

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**In the Matter of Avista Corporation d/b/a
Avista Utilities' 2023 Electric Integrated
Resource Plan Progress Report**

DOCKET UE-200301

**COMMISSION STAFF COMMENTS REGARDING
AVISTA CORPORATION d/b/a AVISTA UTILITIES' INTEGRATED RESOURCE
PLAN PROGRESS REPORT SUBMITTED IN COMPLIANCE WITH
RCWs 19.405, 19.280 and WACs 480-100-600 through -630
AND DOCKET UE-191023, Order R-601**

August 1, 2023

Table of Contents

Executive Summary 1
 Summary of the Progress Report 1
 Summary of Recommendations 3
Compliance with Commission Rules and Orders 4
Changing Regulatory and Incentive Landscape..... 5
Public Participation..... 6
Maximizing Customer Benefit..... 6
Climate Change Impacts 7
Distributed Energy Resources..... 7
 Named Community Investment Fund 8
 Energy Efficiency 8
 Demand Response..... 9
Decarbonization and Electrification..... 11
Summary of Public Comments 12

Executive Summary

These comments from Utilities and Transportation Commission (Commission) staff (Staff) highlight the most important issues identified in our review of Avista Corporation d/b/a Avista Utilities' (Avista or Company) first 2023 Electric Integrated Resource Plan (IRP) Two-year Progress Report (Progress Report). In December 2020, the Commission promulgated new rules related to long-range resource planning and required a full IRP every four-years with a Progress Report with less stringent requirements every two years. Avista filed its Progress Report January 3, 2023, in accordance with Commission rule, and a full IRP June 1, 2023, as a result of regulatory requirements in Idaho. As compared to a full IRP, an IRP Progress Report must adhere to a subset of requirements and reflect changing conditions.¹ Staff has reviewed Avista's full 2023 IRP for compliance with Commission rules for a Progress Report.

This document does not represent an exhaustive summary of Staff's analysis, but instead focuses on particularly salient topics and themes. Staff stresses that any planning document represents a snapshot in time. This IRP was developed over a period during which new policies were at various stages of implementation or passage. With this in mind, Staff's recommendations in this document focus on improvements that Staff believes Avista should make in its next IRP filing in 2025.

Summary of the Progress Report

The most notable difference between Avista's 2021 and 2023 electric IRPs is the lack of additional *resource need*.² Significant recent acquisitions have pushed out *resource need* until 2030, while the previous IRP preferred resource strategy called for 518 MW of near-term new resources, primarily wind for Washington and gas peakers for Idaho.³ As illustrated in Table 1, after 2030, the Company's IRP calls for Washington investment in wind resources, renewable fueled combustion turbines (CT), and long duration storage. To serve Idaho customers, Avista plans to invest in natural gas combustion turbines, natural gas reciprocating engines (ICE), wind, and short duration storage.

The preferred resource strategy calls for less energy efficiency (EE) than in the past, enough to meet 27 percent of future load growth as compared to prior IRPs where EE met nearly 70 percent.⁴ Avista found nearly 7 MW of opt-in time of use rates as the only cost-effective demand

¹ WAC 480-100-625(4) and RCW 19.280.030.

² WAC 480-100-605 "*Resource need*" means any current or projected deficit to reliably meet electricity demands created by changes in demand, changes to system resources, or their operation to comply with state or federal requirements. Such demands or requirements may include, but are not limited to, capacity and associated energy, capacity needed to meet peak demand in any season, fossil-fuel generation retirements, equitable distribution of benefits or reduction of burdens, cost-effective conservation and efficiency resources, demand response, and renewable and nonemitting resources.

³ UE-200301 2021 Electric IRP Update Table 2 2021 Preferred Resource Strategy Update (2022-2031), page 4, April 30, 2021.

⁴ Docket UE-200301, "2023 Electric Integrated Resource Plan" (Avista 2023 IRP), pg. 9-7.

response but is piloting to see if the expected benefits materialize prior to committing to a full program.⁵

Table 1: Avista 2023 Preferred Resource Strategy⁶

Resource	Time Period	Jurisdiction	Capacity (MW)	Energy Capability (aMW)
NW Wind	2030	WA	200	63
Montana Wind	2032	WA	200	97
Natural Gas CT	2034	ID	90	86
Renewable Fueled CT	2036	WA	88	31
Long Duration Storage (>24 hr)	2039	WA	52	-1
PPA Wind Renewal	2041	WA	140	53
Renewable Fueled CT	2041	WA	74	26
Natural Gas (ICE)	2041	ID	46	46
PPA Wind Renewal	2042	WA	105	36
Renewable Fueled CT	2042	WA	186	65
Natural Gas CT	2042	ID	102	97
Long Duration Storage (>24 hr)	2043	WA/ID	68	-1
NW Wind	2044	WA	100	31
Long Duration Storage (>24 hr)	2044	WA/ID	50	-1
NW Wind	2045	WA	200	63
Renewable Fueled CT	2045	WA	348	122
Natural Gas (ICE)	2045	ID	65	65
Short Duration Storage (<8 hr)	2045	ID	25	0
Total New Resources			2,139	878

The Progress Report describes a future with a higher electric load forecast than that of Avista's 2021 IRP, in part due to Avista's forecast of residential and commercial electric vehicle (EV) assessment and forecast of adoption rates and building electrification. This resource strategy would allow Avista to meet 92 percent of system load with clean and renewable resources and meet 100 percent of Washington load with clean resources on average each month by 2045.⁷

⁵ Avista 2023 IRP pg. 9-7.

⁶ Avista 2023 IRP, pg. iii.

⁷ Avista 2023 IRP, pg. ii.

Summary of Recommendations

Staff identified the most important issues from our review and categorized our comments into the following topics: changing regulatory landscape, maximizing customer benefit, climate change, distributed energy resources, and decarbonization, electrification, and electric vehicle assumptions. Staff recommends the following changes to Avista for its 2025 IRP (unless a different timeline is stated explicitly).

Topic	No.	Recommendations
Changing Regulatory and Incentive Landscape	1	Account for the impacts of the Inflation Reduction Act and Infrastructure Investment and Jobs Act in Avista's 2025 IRP.
	2	Collaborate with the Energy Efficiency Advisory Group to determine appropriate treatment of federal dollars in the cost-benefit analysis of distributed energy resources for the 2025 IRP.
	3	For the upcoming CEIP Update, include impacts of IRA provisions for which there is available information even if it was not available in time for the Progress Report, particularly around electrification and demand-side resources.
Maximizing Customer Benefit	4	Staff expects Avista's methods of accounting for customer benefit will continue to be refined, along with additional values for appropriate NEIs. Since much of this work will be similar among Washington investor-owned utilities, Staff encourages all utilities to collaborate on valuation studies to ensure efficient use of ratepayer dollars.
Climate Change Impacts	5	Adopt Representative Concentration Pathway 8.5 as it is relied upon by the Northwest Power and Conservation Council.
Distributed Energy Resources	6	Clearly incorporate the findings and input from the distribution planning process and the Distribution Planning Advisory Group (DPAG).
	7	Account for the interactive effects of energy efficiency and DR in the potential assessments for the 2025 IRP.
	8	Model opt-out demand response programs in the IRP, and strongly consider piloting opt-out demand response programs with appropriate customer protections.
	9	For the 2025 IRP, Staff expects a robust discussion and analysis of DR, with the capacity contribution from DR to be tailored according to program type, the number of events, and their duration.
Decarbonization and Electrification	10	Staff recommends that Avista update its assumptions around electric vehicle adoption in its 2025 IRP to reflect recent trends, policies, and incentives that have emerged since the Company produced its EV forecast used in this filing. These updates should also include learnings from Avista's implementation of its transportation electrification programs and related demand response programs.

Compliance with Commission Rules and Orders

Per WAC 480-100-625, electric investor-owned utilities (IOUs) regulated by the Commission are required to file a full electric integrated resource plan (IRP) every four years on January 1, and an IRP progress report two years later.

A Progress Report is required to update several elements of the most recent full electric IRP, including:

- The load forecast;
- The demand-side resource assessment, including a new conservation potential assessment;
- The resource costs;
- The portfolio analysis and preferred portfolio;
- Any other updates necessary due to changing state or federal requirements, or significant changes to economic market forces;
- Any updates for elements found in the utility's current clean energy implementation plan (CEIP).

Staff has reviewed Avista's 2023 Electric IRP and found that it includes the above updates required by Commission rule.

Avista's approved CEIP contained six conditions (2, 8, 14, 34, 35, and 36) pertaining to the 2023 IRP Two-year Progress Report.⁸ Staff has not identified any issues with Avista's compliance

⁸ UE-210628 Order 01 Appendix A, June 23, 2022.

Condition 2. Avista will apply Non-Energy Impacts (NEIs) and Customer Benefit Indicators (CBIs) to all resource and program selections in determining its Washington resource strategy, in its 2023 Integrated Resource Plan (IRP) Progress Report and will incorporate any guidance given by the Commission on how to best utilize CBIs in CEIP planning and evaluation. Avista agrees to engage and consult with its applicable advisory groups (IRP Technical Advisory Committee (TAC) and Energy Efficiency Advisory Group (EEAG)) regarding an appropriate methodology for including NEIs and CBIs in its resource selection.

Condition 8. Avista in its IRP resource selection model for the 2023 IRP Progress Report will give the model the option to meet CETA goals with a choice between an Idaho allocated existing renewable resource at market price (limited to Kettle Falls, Palouse Wind, Rattle Snake Flats Chelan PUD purchase contracts 2 & 3) or acquiring a new 100 percent allocated Washington renewable resource for primary compliance. Further, the model will have the option to acquire new 100 percent allocated resource, market REC, or Idaho allocated REC (at market prices) to meet alternative compliance.

Condition 14. Avista will include a Distributed Energy Resources (DERs) potential assessment for each distribution feeder no later than its 2025 electric IRP. Avista will develop a scope of work for this project no later than the end of 2022, including input from the IRP TAC, EEAG, and DPAG. The assessment will include a low-income DER potential assessment. Avista will document its DER potential assessment work in the Company's 2023 IRP Progress Report in the form of a project plan, including project schedule, interim milestones, and explanations of how these efforts address WAC 480-100-620(3)(b)(iii) and (iv).

with these conditions in the 2023 Progress Report but notes that many of these conditions will continue to be relevant in future planning cycles. As circumstances change and new information comes to light, Staff expects Avista to make continued iterative improvements.

Changing Regulatory and Incentive Landscape

The impacts of changing laws and policies, as well as economic or market force dynamics, are integral to an electric IOU's Progress Report.⁹ Recently, Staff observes that changes to the energy regulatory environment have been coming fast and furious, both at the state and federal level.

At the state level, Commission IRP rules implementing CETA were adopted mere days before IOUs were required to file a draft of the 2021 IRP, which the Progress Report is based on. The 2025 IRP will be the first full IRP process to fully incorporate all of the new Washington rules. In addition, state building codes continue to embed efficiency into new construction, impacting the load forecast while limiting traditional utility energy efficiency program savings potential.

As described in more detail in Staff's comments on Avista's Gas IRP, the Climate Commitment Act (CCA) made major changes to the way carbon emissions are treated in Washington. Electric utilities are allocated no-cost allowances that companies may use for compliance or sell for the benefits of ratepayers. As Avista and others continue to explore the nuances of this law, Staff expects Avista to refine its modeling of the CCA in the 2025 IRP.

The Infrastructure Investment and Jobs Act (IIJA), also referred to as the Bipartisan Infrastructure Law, was signed in November of 2021. Avista does not directly describe opportunities made available by the IIJA within the IRP.

Another important legislative change was the passage of the Inflation Reduction Act (IRA). The IRA was signed into law several months into Avista's Progress Report development process. This law is poised to have wide-ranging impacts on the energy system including on the demand and supply side of the equation, though many of the implementation details needed to fully understand and plan for the IRA are still under development at both the federal and state level.

Condition 34. For its 2023 IRP Progress Report, Avista commits to reevaluate its resource need given acquisitions the Company has made since its 2021 IRP (e.g., Chelan PUD hydro slice contracts) and include those proposed changes in its 2023 Biennial CEIP Update.

Condition 35. Avista recognizes that not all CBIs will be relevant to resource selection (for example, some CBIs pertain to program implementation). For its 2023 IRP Progress Report, and future IRPs and progress reports, Avista should discuss each CBI and where the CBI is not relevant to resource selection, explain why.

Condition 36. For its 2023 IRP Progress Report, Avista will: . . . b. Use the Qualifying Capacity Credit (QCC) for renewable and storage resources from the Western Power Pool's Western Regional Adequacy Program (WRAP), if available, or explain why the WRAP's QCCs are inappropriate for use.

c. Update its load forecast to include the baseline zero emission vehicle (ZEV) scenario from its Transportation Electrification Plan.

⁹ Per [WAC 480-100-625\(4\)\(b\)](#).

While the details of many of the IRA's demand-side programs are still being developed, significant incentives for increased electric vehicle adoption, building electrification, rooftop solar, distributed storage, and energy efficiency are all part of the law. Avista incorporated much of what was known about IRA impacts at the time. **Staff expects to see full accounting for the impacts of the IRA and IIJA in Avista's 2025 IRP.**

One complicating question is how to include IRA funds within the current modified total resource cost (TRC) test. The TRC is "designed to capture all of a conservation program's benefits and costs, regardless of who pays for them."¹⁰ If incentives from the federal government are treated as both a cost and a benefit, it becomes a transfer payment with no effect on the cost-effectiveness of the utility programs. However, it may be more appropriate to treat this federal investment solely as a benefit intended to increase uptake of these measures. **Staff recommends Avista collaborate with the Energy Efficiency Advisory Group (EEAG) to determine appropriate treatment of particular federal dollars in the cost-benefit analysis of distributed energy resources for the 2025 IRP.**

For the upcoming CEIP Update, Staff expects Avista to include impacts of IRA provisions for which there is available information even if it was not available in time for the Progress Report, particularly around electrification and demand-side resources. The Company should continue to adaptively manage its portfolio of DERs, ensure customer awareness of beneficial federal programs, and actively facilitate customers stacking utility, state, and federal programs.

Public Participation

Avista continues to improve on public participation opportunities in planning processes. For this Progress Report and IRP, the Company held nine meetings of the Technical Advisory Committee (TAC) that were open to the public, a technical modeling workshop, and a public meeting that included a recorded presentation with both daytime and evening opportunities for questions and comments. Outside of TAC meetings, Avista's IRP team continues to consult with the Energy Efficiency Advisory Group (EEAG) and Equity Advisory Group (EAG) on specific applicable topics.

Maximizing Customer Benefit

Avista's Portfolio #17: Washington Maximum Customer Benefits scenario analyzed a set of assumptions to see how they would improve customer benefit indicators (CBIs). In this scenario the Company constrained the model so that it would not choose resources with NOx emissions, nuclear energy, or out of state renewable resources.¹¹ The results of this portfolio show a rate increase of 29 percent by 2045, less emissions, and a drop in average excess energy burden for low-income customers from \$2,035 per year to \$632 per year.¹²

¹⁰ UG-121207 Commission Policy Statement on Cost-Effectiveness, page 5 paragraph 9.

¹¹ Avista 2023 IRP pg. 10-12.

¹² Avista 2023 IRP pg. 10-12.

To better model how different portfolios effect customers Avista engaged a consultant, DNV, to expand the identification and quantification of non-energy impacts (NEIs) for resources beyond energy efficiency. By incorporating NEI values into the PRISM model, Avista is able to better ensure that customers are benefiting from the resource selection.

Avista's work on identifying customer benefits in this IRP Progress Report puts it on the path towards compliance with the requirement of a maximum customer benefit scenario in the 2025 IRP.¹³ Avista included CBI metrics related to resource planning by including NEIs where there is a direct correlation. The IRP includes a chapter that discusses each CBI established with the approval of the Clean Energy Implementation Plan (CEIP)¹⁴ and the metrics relevant to resource selection.¹⁵ **Staff expects Avista's methods of accounting for customer benefit will continue to be refined, along with additional values for appropriate NEIs. Since much of this work will be similar among WA IOUs, Staff encourages all utilities to collaborate on additional valuation studies to ensure efficient use of ratepayer dollars.**

Climate Change Impacts

Staff discusses the impacts of incorporating climate change models into Avista's planning process in our comments on Avista's 2023 Gas IRP. The comments and recommendation concerning climate change impacts in that document also apply to the electric side of Avista's planning.¹⁶ **Staff recommends that Avista adopt Representative Concentration Pathway 8.5 as it is relied upon by the Northwest Power and Conservation Council.**¹⁷

Distributed Energy Resources

An electric IRP must evaluate a variety of distributed energy resources (DERs).¹⁸ Avista's 2023 IRP includes potential assessments of energy efficiency (EE) and demand response (DR). Distributed solar and storage were included as resource options not analyzed in potential assessments, primarily for the named community investment fund, but could be selected for the overall portfolio as well.

¹³ WAC 480-100-620(10)(c) At least one sensitivity must be a maximum customer benefit scenario. This sensitivity should model the maximum amount of customer benefits described in RCW 19.405.040(8) prior to balancing against other goals.

¹⁴ UE-210628 Order 01, June 23, 2022.

¹⁵ Avista 2023 IRP Ch. 11 pgs. 11.9 thru 11.27.

¹⁶ See Commission Staff Comments on Avista's 2023 Gas IRP, Docket UG-220244.

¹⁷ "Specifically, the Council uses the Representative Concentration Pathway (RCP) 8.5 which reflects an end-of century radiative forcing of 8.5 watts per square meter." 2021 Power Plan, Page 54, Footnote 47, [The 2021 Northwest Power Plan \(nwcouncil.org\)](https://www.nwcouncil.org).

¹⁸ RCW 19.405.020(13) "Distributed energy resource" means a nonemitting electric generation or renewable resource or program that reduces electric demand, manages the level or timing of electricity consumption, or provides storage, electric energy, capacity, or ancillary services to an electric utility and that is located on the distribution system, any subsystem of the distribution system, or behind the customer meter, including conservation and energy efficiency.

For the 2025 IRP, Avista will include a DER potential assessment for each distribution feeder, including a low-income DER potential assessment. This requirement is a condition¹⁹ of the approved CEIP and will also help Avista come into compliance with new IRP rules.²⁰ **In addition to the DER potential assessment, Staff expects the 2025 IRP to clearly incorporate the findings and input from the distribution planning process and the Distribution Planning Advisory Group (DPAG).**

Named Community Investment Fund

Avista's named community investment fund (NCIF) targets benefits to named communities by providing a minimum spending threshold for certain types of projects. While the IRP deals with generic resources and does not determine projects for the NCIF, Avista estimates possible projects in the IRP preferred portfolio by requiring the model to select an additional \$2 million of low-income energy efficiency and \$0.4 million of incremental supply-side DER each year.²¹

Energy Efficiency

Staff discusses Avista's approach to its 2023 Conservation Potential Assessment (CPA) at greater length in our comments on Avista's 2023 Gas IRP. Most of the comments and recommendations in that document also apply to the electric side of Avista's planning.

While economically achievable potential is declining due to strong codes and standards and lower avoided costs, Staff is generally satisfied with Avista's approach of modeling energy efficiency.

¹⁹ UE-210628 Order 01 June23, 2022 Condition 14: Avista will include a Distributed Energy Resources (DERs) potential assessment for each distribution feeder no later than its 2025 electric IRP. Avista will develop a scope of work for this project no later than the end of 2022, including input from the IRP TAC, EEAG, and DPAG. The assessment will include a low-income DER potential assessment. Avista will document its DER potential assessment work in the Company's 2023 IRP Progress Report in the form of a project plan, including project schedule, interim milestones, and explanations of how these efforts address WAC 480-100-620(3)(b)(iii) and (iv).

²⁰ WAC 480-100-620(3)(b)(iii) Energy assistance potential assessment – The IRP must include distributed energy programs and mechanisms identified pursuant to RCW 19.405.120, which pertains to energy assistance and progress toward meeting energy assistance need; and (iv) Other distributed energy resource potential assessments – The IRP must assess other distributed energy resources that may be installed by the utility or the utility's customers including, but not limited to, energy storage, electric vehicles, and photovoltaics. Any such assessment must include the effect of distributed energy resources on the utility's load and operations.

²¹ Avista 2023 IRP 9-6. NCIF funding targets:

40% or up to \$2 million dedicated for targeted energy efficiency efforts.

20% or up to \$1 million dedicated to distribution resilience efforts.

20% or up to \$1 million dedicated to incentives or grants to develop projects led by local customers or third parties.

10% or up to \$500,000 for new targeted outreach and engagement efforts intended to reduce barriers to participation for Named Communities' access to clean energy.

10% or up to \$500,000 for all other projects, programs, or initiatives

Demand Response

To identify all cost-effective DR required by CETA, Avista hired Applied Energy Group (AEG) to conduct a demand response potential assessment (DRPA), in addition to the CPA. The assessment includes 16 programs for both winter and summer peaks, encompassing controllable DR and rate design programs.

While AEG performed both the CPA and the DRPA, the assessments did not account for the significant interactive effects of these technologies. For example, an electric resistance water heater has the capability to shift comparably large amounts of energy use compared to a heat-pump water heater. Making the efficient choice saves energy but decreases the potential for a dispatchable resource. **Staff recommends Avista account for the interactive effects of energy efficiency and DR in the potential assessments for the 2025 IRP.**

In its Washington service territory, Avista has successfully completed the implementation of an advanced metering infrastructure (AMI).²² Staff recognizes this achievement as an asset for comprehensive analysis. Moreover, with this investment of empowering technology, Staff holds high expectations for significant benefits to be derived from DR programs, directly linked to the investments made. Current DR programs Avista offers include commercial electric vehicle time-of-use rates (TOU) and an agreement for 30 MW of DR with one industrial customer. Beginning in 2024, Avista plans to implement three DR pilot programs. These include a TOU opt-in rate option, a peak-time rebate, and direct load control (DLC) of grid-enabled water heaters.²³ Staff eagerly await the outcomes and will diligently monitor their programs progress.

Avista describes the Company's long history exploring DR pilots.²⁴ The experiences showed high participant engagement but difficulty recruiting customers. **In order to acquire all cost-effective DR, as required by RCW 19.405.050(3), Staff suggests Avista model opt-out demand response in the IRP, and strongly consider piloting, opt-out demand response programs with appropriate customer protections.**

The reliability capacity contribution from DR should be tailored according to program type, the number of events, and their duration. Historically, DR programs have effectively provided capacity during periods of unusually high wholesale prices. Avista reports successful realization of reliable ancillary services in wholesale markets through demand response.²⁵

Table 2 shows Avista's evaluated DR services. Avista evaluated various control and pricing options. However, Avista did not consider variations and assumptions regarding the number and duration of events which may have underestimated the potential for a more fitting program designed with utility systems.

²² Avista 2023 IRP pg. 5-10.

²³ Avista 2023 IRP pg. 5-13.

²⁴ Avista 2023 IRP pg. 5-8.

²⁵ Avista 2023 IRP pg. 5-8.

Table 2: Demand Response Program Options by Market Segment²⁶

DR Program		Participating Market Segment				Season Impacted	
Program Type	Program Option	Res.	Sm. Com.	Large. Com./ Ind.	Extra Large Com./ Ind.	Winter	Summer
Curtable/Controllable DR	DLC Central AC	X	X				X
	DLC Smart Thermostat – Cooling	X	X				X
	DLC Smart Thermostat – Heating	X	X			X	
	DLC CTA-2045 Water Heating	X	X			X	X
	DLC Water Heating	X	X			X	X
	DLC Vehicle Charging	X				X	X
	DLC Smart Appliances	X	X			X	X
	Third Party Contracts			X	X	X	X
	Thermal Energy Storage		X	X	X		X
	Battery Energy Storage	X	X	X	X	X	X
	Behavioral	X				X	X
Ancillary Services	X	X	X	X	X	X	
Rates	Time-of-Use Opt-in	X	X	X	X	X	X
	Variable Peak Pricing Rates	X	X	X	X	X	X
	Peak-Time Rebate	X	X			X	X
	Electric Vehicle Time-of-Use		X	X		X	X

Avista notes the Western Resource Adequacy Market (WRAP) has not determined a Qualifying Capacity Credit (QCC) for load reduction programs.²⁷ To incorporate results of its DR potential assessment into the Company's PRiSM long-term capacity expansion (LTCE) portfolio model, Avista applied effective load carrying capability (ELCC) values for DR as determined by the

²⁶ Avista 2023 IRP pg. 5-2.

²⁷ Avista 2023 IRP pg. 5-16.

March 2019 E3 Study on Resource Adequacy in the Pacific Northwest.²⁸ Staff contends this four-year old E3 Study is outdated and more recent ELCC analyses suggest significantly higher values should be applied to Pacific Northwest DR. Avista incorporated assumptions that a six-hour reduction would be required to receive a 100 percent QCC, as participation rates steadily decline, and came up with a DR QCC forecast for a 4-hour program, shown in the figure below. In contrast, a peer utility using an updated E3 study, has found higher ELCC values that contribute to a significant increase in cost-effective DR potential.²⁹

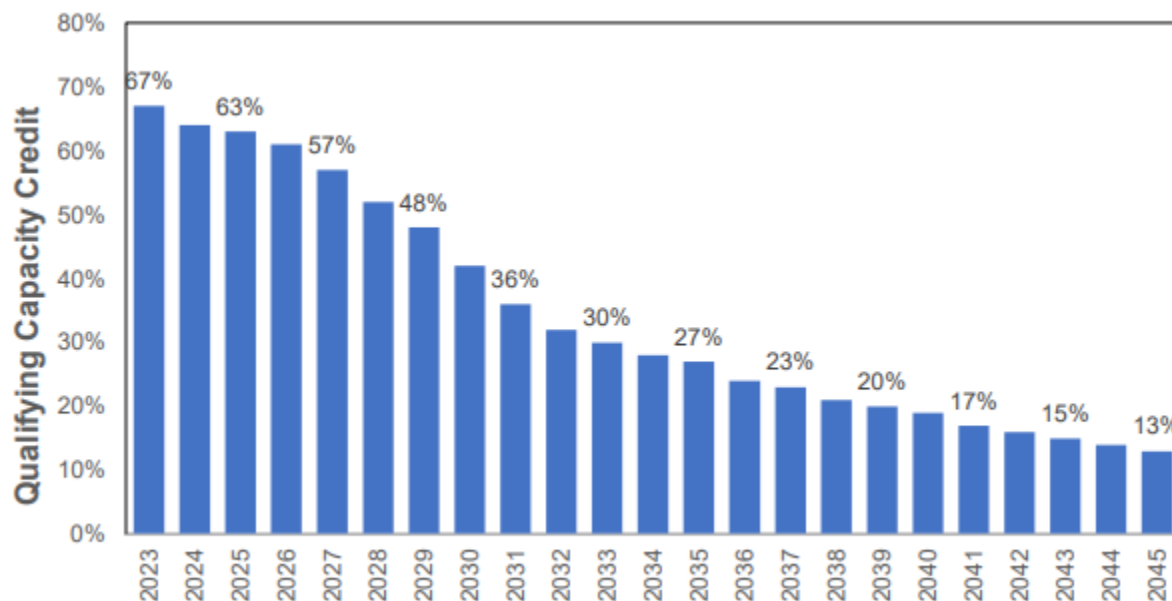


Figure 1: Demand Response QCC for a 4-hour Program³⁰

For the 2025 IRP, Staff expects a robust discussion and analysis of DR, with the capacity contribution from DR to be tailored according to program type, the number of events, and their duration.

Decarbonization and Electrification

Staff discusses Avista’s approach to modeling the electrification of gas loads in our comments on Avista’s 2023 Gas IRP. We recognize the complexity of this task and appreciate Avista taking on this analysis in its planning process but make several recommendations to refine the analysis and account for voluntary electrification and gas customer attrition.

²⁸ Avista 2023 IRP pg. 5-16.

²⁹ Docket UE-200304, “Puget Sound Energy 2023 Electric Progress Report,” at pgs. 1-5 thru 1.6 and 7-4 thru 7-14.

³⁰ Avista 2023 IRP pg. 5-16.

In addition to Staff's comments on Avista's 2023 Gas IRP and recommendations made above, **Staff recommends that Avista update its assumptions around electric vehicle adoption in its 2025 IRP to reflect recent trends, policies, and incentives that have emerged since the Company produced its EV forecast used in this filing. These updates should also include learnings from Avista's implementation of its transportation electrification programs and related demand response programs.**

Summary of Public Comments

As of the filing of these comments, no public comment about Avista's 2023 Electric IRP Progress Report has been received in the docket.