,701,846

The Company 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 towards 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 that is spent on customized projects for energy efficiency participants. While labor costs are generally not included as a direct customer benefit, the inclusion of the Energy Efficiency 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

% of utility expenditures returned to customers via direct benefits	82%
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The program-by-program details of the expected incentive expenditures for 2020 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 highly correlated to program's throughput and energy acquisition and based on customer participation, the amounts are subject to change.

Table 5: Customer Direct Incentive Expenditure Detail

Program	Direct Incentive Expenditure
Washington Low-Income	\$1,342,205
Residential Programs	
Res Prescriptive	\$2,992,700
Multifamily Direct Install	\$12,887
Simple Steps	\$0
Non-Residential Programs	
NonRes HVAC	\$96,000
NonRes Shell	\$54,065
Food Services	\$111,900
Site Specific	\$453,000
Total Low Income Incentives	\$1,342,205
Total Residential Incentives	\$3,005,587
Total Non-Residential Incentives	\$714,965
Total of all incentives	\$5,062,757

The non-incentive expense, including both non-supplemental and supplemental expenditures, is detailed to a lower level of aggregation and broken out by portfolio in the table below. The allocation of these expenses is allocated by the percentage of value provided by each program. The policy regarding assigning costs is based upon 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

	Washington Gas Portfolio	Supplemental Budget	Non-Supplemental Budget
Third Party non-incentive payments	\$303,831	\$0	\$303,831
Labor	\$214,532	\$0	\$214,532
EM&V	\$77,000	\$77,000	\$0
Memberships	\$7,788	\$0	\$7,788
Customer Outreach	\$60,993	\$0	\$60,993
Training/Travel	\$350	\$0	\$350
Regulatory	\$350	\$0	\$350
Studies and Research	\$3,500	\$0	\$3,500
Software Implementation	\$15,994	\$0	\$15,994
Conservation Potential Assessment	\$7,000	\$7,000	\$0
General Implementation	\$31,751	\$0	\$31,751
NEEA Fees	\$406,000	\$406,000	\$0
Total	\$1,129,089	\$490,000	\$639,089

VIII. STUDIES AND OTHER ITEMS

a. iEnergy DSM Enterprise Software Integration

During 2019, Avista began utilizing the iEnergy software platform for several functions. The DSM Central module will be used internally to process, and track Energy Efficiency projects. Commercial rebate submissions are the priority for inclusion to increase our access to the data elements collected. Residential project details may also begin to be migrated into the software if resources become available. In addition, the Trade Ally module will be used to improve communications with regional vendors, and installers. This program is a purpose-built, data management, analytics and customer engagement platform that assists utilities in managing their business processes. The platform includes an end-to-end management module that tracks and reports energy efficiency savings and expenses along with providing timely reporting for internal and external stakeholders.

b. Particulate Matter 2.5

Using a nationwide network of monitoring sites, EPA has developed ambient air quality trends for particle pollution, also called Particulate Matter (PM). PM^{2.5} describes fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller. Under the Clean Air Act, EPA sets and reviews national air quality standards for PM. Avista has received results from ABT Consulting for the development of PM 2.5 non-energy values for offering wood burning on a measure BTU basis. Avista discussed these results with their Advisory Group at the Fall 2018 meeting to determine an agreed upon value for non-energy benefits. Consensus was reached to use the median values and take an average of the high and the low values which results in \$0.0065 (\$ per kWh of electricity saved) by ductless heat pump replacing zonal heat and \$0.0041 (\$ per kWh of electricity saved) by replacing zonal heat with natural gas furnaces.

c. Advanced Meter Infrastructure (AMI)

Avista's movement towards Advanced Meter Infrastructure (AMI) presents multiple opportunities for both the Company and its customers. One benefit to energy conservation is that customers will be able to receive faster feedback on their energy usage and have the opportunity to adapt their energy use based on the data received. AMI is currently being implemented in Avista's Washington service territory for both electric and natural gas customers. The implementation of AMI meters involves the removal of the existing analog meter and the replacement with a digital meter that provides functionality for high resolution read rates and automated communication protocols. Avista began the installation of AMI meters in its Washington service territory in September of 2018 and as of October 2019, is approximately 39% complete.

AMI has the potential to provide multiple benefits to Avista customers. Chief among these benefits are an improved understanding of how they use energy and subsequently, how that energy use impacts their Avista bill.

In coordination with multiple departments internally, Avista was able to deliver the first customer facing functionality to leverage AMI data. Specifically, Avista delivered a new feature on its website, myavista.com on May 1st, 2019 that calculates a customers projected bill based on their average daily usage. This feature is made possible by leveraging daily AMI meter reads that we were not able to obtain prior to the implementation of the AMI project. Customers now also

have the ability to ‘drill down’ to view five minute interval data which allows them to understand their energy usage profile in more detail. Our goal is to better inform our customers of their energy usage throughout the billing period subsequently giving them an opportunity to reduce their usage to lower their monthly bill.

Additionally, Avista officially kicked off a project that will send proactive notifications to customers when their user defined budget threshold is projected to be exceeded. Customers will be able to log into myavista.com or call customer service to define a budget threshold (e.x. \$125.00) and if the ‘projected bill amount’ is predicted to exceed the that, then Avista will send an email or text alerting the customer, thus giving them an opportunity to adjust their usage to lower their monthly bill. This functionality is planned to be delivered in Q1 of 2020.

IX. CONCLUSION AND CONTACT INFORMATION

This 2020 Annual Conservation Plan represents program efforts by the Company in order to achieve its expected eligible acquisition savings for the 2020 program year. For additional supporting information please see the corresponding appendices:

Appendix A: Program Plans

Appendix B: Evaluation, Measurement and Verification Plan

Appendix C: Summarization of Cost-Effectiveness Methodology

Appendix D: Schedule 90 and 190, Washington

Appendix E: Program Summary

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Appendix C:
UES (Unit Energy Savings) Values

Fuel	Measure Description	Program	1st Year kWh Savings	1st Year Therm Savings	UOM	Source
Electric	Web Tstat Elec DIY	Residential Prescriptive	748.50	-	Unit	ResConnectedTstats_v1.3
Electric	Web Tstat Elec Cont	Residential Prescriptive	748.50	-	Unit	ResConnectedTstats_v1.3
Electric	ELEC RESISTANCE TO ASHP	Residential Prescriptive	5,865.33	-	Unit	ResSFExistingHVAC_4_2
Electric	ELEC WINDOWS --> <0.30 U	Residential Prescriptive	11.13	-	SQFT	ResSFWx_v3_7
Electric	E ESTAR HOME - MANUF, ELEC/DF	Residential Prescriptive	3,315.00	-	Unit	RTF
Electric	EIEC Storm Windows	Residential Prescriptive	12.25	-	SQFT	ResSFWx_v3_7
Electric	Ductless Heat Pump (displace zonal)	Residential Prescriptive	2,348.00	-	Unit	ResSFExistingHVAC_v4_2
Electric	Heat Pump Water Heater (Anysize Ave Tier 2/3)	Residential Prescriptive	1,166.00	-	Unit	ResHPWH_v4_2
Electric	Wall Insulation R0->=R11+	Residential Prescriptive	2.00	-	SQFT	ResSFWx_v3_7
Electric	Floor Insulation R0->=R19+	Residential Prescriptive	1.00	-	SQFT	ResSFWx_v3_7
Electric	Attic Insulation less than R11 to R49	Residential Prescriptive	1.75	-	SQFT	ResSFWx_v3_7
Electric	Front Load Washer	Residential Prescriptive	143.00	-	Unit	ResClothesWashers_v6_1_Update
Electric	Vented Energy Star Clothing Dryer	Residential Prescriptive	68.00	-	Unit	ResClothesDryers_v3.1
Electric	Web Tstat Elec DIY	Low Income	1.00	-	SQFT	Avista
Electric	Web Tstat Elec Cont	Low Income	186.86	-	Unit	Avista
Electric	ELEC RESISTANCE TO ASHP	Low Income	39.00	-	Unit	Avista
Electric	ELEC WINDOWS --> <0.30 U	Low Income	1.64	-	SQFT	Avista
Electric	E ESTAR HOME - MANUF, ELEC/DF	Low Income	2,053.50	-	Unit	Avista
Electric	EIEC Storm Windows	Low Income	0.46	-	SQFT	Avista
Electric	Ductless Heat Pump (displace zonal)	Low Income	2.61	-	SQFT	Avista
Electric	Heat Pump Water Heater (Anysize Ave Tier 2/3)	Low Income	1.23	-	SQFT	Avista
Electric	Wall Insulation R0->=R11+	Low Income	1.48	-	SQFT	Avista
Electric	Floor Insulation R0->=R19+	Low Income	689.00	-	Unit	Avista
Electric	Attic Insulation less than R11 to R49	Low Income	3,902.55	-	Unit	Avista
Electric	Front Load Washer	Low Income	2,348.00	-	Unit	Avista
Electric	Vented Energy Star Clothing Dryer	Low Income	587.33	-	Unit	Avista
Electric	E AIR INFILTRATION	Low Income	5,865.33	-	Unit	Avista
Electric	E ENERGY STAR RATED DOORS	Low Income	1.00	-	Unit	Avista
Electric	E ENERGY STAR REFRIGERATOR	Low Income	9.00	-	Unit	Avista
Electric	12-20 watt LED Fixture Retrofit	Interior Lighting	159.87	(1.98)	Unit	Avista
Electric	140 watt fixture/Lamp - Int	Interior Lighting	627.23	(7.79)	Unit	Avista
Electric	175 watt fixture/Lamp - Int	Interior Lighting	1,015.33	(12.60)	Unit	Avista
Electric	400 watt fixture/Lamp - Int	Interior Lighting	2,723.66	(33.81)	Unit	Avista
Electric	2-9 watt MR16	Interior Lighting	57.20	(0.71)	Unit	Avista
Electric	Occ Sensors	Interior Lighting	127.92	(1.59)	Unit	Avista
Electric	T5HO TLED	Interior Lighting	105.40	(1.31)	Unit	Avista
Electric	T8 TLED	Interior Lighting	48.38	(0.60)	Unit	Avista
Electric	U-Bend	Interior Lighting	52.09	(0.65)	Unit	Avista
Electric	2x2 fixtures	Interior Lighting	106.15	(1.32)	Unit	Avista
Electric	2x4 fixtures	Interior Lighting	139.83	(1.74)	Unit	Avista
Electric	8' T8 TLED	Interior Lighting	57.84	(0.72)	Unit	Avista
Electric	LLLC Fixture	Interior Lighting	187.20	(2.32)	Unit	Avista
Electric	25 watt fixture	Exterior Lighting	329.18	-	Unit	Avista
Electric	30 watt fixture	Exterior Lighting	439.27	-	Unit	Avista
Electric	50 watt fixture	Exterior Lighting	675.00	-	Unit	Avista
Electric	100 watt fixture	Exterior Lighting	681.18	-	Unit	Avista

Fuel	Measure Description	Program	1st Year kWh Savings	1st Year Therm Savings	UOM	Source
Electric	100 watt NC fixture	Exterior Lighting	737.88	-	Unit	Avista
Electric	140 watt fixture - Ext	Exterior Lighting	910.42	-	Unit	Avista
Electric	140 watt NC fixture	Exterior Lighting	817.83	-	Unit	Avista
Electric	160 watt fixture	Exterior Lighting	1,142.86	-	Unit	Avista
Electric	160 watt NC fixture	Exterior Lighting	984.07	-	Unit	Avista
Electric	175 watt fixture - Ext	Exterior Lighting	1,415.50	-	Unit	Avista
Electric	300 watt fixture - Ext	Exterior Lighting	2,468.82	-	Unit	Avista
Electric	400 watt fixture - Ext	Exterior Lighting	3,493.04	-	Unit	Avista
Electric	Sign Lighting	Exterior Lighting	107.20	-	Unit	Avista
Electric	Less than R11 attic insulation (E/E) to R30-R44 Attic Insulation	Non-Res Shell	1.02	-	SQFT	Avista
Electric	Less than R11 attic insulation (E/E) to R45+ Attic Insulation	Non-Res Shell	1.39	-	SQFT	Avista
Electric	Less than R11 roof insulation (E/E) to R30+ Roof Insulation	Non-Res Shell	1.36	-	SQFT	Avista
Electric	Less than R4 wall insulation (E/E) to R11-R18 Wall Insulation	Non-Res Shell	2.82	-	SQFT	Avista
Electric	Less than R4 wall insulation (E/E) to R19+ Wall Insulation	Non-Res Shell	4.11	-	SQFT	Avista
Electric	15 HP Industrial	GreenMotors	525.00	-	Unit	RTF
Electric	20 HP Ind	GreenMotors	703.00	-	Unit	RTF
Electric	25 HP Ind	GreenMotors	893.00	-	Unit	RTF
Electric	30 HP Ind	GreenMotors	962.00	-	Unit	RTF
Electric	40 HP Ind	GreenMotors	1,121.00	-	Unit	RTF
Electric	50 HP Ind	GreenMotors	1,206.00	-	Unit	RTF
Electric	60 HP Ind	GreenMotors	1,269.00	-	Unit	RTF
Electric	75 HP Ind	GreenMotors	1,305.00	-	Unit	RTF
Electric	100 HP Ind	GreenMotors	1,723.00	-	Unit	RTF
Electric	125 HP Ind	GreenMotors	1,990.00	-	Unit	RTF
Electric	150 HP Ind	GreenMotors	2,366.00	-	Unit	RTF
Electric	200 HP Ind	GreenMotors	3,138.00	-	Unit	RTF
Electric	250 HP Ind	GreenMotors	3,799.00	-	Unit	RTF
Electric	300 HP Ind	GreenMotors	4,535.00	-	Unit	RTF
Electric	350 HP Ind	GreenMotors	5,287.00	-	Unit	RTF
Electric	400 HP Ind	GreenMotors	5,994.00	-	Unit	RTF
Electric	450 HP Ind	GreenMotors	6,732.00	-	Unit	RTF
Electric	500 HP Ind	GreenMotors	7,491.00	-	Unit	RTF
Electric	600 HP Ind	GreenMotors	10,137.00	-	Unit	RTF
Electric	700 HP Ind	GreenMotors	11,777.00	-	Unit	RTF
Electric	800 HP Ind	GreenMotors	13,431.00	-	Unit	RTF
Electric	900 HP Ind	GreenMotors	15,077.00	-	Unit	RTF
Electric	1000 HP Ind	GreenMotors	16,682.00	-	Unit	RTF
Electric	1250 HP Ind	GreenMotors	17,812.00	-	Unit	RTF
Electric	1500 HP Ind	GreenMotors	21,329.00	-	Unit	RTF
Electric	1750 HP Ind	GreenMotors	24,779.00	-	Unit	RTF
Electric	2000 HP Ind	GreenMotors	28,201.00	-	Unit	RTF
Electric	2250 HP Ind	GreenMotors	31,527.00	-	Unit	RTF
Electric	2500 HP Ind	GreenMotors	34,957.00	-	Unit	RTF
Electric	3000 HP Ind	GreenMotors	41,686.00	-	Unit	RTF
Electric	3500 HP Ind	GreenMotors	48,532.00	-	Unit	RTF
Electric	4000 HP Ind	GreenMotors	55,466.00	-	Unit	RTF
Electric	4500 HP Ind	GreenMotors	62,269.00	-	Unit	RTF
Electric	5000 HP Ind	GreenMotors	69,044.00	-	Unit	RTF
Electric	Washington Fleet Heat	Fleet Heat	8,000.00	-	Unit	Avista
Electric	Prescriptive VFDs - HVAC Cooling Pump	NR VFD	1,091.00	-	Unit	Avista
Electric	Prescriptive VFDs - HVAC Fan	NR VFD	1,022.00	-	Unit	Avista

Fuel	Measure Description	Program	1st Year kWh Savings	1st Year Therm Savings	UOM	Source
Electric	Prescriptive VFDS - HVAC Heating Pump or combo	NR VFD	1,756.00	-	Unit	Avista
Electric	On-Demand Commercial Overwrapper	Grocer	1,588.00	-	Unit	ComOnDemandOverwrappers_v1_1
Electric	LT Case: T12 to LP LED Inside Lamp	Grocer	104.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	MT Case: T12 to LP LED Inside Lamp	Grocer	85.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	MT Case: T8 to LED Inside Lamp	Grocer	52.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	LT Case: T8 to LP LED Inside Lamp	Grocer	63.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	T12 to LP LED Outside Lamp	Grocer	73.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	T8 to LP LED Outside Lamp	Grocer	44.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	MT Case: 2 T8 to 1 High Power LED Inside Lamp	Grocer	116.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	MT Case: 2 T12 to 1 High Power LED Inside Lamp	Grocer	183.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	LT Case: 2 T8 to 1 High Power LED Inside Lamp	Grocer	142.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	LT Case: 2 T12 to 1 High Power LED Inside Lamp	Grocer	223.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	MT Case: 2 T8 to 1 High Power LED Outside Lamp	Grocer	99.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	MT Case: 2 T12 to 1 High Power LED Outside Lamp	Grocer	156.00	-	Unit	ComGroceryDisplayCaseLighting_v1_2
Electric	Anti-Sweat Heater Controls - Low Temp	Grocer	305.00	-	Unit	ComGroceryComGroceryAntySweatHeaterCo ntrols_v3.1
Electric	Anti-Sweat Heater Controls - Med Temp	Grocer	217.00	-	Unit	ComGroceryComGroceryAntySweatHeaterCo ntrols_v3.1
Electric	Gaskets for Low Temp Reach-in Glass Doors	Grocer	243.00	-	Unit	ComGroceryDoorGasketReplacement_v1_5
Electric	Gaskets for Medium Temp Reach-in Glass Doors	Grocer	248.00	-	Unit	ComGroceryDoorGasketReplacement_v1_5
Electric	Gaskets for Walk-in Freezer - Main Door	Grocer	347.00	-	Unit	ComGroceryDoorGasketReplacement_v1_5
Electric	Gaskets for Walk-in Cooler - Main	Grocer	204.00	-	Unit	ComGroceryDoorGasketReplacement_v1_5
Electric	Evap motors: shaded pole to ECM in Walk-in - Greater than 23 watts	Grocer	1,355.00	-	Unit	ComGroceryWalkinECM_v3_1
Electric	Evap motors: shaded pole to ECM in Walk-in - less than 23 watts	Grocer	583.00	-	Unit	ComGroceryWalkinECM_v3_1
Electric	Evap motors: shaded pole to ECM in Display Case	Grocer	685.00	-	Unit	ComGroceryWalkinECM_v3_1
Electric	Floating Head Pressure for Single Compressor Systems, LT Condensing Unit	Grocer	855.00	-	Unit	ComGroceryFHPSingleCompressor_v1_6
Electric	Floating Head Pressure for Single Compressor Systems, LT Remote Condenser	Grocer	685.00	-	Unit	ComGroceryFHPSingleCompressor_v1_6
Electric	Floating Head Pressure for Single Compressor Systems, MT Condensing Unit	Grocer	757.00	-	Unit	ComGroceryFHPSingleCompressor_v1_6
Electric	Floating Head Pressure for Single Compressor Systems, MT Remote Condenser	Grocer	473.00	-	Unit	ComGroceryFHPSingleCompressor_v1_6
Electric	Evaporator Fan ECM Motor Controller - Walk-In - Medium Temp - >23 Watt - 2 or more motors/controller	Grocer	318.00	-	Unit	ComGroceryWalkinEvapFanECMController_v 3_1
Electric	Evaporator Fan ECM Motor Controller - Walk-In - Low Temp - >23 Watt - 3 or more motors/controller	Grocer	253.00	-	Unit	ComGroceryWalkinEvapFanECMController_v 3_1
Electric	Evaporator Fan ECM Motor Controller - Walk-In - Low Temp - ≤ 23 Watt - 7 or more motors/controller	Grocer	119.00	-	Unit	ComGroceryWalkinEvapFanECMController_v 3_1
Electric	Strip Curtains for Convenience Store Walk-in Freezers	Grocer	31.00	-	Unit	ComGroceryStripCurtain_v1_7
Electric	Strip Curtains for Restaurant Walk-in Freezers	Grocer	129.00	-	Unit	ComGroceryStripCurtain_v1_7
Electric	Strip Curtains for Supermarket Walk-in Coolers	Grocer	123.00	-	Unit	ComGroceryStripCurtain_v1_7
Electric	Strip Curtains for Supermarket Walk-in Freezers	Grocer	535.00	-	Unit	ComGroceryStripCurtain_v1_7
Electric	Add doors to Open Medium Temp Cases	Grocer	533.00	-	Unit	Avista
Electric	Cases - Low Temp Coffin to High Efficiency Reach-in	Grocer	1,074.00	-	Unit	Avista

Fuel	Measure Description	Program	1st Year kWh Savings	1st Year Therm Savings	UOM	Source
Electric	Cases - Low Temp Open to Reach-in	Grocer	1,674.00	-	Unit	Avista
Electric	Cases - Low Temp Reach-in to High Efficiency Reach-in	Grocer	963.00	-	Unit	Avista
Electric	Cases - Medium Temp Open Case to New High Efficiency Open Case	Grocer	222.00	-	Unit	Avista
Electric	Cases - Medium Temp Open Case to New Reach In	Grocer	585.00	-	Unit	Avista
Electric	Special Doors with Low/No ASH for Low Temperature Reach-in	Grocer	1,700.00	-	Unit	Avista
Electric	Advanced Floating Controls: Floating Head and Suction Pressure with Balanced Port Valves	Grocer	238.40	-	Unit	Avista
Electric	Advanced Floating Controls: Floating Head and Suction Pressure with Electronic Expansion Valves (EEXVs)	Grocer	676.80	-	Unit	Avista
Electric	Advanced Floating Controls: Increase Suction Temperature with Electronic Expansion Valves (EEXVs)	Grocer	203.60	-	Unit	Avista
Electric	Efficient Compressors - Low Temperature	Grocer	798.00	-	Unit	ComGroceryCompressorECM_v2_3
Electric	Floating Head Pressure Control - Air Cooled	Grocer	332.00	-	Unit	Avista
Electric	Floating Head Pressure Control - Evap Cooled	Grocer	708.00	-	Unit	Avista
Electric	Floating Head Pressure Control w/ VFD- Air Cooled	Grocer	915.00	-	Unit	Avista
Electric	Multiplex - Compressors - Air-cooled Condenser	Grocer	1,968.00	-	Unit	Avista
Electric	Multiplex - Compressors - Evaporative Condenser	Grocer	1,968.00	-	Unit	Avista
Electric	Multiplex - Controls - Floating suction pressure - air cooled condenser	Grocer	227.00	-	Unit	Avista
Electric	Multiplex - Controls - Floating suction pressure - evaporative condenser	Grocer	231.00	-	Unit	Avista
Electric	Multiplex - Efficient/oversized Air-cooled Condenser for Multiplex	Grocer	2,061.00	-	Unit	Avista
Electric	Multiplex - Efficient/oversized Water-cooled Condenser for Multiplex	Grocer	1,550.00	-	Unit	Avista
Electric	VFD - Condenser Fan Motors - Air Cooled	Grocer	930.00	-	Unit	Avista
Electric	VFD - Condenser Fan Motors - Evap Cooled	Grocer	930.00	-	Unit	Avista
Electric	0.81 to 1.00 GPM electric pre-rinse sprayer	Food	570.00	-	Unit	ComCookingPreRinseSprayValve_v2_4
Electric	3 pan electric steamer	Food	9,066.00	-	Unit	ComCookingSteamer_v3_1
Electric	4 pan electric steamer	Food	12,123.00	-	Unit	ComCookingSteamer_v3_1
Electric	5 pan electric steamer	Food	15,013.00	-	Unit	ComCookingSteamer_v3_1
Electric	6 pan electric steamer	Food	17,906.00	-	Unit	ComCookingSteamer_v3_1
Electric	10 or larger pan electric steamer	Food	29,954.00	-	Unit	ComCookingSteamer_v3_1
Electric	Efficient combination oven (>= 16 pan and <= 20 pan) electric	Food	5,528.00	-	Unit	ComCookingCombinationOven_v3_1
Electric	Efficient combination oven (>= 6 pan and <= 15 pan) electric	Food	5,107.00	-	Unit	ComCookingCombinationOven_v3_1
Electric	Efficient Electric convection oven full size	Food	977.00	-	Unit	ComCookingConvectionOven_v3_1
Electric	Efficient hot food holding cabinet, 1/2 size	Food	1,607.00	-	Unit	ComCookingHotFoodCabinet_v3_1
Electric	Efficient hot food holding cabinet, full size	Food	2,860.00	-	Unit	ComCookingHotFoodCabinet_v3_1
Electric	Efficient hot food holding cabinet, Double Size	Food	5,238.00	-	Unit	ComCookingHotFoodCabinet_v3_1
Electric	Electric fryer (Large Vat Size)	Food	1,660.00	-	Unit	ComCookingFryer_v3_1
Electric	Standard Efficiency Appliance to H.E. electric griddle, 70% effic. or better	Food	1,636.00	-	Unit	Avista
Electric	High temp electric hot water dishwasher	Food	4,110.00	-	Unit	Avista
Electric	Low temp electric hot water dishwasher	Food	3,801.00	-	Unit	Avista
Electric	Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 200 to 399 lbs./day capacity	Food	592.00	-	Unit	Avista
Electric	Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 400 to 599 lbs./day capacity	Food	804.00	-	Unit	Avista

Fuel	Measure Description	Program	1st Year kWh Savings	1st Year Therm Savings	UOM	Source
Electric	Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 600 to 799 lbs./day capacity	Food	1,000.00	-	Unit	Avista
Electric	Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, 800 to 999 lbs./day capacity	Food	173.00	-	Unit	Avista
Electric	Standard Efficiency Appliance to Energy Star ice maker, air cooled, ice making head, under 200 lbs./day capacity	Food	940.00	-	Unit	Avista
Electric	Washington Air Guardian	AirGuardian	6,000.00	-	Unit	Avista
Nat Gas	G Windows Single Pane <0.30 U-value	Residential Prescriptive	-	0.52	Unit	Convert from Kwh to Therms
Nat Gas	G Windows Dual Pane <0.30 U-value	Residential Prescriptive	-	0.24	Unit	Convert from Kwh to Therms
Nat Gas	G Web Tstat Gas DIY	Residential Prescriptive	-	26.00	Unit	Impact Eval
Nat Gas	G Web Tstat Gas Cont	Residential Prescriptive	-	26.00	Unit	Impact Eval
Nat Gas	NG WALL FURNACE 90%	Residential Prescriptive	-	103.00	Unit	Avista
Nat Gas	NG FURNACE 90%	Residential Prescriptive	-	103.00	Unit	Impact Eval
Nat Gas	G TANKLESS WH (0.82+)	Residential Prescriptive	-	78.00	Unit	AEG TRM Value
Nat Gas	NG Storm Windows	Residential Prescriptive	-	0.42	Unit	Convert from Kwh to Therms
Nat Gas	E STAR HOME - GAS ONLY	Residential Prescriptive	-	133.98	Unit	AEG TRM Value
Nat Gas	G HE Water Heaters (<= 55)(.65 or greater)	Residential Prescriptive	-	21.80	Unit	AEG TRM Value
Nat Gas	G Wall Insulation	Residential Prescriptive	-	0.07	Unit	AEG TRM Value
Nat Gas	G Floor Insulation	Residential Prescriptive	-	0.06	Unit	AEG TRM Value
Nat Gas	G Attic Insulation	Residential Prescriptive	-	0.15	Unit	AEG TRM Value
Nat Gas	NG BOILER 96% AFUE	Residential Prescriptive	-	112.40	Unit	AEG TRM Value
Nat Gas	G AIR INFILTRATION	Low Income	-	12.23	SQ FT	WPL
Nat Gas	G ENERGY STAR DOORS	Low Income	-	9.66	Unit	Avista
Nat Gas	G ENERGY STAR WINDOWS	Low Income	-	0.25	SQ FT	Avista
Nat Gas	G HE FURNACE AFUE 95%	Low Income	-	62.24	Unit	Avista
Nat Gas	G HE WH < 55 Gal	Low Income	-	7.05	Unit	Avista
Nat Gas	G INS - CEIL/ATTIC	Low Income	-	0.09	SQ FT	WPL
Nat Gas	G INS - DUCT	Low Income	-	0.07	SQ FT	WPL
Nat Gas	G INS - FLOOR	Low Income	-	0.07	SQ FT	WPL
Nat Gas	G INS - WALL	Low Income	-	0.06	SQ FT	WPL
Nat Gas	G duct sealing	Low Income	-	20.17	Unit	WPL
Nat Gas	HEALTH & HUMAN SAFETY	Low Income	-	1.00	Unit	Avista
Nat Gas	Tankless Water Heater (<=55 Gal)	Low Income	-	66.50	Unit	Avista
Nat Gas	HE Boiler AFUE 96%	Low Income	-	103.84	Unit	Avista
Nat Gas	Gas Boiler <300kBtu .85-.89 AFUE	NR HVAC	-	1.77	Unit	Avista
Nat Gas	Gas Boiler <300kBtu .90+ AFUE AFUE	NR HVAC	-	2.87	Unit	Avista
Nat Gas	Multistage Furnace <225 kBtu .90-.95 AFUE	NR HVAC	-	3.67	Unit	Avista
Nat Gas	Multistage Furnace <225 kBtu .95+ AFUE	NR HVAC	-	4.22	Unit	Avista
Nat Gas	Singlstage Furnace <225 kBtu .90-.95 AFUE	NR HVAC	-	2.87	Unit	Avista
Nat Gas	Singlstage Furnace <225 kBtu .95+ AFUE	NR HVAC	-	3.67	Unit	Avista
Nat Gas	Less than R11 attic insulation (E/G) to R30-R44 Attic Insulation	NR Shell	-	0.09	SQ FT	Avista
Nat Gas	Less than R11 attic insulation (E/G) to R45+ Attic Insulation	NR Shell	-	0.13	SQ FT	Avista
Nat Gas	Less than R11 roof insulation (E/G) to R30+ Roof Insulation	NR Shell	-	0.13	SQ FT	Avista
Nat Gas	Less than R4 wall insulation (E/G) to R11-R18 Wall Insulation	NR Shell	-	0.27	SQ FT	Avista

Fuel	Measure Description	Program	1st Year kWh Savings	1st Year Therm Savings	UOM	Source
Nat Gas	Less than R4 wall insulation (E/G) to R19+ Wall Insulation	NR Shell	-	0.39	SQ FT	Avista
Nat Gas	0.81 to 1 GPM gas pre-rinse sprayer	Food	-	16.81	SQ FT	Avista
Nat Gas	3 pan gas steamer	Food	-	586.22	SQ FT	Avista
Nat Gas	4 pan gas steamer	Food	-	779.91	SQ FT	Avista
Nat Gas	5 pan gas steamer	Food	-	973.63	SQ FT	Avista
Nat Gas	6 pan gas steamer	Food	-	1,167.36	SQ FT	Avista
Nat Gas	10 or larger pan gas steamer	Food	-	3,043.24	SQ FT	Avista
Nat Gas	Efficient combination oven (>= 16 pan and <= 20 pan) gas	Food	-	500.00	SQ FT	Avista
Nat Gas	Efficient combination oven (>= 6 pan and <= 15 pan) gas	Food	-	403.00	SQ FT	Avista
Nat Gas	Efficient convection oven full size	Food	-	450.00	SQ FT	Avista
Nat Gas	H.E. gas convection oven, 40% effic. or better	Food	-	323.00	SQ FT	Avista
Nat Gas	Gas rack oven	Food	-	1,034.00	SQ FT	Avista
Nat Gas	Energy Star 50% effic.gas fryer	Food	-	505.00	SQ FT	Avista
Nat Gas	H.E. gas griddle, 40% effic. or better	Food	-	88.00	SQ FT	Avista
Nat Gas	High temp gas hot water dishwasher	Food	-	102.82	SQ FT	Avista
Nat Gas	Low temp gas hot water dishwasher	Food	-	140.10	SQ FT	Avista

Appendix D:
NEEA Memo

Memorandum



8/30/2019

TO: Dan Johnson, Director of Energy Efficiency, Avista Utilities; Ryan Finesilver, DSM Analyst/Planning and Analytics, Avista Utilities

FROM: Christina Steinhoff, Principal Planning Analyst

CC: Stephanie Rider, Senior Manager, Data Planning & Analytics; Susan Hermenet, NEEA Director of Planning Evaluation Technology, BJ Moghadam, Senior Manager, NEEA Stakeholder Relations

SUBJECT: 2020-2021 Biennium Targets Final

Avista Utilities Washington, Pacific Power Washington, and Puget Sound Energy have developed a joint approach to calculate savings from NEEA initiatives. As part of the utilities' biennial savings updates, NEEA provides a two-year electric energy savings forecast.

This memo provides a forecast of NEEA's 2020-2021 savings to support setting the next Biennial Conservation Target.

[Appendix A](#) documents NEEA's methodology. The attached Excel spreadsheet contains details about the baseline and technical assumptions by measure.

Please do not hesitate to contact Christina Steinhoff at 503.688.5427 with any questions about this report.

2020-2021 Targets

NEEA is forecasting that Avista will receive 0.76 aMW of savings from its voluntary programs, 0.84 aMW from its Codes and Standards programs and an additional 0.29 aMW from other regional measures that it is able track. To avoid double counting savings, these values net out a forecast of savings the Bonneville Power Administration, Energy Trust of Oregon and local utilities will claim through their local programs. The savings are distributed based on funder share (Appendix A).



Table 1: Savings Targets (aMW)

Category	2020	2021	Total
Program Measures	0.41	0.35	0.76
Codes & Standards Measures*	0.37	0.47	0.84
Trackable Measures	0.11	0.18	0.29

These are site-base, first year savings allocated by funding share.

**Program Measures* can result in a code or standard. As a result, some of the first-year savings from *Program Measures* are reported as *Codes & Standards Measures*.

The forecast does not include savings from programs in development such as Manufactured Homes, Windows Attachments and Extended Motors Programs. It also excludes some products in NEEA's Retail Products Portfolio where NEEA is working on energy consumption measurement.

Definitions

-Remaining Savings: Savings above the Power Plan Baseline not counted through the Bonneville Power Administration, Energy Trust of Oregon, or local utility programs. NEEA updates the baseline to the Regional Technical Forum (RTF) for measures the RTF updated after the development of the 7th Power Plan.

-Program Measures: These savings come from measures a part of a NEEA program but not a code or a standard. For example, NEEA worked on ductless heat pumps; therefore, this report counts all the savings above the Council baseline from ductless heat pumps less those claimed through local programs.

-Codes and Standards Measures: These savings come from codes or standards either a part of a NEEA program or separate work. For example, NEEA contractors develop code proposals, implement and facilitate code-development meetings, and provide testimony for the Technical Advisory Groups and the State Building code Board. After adoption, NEEA quantifies and reports the savings for the region.

-Trackable Measures: Through its work, NEEA often collects additional data. For example, NEEA worked on both the residential lighting standard and on CFLs. In doing so, NEEA collects total market data, which include other efficient measures like LEDs. This report includes Savings from those efficient measures.



Appendix A: Methodology to Estimate Savings

This report uses:

- Savings rates from the Regional Technical Forum (RTF) approved after 2015 and prior to Aug. 1, 2019.
- If RTF savings rates are not available, the report uses savings rates from the original 7th Power Plan.
- If those rates are not available, NEEA calculates savings rates using the 7th Power Plan baseline (e.g. 2015).

For comparison against the targets, NEEA will update the savings rates with the RTF. However, all other savings rates will remain the same. These savings rates will only change based on tracked units (e.g. the DHP savings rate would change based on the climate zone of the actual installs) and not based on updates to technical assumptions or baselines.

The attached spreadsheet contains sources and additional information regarding the savings rate calculations.

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 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 2 shows the funder shares.

Table 2: Funder Share for the Washington Savings Forecast

Funder Share

Avista Washington

2020-2021 (f)	3.95%
2015-2019	4.04%
2010-2014	3.59%
Previous (pre 2010 investments)	2.77%

Note: NEEA will update the 2020-2021 funding share based on the final 2020-2024 Business Plan.

Appendix E:
Statewide Advisory Group Report

**WASHINGTON STATEWIDE ADVISORY
GROUP
(SWAG)**



**Report on 2018 Washington State Investor Owned Utility
Energy Efficiency Joint Advisory Group Activities and Outcomes**

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SWAG Participants List

Riley Peck – Alliance of Western Energy Consumers
Dan Johnson – Avista Corporation
Amber Gifford – Avista Corporation
Ryan Finesilver – Avista Corporation
Amanda Sargent – Cascade Natural Gas Corporation
Monica Cowlshaw – Cascade Natural Gas Corporation
Kent Crouse – Cascade Natural Gas Corporation
Al Spector – Cascade Natural Gas Corporation
Glenn Blackmon – Department of Commerce
Tom Eckman – National Efficiency Screening Project
Amy Wheelless – NW Energy Coalition
Kerry Meade – Northwest Energy Efficiency Council
Jeff Harris – Northwest Energy Efficiency Alliance
Becky Walker – Northwest Energy Efficiency Alliance
Stephanie Rider – Northwest Energy Efficiency Alliance
Christina Steinhoff – Northwest Energy Efficiency Alliance
Rick Hodges – Northwest Natural
Charlie Grist – Northwest Power and Conservation Council
Tina Jayaweera – Northwest Power and Conservation Council
Shawn Collins – Opportunity Council
Don Jones – PacifiCorp
Eli Morris – PacifiCorp
Ajay Kumar – PacifiCorp
Ariel Son – PacifiCorp
Carla Colamonici – Public Counsel
Sarah Laycock – Public Counsel
Bob Stolarski – Puget Sound Energy
Dan Anderson – Puget Sound Energy
Bill Hopkins – Puget Sound Energy
Andy Hemstreet – Puget Sound Energy
Lance Rottger – Puget Sound Energy
Nate Hill - Puget Sound Energy
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Chuck Murray – Washington State Department of Commerce
Deborah Reynolds – Washington State Utilities and Transportation Commission
Jennifer Snyder – Washington State Utilities and Transportation Commission
Kyle Frankiewich – Washington State Utilities and Transportation Commission
David Nightingale – Washington State Utilities and Transportation Commission
Kathi Scanlan – Washington State Utilities and Transportation Commission
Andrew Rector – Washington State Utilities and Transportation Commission

SWAG Glossary of Terms

Decoupling Threshold – EIA Penalty Threshold plus 5 percent of the EIA Target.

EIA Penalty Threshold – (may be the same as “EIA Target”) as approved by the Commission, which may rely on standard practice to set IOU conservation targets.

EIA Target – All cost-effective conservation potential as required by RCW 19.285. Includes the CPA Pro-Rata Share plus other programs/measures with confident savings that were omitted from CPA.

Excess Savings – Savings beyond Decoupling Threshold not claimed for incentive which can be used to meet targets in future biennia

SWAG – State Wide Advisory Group. Washington stakeholders, assembled to discuss common electric and natural gas conservation issues and objectives.

Executive Summary

On November 1, 2017 Puget Sound Energy, Avista Corporation, and Pacific Power and Light filed their 2018-2019 Biennial Conservation Plans (BCPs) with the Washington Utilities and Transportation Commission (UTC, or Commission) for approval. Comments were subsequently filed December 1st by Commission Staff which made recommendations pertaining to all three Washington State electric investor owned utilities (IOUs). Staff recommended that three specific issues be discussed and/or resolved in a statewide stakeholder forum. Those issues are:¹

- 1) Discuss the issues pertaining to the inclusion of Northwest Energy Efficiency Alliance (NEEA) savings in the IOUs' biennial savings,
- 2) Work through the Resource Value Framework (RVF) outlined in the National Standards Practice Manual (NSPM) collaboratively with stakeholders, and
- 3) A proposed discussion halfway through the biennium to discuss a properly-designed positive incentive to encourage achievement exceeding the biennial conservation target with a joint advisory group.

On January 10, 2018, UTC Commissioners conducted an open meeting, approving the IOU BCPs. In the Order 01, Docket UE-171087 Discussion, the Commission required the IOUs to form a joint advisory group to discuss:

“([...]) whether to include the various subsets of NEEA savings, whether the EIA requires that NEEA savings be included in target calculations, ([...]) and the degree of control the Companies have over NEEA's execution of its programs.”²

Formation of the SWAG

Per the commission's requirement, a Statewide Advisory Group (SWAG) was assembled with contributing members including Washington State electric and natural gas IOUs and their respective advisory groups to discuss the Commission-ordered NEEA issue. The SWAG also discussed two other topics of interest noted in Commission Staff's December 1, 2018 memo (point 2 and 3 above) over the course of several months in 2018.

¹ Synopsized, and not directly quoted from Commission Staff's comments on 2018-2019 Biennial Conservation Plans.

² ¶ 26, page 7, “DISCUSSION”, Order 01, Docket UE-171087.

A SWAG charter was developed to focus the group's efforts on the issues identified by Staff:

1. Development of a recommendation for the treatment of NEEA savings as in or out of the Energy Independence Act (EIA) target:

“By way of guidance for the parties, those discussions should address whether to include the various subsets of NEEA savings, whether the EIA requires that NEEA savings be included in target calculations, consistency with target setting requirements for consumer-owned utilities, and the degree of control the Companies have over NEEA's execution of its programs. We expect those conversations to occur in calendar year 2018.

We reserve judgment related to the issue of whether NEEA savings should be included in conservation targets in subsequent biennia pending the joint advisory group's submission of its findings and recommendations.”

2. Discussion regarding a possible Conservation Performance Incentive Mechanism. As stated in Commission Staff's comments:

“([...]) the Company suggests conducting a workshop in a statewide collaborative setting. This may be a useful exercise and Staff proposes a joint advisory group meeting halfway through the biennium to discuss this, as well as any other common issues.”³

3. Identify areas of improvement to UTC cost-effectiveness methodology by investigating a Resource Value Framework (RVF), as stated in Staff's Comments:

“Staff strongly agrees that the NSPM should be followed in a collaborative process to identify areas of improvement to UTC cost-effectiveness methodology. Staff suggests that any such comprehensive process commence after the conclusion of the Commission's current integrated resource plan (IRP) rulemaking in Docket U-161024.”⁴

SWAG Results

SWAG Summary Statement – NEEA Savings

The treatment of NEEA savings is the only one of three discussion topics considered in the 2018-2019 BCP open meeting for which the Commission explicitly required a discussion by the SWAG, as well as a deliverable. Following several SWAG meetings discussing NEEA savings, the SWAG agreed that the EIA

³ Commission Staff Comments Regarding Electric Utility Conservation Plans; Dockets: UE-171087, UE-171091, UE-171092 [P.10]

⁴ Ibid. [P.10].

Target includes NEEA savings, but also gives the Commission discretion to determine the elements that should be included in the EIA Penalty Threshold.⁵

Further, there was general agreement that the UTC's standard practice should exclude NEEA savings from the EIA Penalty Threshold. However, UTC Staff dissented from this position.

It should be mentioned that none of the recommendations from the SWAG preclude the Commission from making any of its own decisions.

Appendices

Summaries of ancillary discussions, participant comments, meeting summaries, presentation details, and the SWAG charter are presented in this Report's Appendices.

Appendix A: Performance Incentive Framework Discussions

Following Staff's BCP Comments for the electric IOUs, the SWAG engaged in discussions regarding potential frameworks that could be used for utilities to propose an incentive in upcoming BCPs. The framework provides conditions and limitations for incentive proposals, but leaves specific incentive planning proposal decisions to the respective conservation advisory groups. Since this topic was not specifically ordered by the Commission, a summary of SWAG meeting discussions is presented in this Report as Appendix A.

Appendix B: Three Utility Performance Incentive Model Alternatives

As Extracted from the December 7, 2018 SWAG meeting, there are overviews of three incentive framework alternatives.

Appendix C: Resource Value Framework Discussions

In an effort to improve current Total Resource Cost (TRC) calculation practices, the SWAG followed several of the steps outlined in National Standard Practice Manual (NSPM) to review the RVF and Resource Value Test (RVT) to determine whether areas of improvement to the current cost effectiveness. This appendix provides a summary of those discussions.

Appendix D: Member Input

All SWAG members were provided opportunities to contribute to or make comments on this Report. Member comments are provided verbatim in this Appendix.

Appendix E: Meeting Summaries

This Appendix provides a summary of the six 2018 and one 2019 SWAG meetings.

⁵ See RCW 19.285.040(1)(f) The commission may rely on its standard practice for review and approval of investor-owned utility conservation targets.

[Appendix F: State Wide Advisory Group Charter](#)

This Appendix provides the charter to which members agreed in the formation of the SWAG.

Treatment of NEEA Savings in Future Biennial Target-Setting and Reporting

In approving the IOUs' 2018-2019 Biennial Conservation Plans, the Commission directed the IOUs to form a joint advisory group⁶ to discuss the following issues related to the treatment of NEEA savings in future biennial periods:

1. Whether to include the various subsets of NEEA savings,
2. Whether the EIA requires that NEEA savings be included in target calculations,
3. Consistency with target setting requirements for consumer-owned utilities, and
4. The degree of control the Companies have over NEEA's execution of its programs.

All of these topics were discussed at various SWAG meetings and the results of those discussions are summarized below.

1. Whether to include the various subsets of NEEA savings

At the May 18, 2018, SWAG meeting, NEEA staff presented an overview of how NEEA forecasts and reports estimated energy savings for Washington IOUs. The presentation included a summary of the three subsets of savings NEEA currently tracked:

- Program measures: Savings from measures NEEA has directly worked on through its market transformation programs
- Codes and Standards: Savings from state energy codes, and state and federal appliance standards NEEA has worked on and influenced
- Trackable measures: Savings from efficiency measures that NEEA does not include in targets or actual achieved savings values

Consistent with how the IOUs applied NEEA's savings forecast in 2018-2019 biennial target setting, the SWAG reached consensus on how the three subsets of savings should be treated in future biennia:

- Program measures should be counted, as they represent NEEA's estimate of the impact of NEEA initiatives, less the savings already counted through IOU programs.
- Codes and standards should be counted only if the code or standard was not already accounted for in a utility's Conservation Potential Assessment (CPA) baseline. Due to differences in timing of when each IOU completes its CPA, this may lead to differences in which codes and standards are included in the NEEA savings forecast used for biennial target-setting and reporting.
- Trackable measures should be excluded, as they are not directly attributable to a NEEA initiative and may not meet the quality standards of utility programs or NEEA initiatives. For example, some savings in this category have been attributed to LED light bulbs that do not meet ENERGY STAR® specifications.

⁶ Order 01, Docket UE-171087, ¶ 26, page 7.

2. Whether the EIA requires that NEEA savings be included in target calculations

For the past three biennia (2014-2015, 2016-2017, and 2018-2019), the Commission has approved adjusted targets for the IOUs that exclude forecasted NEEA savings, consistent with the joint IOU proposal filed with the Commission in October 2012.⁷ In approving 2018-2019 IOU biennial targets, the Commission directed a statewide group to discuss whether the EIA requires a change in this practice to include NEEA savings in target calculations.⁸

After review of applicable statutes and rules, the SWAG was unable to agree on whether the EIA requires NEEA savings in penalty calculations.⁹ However, the SWAG did agree that the EIA gives the Commission discretion to determine the elements that should be included in the targets subject to potential penalty.¹⁰ To address this concern, the SWAG developed two standard definitions:

- 1) EIA Target, which is set by the Commission and does include NEEA savings.
- 2) EIA Penalty Threshold, which is also set by the Commission, and may exclude NEEA savings as part of the Commission's standard practices.

3. Consistency with target setting requirements for consumer-owned utilities

At the March 30, 2018, SWAG meeting, attendees were presented with an overview of items included in targets and how savings are reported. Through that discussion, it was made clear that consumer-owned and investor-owned utilities do not currently treat NEEA savings consistently in target-setting: IOUs exclude NEEA savings from targets subject to potential penalties, whereas consumer-owned utilities include these savings. However, over the past several years, the IOUs have worked with Commission and Department of Commerce staff to ensure consistency in reporting between the consumer-owned and investor-owned utilities.

⁷ *PacifiCorp 2010-2011 Biennial Conservation Plan*, Docket UE-100170, Joint Utility Proposal (Oct. 13, 2012).

⁸ *In the Matter of Pacific Power & Light Co. Report identifying its 2018-2019 Electric Biennial Conservation Target Under RCW 19.285.040 and WAC 480-109-120*, Docket UE-171092, Order 01 at ¶25.

⁹ Commission staff was the only party dissenting.

¹⁰ See RCW 19.285.040(1)(f) The commission may rely on its standard practice for review and approval of investor-owned utility conservation targets.

4. The degree of control the Companies have over NEEA's execution of its programs.

The IOUs have limited control over NEEA's execution of programs. While the IOUs actively participate on the NEEA Board of Directors and Advisory Committees, the structure of these groups does not allow one funder, or a small group of funders, to directly dictate NEEA's actions:

- Board of Directors: Each funding utility has one seat on NEEA's Board of Directors. Washington electric IOUs collectively hold only 3 of the 20 voting Board seats.¹¹ Board approval or disapproval of NEEA actions only requires a simple majority, not unanimous consent, and therefore, the IOUs are not able to unilaterally dictate the execution of NEEA's programs.
- Regional Portfolio Advisory Committee (RPAC): The RPAC provides NEEA with broad based advice, experience and guidance on electric market transformation programs and supporting activities.¹² In general, the RPAC is a non-voting advisory group with two exceptions:
 - Full consent of RPAC voting members is required in order for a NEEA program to advance through the Initiative Start and Scale-up Approval milestones.
 - An RPAC member may call for a temporary suspension of efforts on a NEEA program if the member believes NEEA has violated the Standard Rules of Engagement or if NEEA activities go beyond the scope of effort agreed upon by the Advisory Committee.

In either of the instances above, if the issue cannot be resolved to the dissenting member's satisfaction, the ultimate decision on whether to advance the initiative or continue the suspended effort rests with NEEA's Executive Director.¹³

- Other Advisory Groups: The IOUs participate in other NEEA advisory groups that provide input to NEEA on various topics. These groups are purely advisory with no ability to vote or authority over NEEA's actions.

¹¹ Of the 20 NEEA board seats, 5 are Washington State IOUs (2 of which are natural gas utilities, and therefore, not subject to the EIA), and 5 are Washington State Public or Municipal utilities subject to the EIA.

¹² RPAC Charter: https://neea.org/img/funder-documents/RPAC_Charter_Dec2017.pdf

¹³ RPAC Charter: https://neea.org/img/funder-documents/RPAC_Charter_Dec2017.pdf "If the Advisory Committee does not reach full consent for program advancement, the advancement of the program will be delayed and NEEA's Executive Director will direct the program team to address the committee's concerns and bring a modified program proposal back to the Advisory Committee for a vote. In the rare occasions when consensus cannot be achieved through this process, the Executive Director will discuss with the Board prior to the Executive Director making the final decision on the program's advancement."

5. Conclusion

Without having reached a consensus among all members, there was a general belief that NEEA savings should remain excluded from IOUs' EIA Penalty Thresholds. Many SWAG members agreed that NEEA savings could be included in targets subject to potential penalty if the inclusion was coupled with the creation of a new incentive mechanism, which is discussed in Appendix A. However, if a utility chooses not to use an incentive mechanism, then the IOUs recommend that NEEA savings would continue to be excluded from the EIA Penalty Thresholds, consistent with the Commission's standard practice.

Appendix A

Utility Performance Incentive - SWAG Discussions

Background

Consideration of proposing an IOU utility performance incentive began with Commission Staff comments to the 2018-2019 Biennial Conservation Plans (BCPs) filed in the three IOU respective dockets. The following is a quote from PSE's BCP section, *Performance Incentive*:

“As described in WAC 480-109-100(9), a utility may propose a positive incentive to encourage achievement exceeding the biennial conservation target. Properly designed, Staff believes this type of incentive could be beneficial to both utilities and ratepayers. PSE chose not to propose an incentive in this biennium's conservation plan; however, the Company suggests conducting a workshop in a statewide collaborative setting. This may be a useful exercise and Staff proposes a joint advisory group meeting halfway through the biennium to discuss this, as well as any other common issues.”¹⁴

Utilities are permitted to seek incentives for additional conservation in the following directives:

- (1) RCW 19.285.060(4): “The commission shall determine if an investor-owned utility may recover the cost of this administrative penalty in electric rates, and may consider providing positive incentives for an investor-owned utility to exceed the targets established in RCW 19.285.040.”¹⁵
- (2) WAC 480-109-100(9): “A utility may propose to the commission positive incentives designed to stimulate the utility to exceed its biennial conservation target as identified in RCW 19.285.060(4). Any proposed utility incentive must be included in the utility's biennial conservation plan.”¹⁶
- (3) Policy guidance for developing performance incentives was established by the Commission in Docket U-100522 – *Report and Policy Statement on Regulatory Mechanisms, Including Decoupling, To Encourage Utilities to Meet or Exceed Their Conservation Targets*.¹⁷

¹⁴ Commission Staff Comments Regarding Electric Utility Conservation Plans; Dockets: UE-171087, UE-171091, UE- 171092 [P.10]

¹⁵ <https://app.leg.wa.gov/rcw/default.aspx?cite=19.285.060>

¹⁶ <https://apps.leg.wa.gov/wac/default.aspx?cite=480.109&full=true>

¹⁷ Report and Policy Statement on Regulatory Mechanisms, Including Decoupling, to Encourage Utilities to Meet or Exceed Their Conservation Targets; Docket U-100522 Policy Statement 11-4-10.

Appendices

Discussion

Consistent with the SWAG charter,¹⁸ and pertinent to the preceding discussion on the treatment of NEEA savings, the IOUs first introduced the topic of performance incentives for discussion at the May 18, 2018 SWAG meeting.

IOUs' research from the American Council for an Energy-Efficient Economy (ACEEE) was presented to demonstrate the type of incentive mechanisms offered around the nation, and SWAG members continued to discuss these options during subsequent meetings, including three performance incentive models applicable to electric and natural gas.¹⁹ The three mechanisms discussed were:²⁰

1. The 2007-2009 PSE Pilot Model: This model attempted to replicate the incentive mechanism that was run from 2007-2009 by PSE which combined a flat \$/MWh above the target and a shared savings incentive component that provided a graduated incentive percentage of the levelized net Total Resource Cost (TRC) benefits.
2. A Flat Incentive: This model provides a per-MWh or per-therm direct incentive on savings.
3. A Shared Benefits Model: This model pays a graduated (increasingly larger) percentage of the total levelized net Utility Cost (UC) benefits on savings above the minimum savings incentive threshold.

The SWAG reviewed the three models and more members of the SWAG expressed a preference for the second model due to lower barriers to calculation/implementation, lack of incentive for Non-Energy Impacts (NEIs) and greater symmetry with the EIA penalty.²¹ Some members also provided alternative, hybrid models for consideration subsequent to the December 7, 2018 SWAG meeting. However, through discussions in SWAG meetings, a tiered unit per savings model (versus a flat-rate model) was agreed upon as the most preferred model.

The SWAG also agreed that it may be appropriate for incentive mechanisms to share certain parameters, while the Advisory Groups determine the specifics of the mechanism.

¹⁸ The SWAG Charter was first distributed to SWAG members prior to the first SWAG meeting on March 30, 2018, and is included in this Report as Appendix F.

¹⁹ Public Counsel does not fully support natural gas performance incentive mechanisms [*ed.: April 9, 2019*].

²⁰ Extracts from the complete December 7, 2018 SWAG meeting presentation are presented in Appendix D.

²¹ As will be discussed in Appendix D, Public Counsel does not support a flat incentive. Conversely, another SWAG member indicated discomfort with the tiered approach. Some SWAG members indicated a preference for neither flat nor tiered structures. AWEC's concerns with incentive mechanisms are discussed in Appendix D.

Appendices

The Framework

The following guidelines were discussed with the SWAG.²² The first series of bullets for framework inclusion are from the Commission's 2010 Report.

Items Described in Docket U-100522, WUTC Report and Policy Statement on Regulatory Mechanisms

- Performance incentives can be in addition to mechanisms designed to recover lost margins – that is, decoupling.
- Conservation portfolio savings must be cost-effective, even after performance incentive payments are included.
- Utilities must identify actions that contributed to exceeding the target and show why these actions were not included.
- Utility must describe and justify any variable utility program incentive levels above the conservation target that it proposes.
- If a utility seeks a performance incentive to achieve its conservation targets early, it should describe any proposed levels of achievement.
- Electric utilities must propose any incentive mechanism in conjunction with their required EIA biennial filing. If a gas utility also provides electric service, it should propose the incentive mechanism at the time that it proposes such a mechanism for electric service. Gas-only utilities should propose such a mechanism in conjunction with a request in a general rate case.
- The Conservation mechanism should be proposed at least 120 days earlier than the EIA target filing to give parties time to evaluate the proposal.

The SWAG also discussed the following possible features to performance mechanisms, including whether:

- Verified NEEA savings should be included in the penalty threshold and incentive.
- A deadband, which includes the 5 percent decoupling savings commitment, should be achieved before a utility can be eligible for a performance incentive.
- A cap on any electric incentive should be set at 150 percent of the EIA target.
- Savings eligible for incentive should be verified by an independent third-party reviewer.
- A utility should explain its plan to exceed or accelerate savings forward in the target and explain any added budget for the additional savings. The plan for the excess or accelerated savings may or may not be separate or distinguishable from the planned savings projected for the EIA Target.
- Conservation portfolio savings should be cost-effective from both a Utility Cost Test and Total Resource Cost Test perspective, even after performance incentive payments are included.
- Penalties should be paid from shareholder dollars and incentives should be collected via the utility's existing conservation cost-recovery mechanism.

²² Not all SWAG members supported the incentive framework or all of the indicated parameters. AWEC, for instance, provided feedback—noted in Appendix A—that they are not supportive of an incentive that doesn't provide an evaluation of the customer benefit of an incentive mechanism.

Appendices

The SWAG continues to discuss the following issues:

- Timeline for collecting incentive payments.
- The amount of the deadband, which will include the decoupling commitment of 5 percent over the EIA Target. In the January 24, 2019 SWAG meeting, there was discussion on the amount of the deadband. Some member suggested 105 to 115 percent above the EIA Target, while several others suggested a 105 to 110 percent above the EIA Target would be reasonable.
- Level of incentive per-MWh or per-therm above the minimum savings incentive threshold.
- Whether a utility can request, and the Commission can approve, to retain excess savings, receive an incentive, or allocate each by bands. For example, if a utility achieved 132 percent of its EIA Target, savings achieved in the 105 to 110 percent band are always considered excess, as that is the deadband. A utility may then choose to receive an incentive on the savings in the 110 to 127 percent range, and count the savings in the 127 to 132 percent range as excess. . Interested Parties can comment on (to support or dispute) the request in a proceeding before the Commission.
- Whether a utility can propose an additional incentive for specific programs or activities.
- Whether savings above the decoupling threshold amount but below incentive eligibility are considered excess savings, and might be treated in compliance with RCW 19.285.040(c) and WAC 480-109-100(3)(c).
- Whether it is ripe for utilities to propose a natural gas conservation incentive mechanism, given recently passed legislation and the lack of Commission rules governing the administration of natural gas conservation programs.

Advisory Group Considerations

Individual utility advisory groups may consider the above parameters, and specific programs or areas of focus and conceptual design for incentive savings (consideration of specific sectors). Any parameters, as outlined above, included in a consensus emerging from this process are intended to guide advisory group discussions.

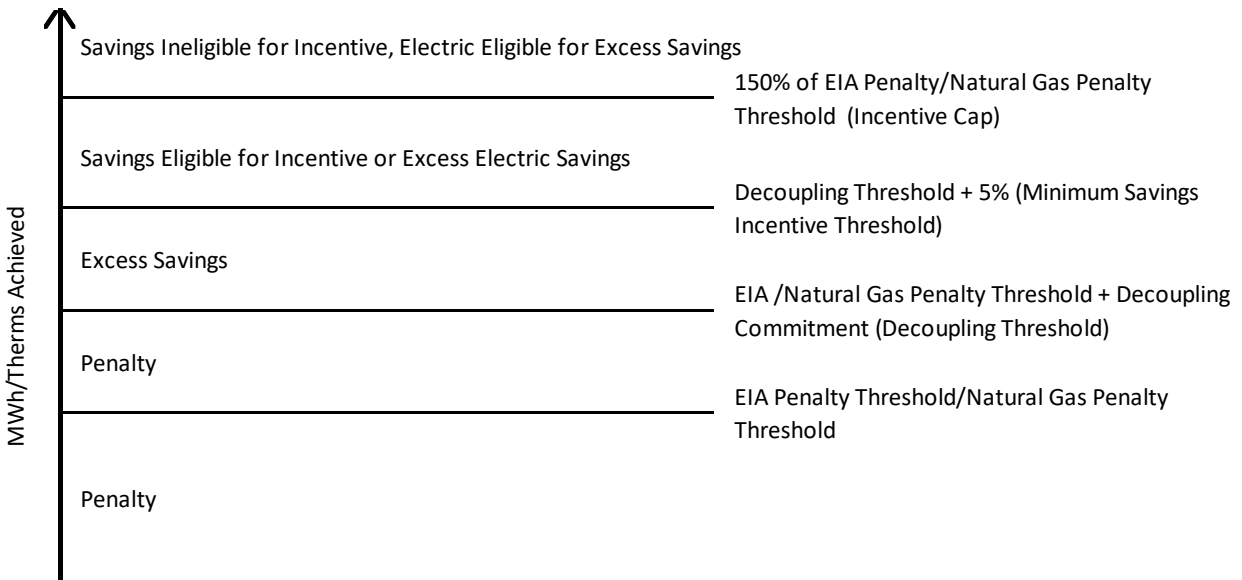
Framework Examples

Figure 3-1 provides a conceptual view of the Utility Performance Incentive model. Starting from the bottom, the EIA Electric/Natural Gas Penalty Threshold and Penalty Threshold + Decoupling Threshold are existing utility mechanisms. Similarly, treatment of any excess savings achieved beyond these two thresholds was established in 2014. The first five percent (after the additional 5 percent decoupling commitment)²³ of excess savings band has been referred to as the “deadband” in SWAG discussions.

Above this level, the utility starts collecting a per-MWh or per-therm incentive up to 150 percent of the EIA Penalty Threshold/ Natural Gas Penalty Threshold. Above 150 percent of the EIA Penalty Threshold, electric savings are only eligible for excess savings.

²³ The 5 percent above the decoupling commitment was the prominent—although not definitive—figure discussed in the SWAG.

Figure 3-1: Electric/Natural Gas Savings Targets and Incentive Eligibility



Utility Performance Incentive Next Steps

The IOUs believe that, over the course of several SWAG meetings in 2018 and 2019, significant and constructive conversations provided members with utility incentive overviews, some conditions that might be implemented for an incentive mechanism, and also raised potential issues.

For instance, the Alliance of Western Energy Consumers (AWEC) expressed a lack of support for an incentive structure that is not based on an evaluation of the incremental customer benefits, similar to the conservation incentives that the Commission approved in PSE’s 2006 rate case (Docket UE-060266). AWEC’s complete comment on the utility performance incentive is located in Appendix A.

Based on the understandings and positions expressed in the relevant SWAG meetings in 2018, the IOUs that intend to develop an incentive mechanism will work with their respective Advisory Groups to flesh out implementation details and resolve as many outstanding issues expressed by SWAG members as possible. Interested IOUs will develop petitions for incentive mechanisms and, consistent with the Commission policy statement in Docket U-100522, will file them 120 days prior to their EIA Target filing.

Appendix B

Three Utility Performance Incentive Model Alternatives

(Extracted from the December 7, 2018 SWAG meeting presentation.)

Alternative 1: 2007-09 PSE Model

- Two components to incentive
 - Flat incentive payment for each MWh above target
 - Shared savings incentive pays a graduated percentage of the levelized net TRC benefit
- Incentive is calculated separately for each tier achieved in the incentive range, then added to determine the total incentive
- Incentive payment capped at 150% of target
- Penalty for electric is same as EIA (\$50/MWh in 2010 escalated to current dollars), gas penalty adjusts EIA electric penalty using ratio of Btu/therm to Btu/MWh
- Pros
 - Multi-factor incentive rewards utility for MWh achievement plus efficient program delivery/cost-effectiveness
- Cons
 - Complex to calculate and administer
 - Using TRC net benefits means incentive is based partly on non-utility system impacts
 - Not symmetrical with penalties

Alternative 2: Flat Incentive Model

- Single flat incentive paid on all savings above target (no difference by tier) with gas incentive per unit being equivalent to electric on a Btu basis; same as penalty
- Penalty for electric is same as EIA (\$50/MWh in 2010 escalated to current dollars), gas penalty adjusts EIA electric penalty using ratio of Btu/therm to Btu/MWh
- Pros
 - Simple to calculate and administer
 - Perfect symmetry with penalty structure
 - Eliminates variability in Utility Cost and TRC net benefits due to factors other than amount of energy savings that can cause differences between utilities in the results of the other models
- Cons
 - Does not explicitly reward utility efforts to improve program delivery/cost effectiveness

Alternative 3: Shared Benefits Model

- Pays a graduated percentage of the levelized net UC benefit; modeled after Minnesota mechanism
- Incentive is applied to all savings above target at the incentive percentage of the highest tier achieved
- Penalty for electric is same as EIA (\$50/MWh in 2010 escalated to current dollars), gas penalty adjusts EIA electric penalty using ratio of Btu/therm to Btu/MWh
- Pros
 - Simple to calculate and administer
 - Incentivizes utilities to improve program delivery/cost effectiveness
 - Uses Utility Cost Test as incentive basis; so large NEIs do not drive incentive payout
- Cons
 - Using UC net benefits can result in differences in payouts to utilities due to factors other than amount of energy savings, such as incentives paid to customers
 - Not symmetrical with penalty

Appendix C

Resource Value Framework

The SWAG spent several days working through the elements of the Resource Value Framework (RVF) over the course of 2018. The National Standard Practice Manual (NSPM) was used as a guide to begin the collaborative process and walk through the RVF and corresponding Resource Value Test (RVT).

The group reviewed current TRC practices and compiled methodologies in order to outline areas of consistency. To kick-off the steps of the RVF, Commission Staff compiled a list of applicable policy goals based on their review of Washington statutes implemented by the UTC for the group's review and discussion. The group then reviewed the utility system costs and benefits at length to explore and identify all costs and benefits. Lastly, the SWAG has progressed to discussions of non-utility costs and benefits and worked collaboratively to determine which additional non-utility system costs and benefits to potentially include in the RVT.

A detailed listing of potential NEIs that could be included in a cost-effectiveness test along with the applicable policy goal linkage has been established. As the next step, Staff is planning to develop an RVT proposal and present it to the group for specific feedback, but at this time a proposal for RVT is on-hold pending the completion of the IRP Rulemaking in docket U-161024 and the outcome of the current legislative session.

Appendix D

Member Input

Section for individual SWAG members to include opinions

Commission Staff

Staff supports the conclusions and recommendations of the SWAG.

NEEA Savings

In regards to NEEA savings, if the Commission approves a conservation incentive, the SWAG is in general agreement that NEEA savings should be included in all savings calculations. If the Commission does not approve, or a utility does not propose, an incentive mechanism, the SWAG recommends removing the forecast of NEEA savings from the penalty threshold.

Staff disagrees that the risk IOUs face by including NEEA savings in the conservation target is significant enough to modify the penalty threshold of the EIA target. The ability of utilities to bank excess savings under the EIA has lowered what Staff had already judged to be a low risk. In addition, consumer-owned utilities in Washington are currently subject to penalties under the EIA if NEEA underperformance causes savings to fall beneath the target.

However, based on discussions in the SWAG, Staff will not oppose the Commission's approval of conservation targets that remove NEEA savings from the penalty threshold. The SWAG agreement that the EIA target and the penalty threshold may be different has helped assuage Staff concerns about consistent reporting to Commerce and the ability to properly count all achieved savings in a potential situation where these savings are monetized as a result of carbon regulation.

If an incentive mechanism is not approved, Staff recommends the Commission affirmatively state that it is the Commission's standard practice to remove forecasted savings from previously undertaken market transformation activities when calculating the penalty threshold. Staff further recommends that the Commission recognize language agreed upon with the SWAG recognizing that the EIA Penalty Threshold may diverge from the EIA Target. The EIA Target will be calculated in accordance with RCW 19.285.040 (1)(a) and (b) and be used when reporting to Commerce and when calculating decoupling commitments.

Appendices

Public Counsel Unit

NEEA Savings

Public Counsel has firmly held the position that NEEA saving should be outside of an IOUs penalizable EIA target. Through the discussions and presentations presented at the SWAG, our position has not changed. In fact, our position was reinforced by the complexity of attributing NEEA savings to specific IOUs and regions, as well as the lack of control Washington IOUs have over the planning processes of NEEA. However, for the purposes of reaching a compromise, Public Counsel agreed that if a performance incentive mechanism was proposed by an IOU and approved by the Commission, Public Counsel would support NEEA's inclusion in the penalizable target.

Performance Incentive Mechanism

Public Counsel appreciated the discussions and debates around the performance incentive mechanism. At this time, Public Counsel supports an incentive mechanism for electric IOUs. However, we do not fully support an incentive for natural gas service. Our primary concerns with a gas mechanism, is lack of (at the time of drafting May 3, 2019) statute or rules requiring verified savings, penalties (except for PSE²⁴), or target setting. However, Public Counsel is open to discussing and supporting an incentive mechanism for the gas IOUs once these rules are in place.

Public Counsel proposed a hybrid tiered model (for electric IOUs) to the SWAG for consideration. While many stakeholders supported the flat-rate tier, Public Counsel believes that the hybrid approach provides a more reasonable incentive calculation to meet the needs of ratepayers and utilities, for the following reasons. The incentive calculation is simplistic with three tiers of savings that escalate as the utilities achieve more savings. Under this design, tiers with increasing per MWh payments further incentivize the utility to achieve more conservation

Below is a list of items Public Counsel originally proposed for an electric incentive mechanism:

- Only verified NEEA savings are included in the penalty threshold and incentive.
- A deadband of 10 percent, not including the five percent decoupling savings commitment, must be achieved before a utility can be eligible for a performance incentive.
- A cap on any electric incentive is set at 150 percent of the EIA target.
- Savings eligible for incentive should be verified by an independent third-party reviewer.
- A utility should explain its plan to exceed the EIA target and explain any added budget for the additional savings, in a manner distinguishable from the savings and budget for the EIA penalizable target and budget.

²⁴ Public Counsel is still considering whether a gas incentive mechanism is appropriate for PSE considering that it currently has penalties for not meeting its gas conservation targets.

Appendices

- Conservation portfolio savings must be cost-effective from both a Utility Cost Test and Total Resource Cost Test perspective, even after performance incentive payments are included.
- Penalties will be paid from shareholder dollars and incentives will be collected via the utility's existing conservation cost-recovery mechanism.
- 50/50 timeline for cost recovery after savings have been verified.
- Excess or accelerated savings (i.e. those eligible for incentive payments) should not be attained from conservation measures that are considered "low-hanging fruit". We prefer savings from a variety of sectors, such as hard-to-reach sectors, deep retrofits, and other measures/programs that are considered 'riskier' investments.

We look forward to continuing these discussions with the SWAG and within the individual Advisory Groups.

Alliance of Western Energy Consumers (AWEC)

AWEC opposes the IOUs' recommendation "that the Commission acknowledge the SWAG consensus view on the utility performance incentive" While AWEC does not necessarily oppose the creation of a performance incentive mechanism for conservation, this issue was outside of the scope of issues for which the Commission formed the SWAG, which was limited to the reporting and tracking of NEEA savings. The SWAG is, of course, free to discuss any issues it likes, just as any stakeholder to that group is free to take any position on conservation incentive mechanisms it feels is appropriate. AWEC participated in the SWAG, but was unaware that this group was going to provide recommendations to the Commission outside of the issues the Commission specifically requested be investigated. Accordingly, AWEC recommends that positions on utility performance incentives be evaluated *de novo* in a docket in which such a performance incentive is at issue, without giving any weight to what the IOUs mischaracterize as the "SWAG consensus view." AWEC, in fact, is not part of this "consensus" because it does not take any position on conservation performance incentives at this time, when no specific incentive mechanism is under evaluation and the Commission did not request recommendations on this issue. What AWEC can say is that, to the extent a conservation performance mechanism should be approved, its provision and amount should be based on an evaluation of the incremental benefits customers receive from the acquisition of incentivized conservation, similar to conservation incentives the Commission has approved in the past, such as the one approved for PSE in its 2006 rate case. Docket UE-060266, Order 08, ¶¶ 145-58 (Jan 5, 2007). It is not clear that the framework included in the report recommends that type of incentive and, to the extent it does not, AWEC opposes it.

Appendix E

Meeting Summaries

- Meeting 1 – March 30, 2018; NEEA in/out of EIA target, Intro to RVF, Commerce Reporting
- Meeting 2 – May 18, 2018; NEEA presents NEEA savings calculations, Performance Incentives in the U.S., RVF Step 1 Identify Policy Goals
- Meeting 3 – June 29, 2018; RVF Step 1 cont., WA Statute Review, NEEA Savings Reporting
- Meeting 4 – August 3, 2018; RVF Step 2 Identify Costs and Benefits
- Meeting 5 – September 7, 2018; RVF Step 3 Introduction
- Webinar – November 9, 2018; RVF Step 3 Identify Applicable Non Energy Impacts
- Meeting 6 – December 7, 2018; Performance Incentive Model Alternatives
- Meeting 7 – January 24, 2019; Performance Incentive Framework Finalized

Appendix F – State Wide Advisory Group Charter

What: IOU's to partner with UTC staff and lead a process to try and achieve consensus on three key issues with advisory groups participation.

Issues: Three key issues were identified out of the 2018-2019 BCP process with common interest to WA IOU's:

1. NEEA in/out of the penalty target,
2. Areas of CE improvement (Consistent TRC/ Investigate RVT),
3. Utility performance incentive.

How: Convene and facilitate a monthly (TBD) statewide working group at the Smart Buildings Center (Pacific Tower, 1200 12th Ave S Suite 110, Seattle, WA 98144). Kickoff meeting by the end of March.

Result: Utilities to prepare a report on consensus status and/or next steps by December 1st, 2018 to the Commission and implement as needed in the 2020-2021 Biennium.

