Energy Efficiency

AVISTA

2020-2021 Biennial Conservation Plan

Table of Contents

I. EXECUTIVE SUMMARY 2
II. BACKGROUND 4
III. THE END-USE EFFICIENCY PLAN 4
IV. UTILITY EVALUATION, MEASUREMENT AND VERFICATION 17
V. COMPLIANCE AND OTHER KEY ISSUES 19
VI. DISTRIBUTION EFFICIENCY 21
VII. GENERATION EFFICIENCIES 23
VIII. CONCLUSION 24

Appendix A: Washington Two-Year Planning Summary
Appendix B: 2020 Energy Efficiency ACP, including the 2018 EM&V Plan
Appendix C: UES (Unit Energy Savings) Values
Appendix D: NEEA Memo
Appendix E: Statewide Advisory Group (SWAG) Report

Key Supporting Documents by Reference:
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 target[2] 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 2019[3]. 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 target[4]. 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 date[5]. Avista intends to remain flexible throughout and 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 savings[6].

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 NEEA[7] 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 purposes[10]. 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 2020-22021 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 identity 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 VERFICATION

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 prudency 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 prudency 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 Plan[12] 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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