

Agenda Date: February 23, 2023

Item Numbers: A1, A2, A3, A4, A5, A6, A7

Dockets:
UE-210822 & UG-210823
UE-210826 & UG-210827
UE-210830
UG-210831
UG-210838

Company: Puget Sound Energy
Avista Corporation d/b/a Avista Utilities
PacifiCorp d/b/a Pacific Power & Light Company
Northwest Natural Gas Company d/b/a NW Natural
Cascade Natural Gas Corporation

Staff: Jade Jarvis and Joel Nightingale, Regulatory Analysts

Recommendation

Take no action acknowledging timely receipt of the 2023 Electric and Natural Gas Annual Conservation Plans on November 16, 2022, in Dockets UE-210822, UG-210823, UE-210826, UG-210827, and UE-210830, and on February 13, 2023, in Dockets UG-210831 and UG-210838.

Background

Avista Corporation (Avista), Pacific Power (PacifiCorp), and Puget Sound Energy (PSE) currently operate their electric energy efficiency programs under conditions approved by the Washington Utilities and Transportation Commission (Commission) pursuant to RCW 19.285 and WAC 480-109. Avista, PSE, Northwest Natural Gas Company (NW Natural) and Cascade Natural Gas Corporation (Cascade) (collectively, the Companies) operate their natural gas programs under requirements established in joint settlement agreements and orders approved in various dockets, and pursuant to RCW 80.28.380.¹

On November 15, 2022, Avista, PacifiCorp, and PSE filed their 2023 Electric and Natural Gas Annual Conservation Plans (ACP) in their respective Dockets.² NW Natural and Cascade filed their 2023 Natural Gas ACPs by February 13, 2023, in Dockets UG-210831 and UG-210838, respectively. The Companies provided information regarding adaptive management and planning steps for the next year to work towards achieving the biennial conservation targets.

¹ Avista (UG-110877); PSE (UG-011571); NW Natural (UG-181053); Cascade (UG-152286).

² Avista (UE-210826, UG-210827); PacifiCorp (UE-210830); PSE (UE-210822, UG-210823).

Tracking Biennial Savings and Percentage of Target

Tables 1 and 2 compare gas and electric projected savings as represented as percentage of the Companies' biennial targets.³ These tables provide a useful overview of the biennial target. Commission staff (Staff) also provide an additional narrative and discussion by company.

Table 1: Gas

Company	2022-23 Projected Savings (therms)	Total Utility Conservation Goal (therms)	Percent of Target
PSE	9,491,518	9,890,520	96%
Avista	1,954,904	2,192,4347	89%
Cascade	1,352,226	1,931,751	70%
NW Natural	620,915	619,200	100%

Table 2: Electric

Company	2022-23 Projected Savings (MWh)	Total Utility Conservation Goal (MWh)	Percent of Target
PSE	535,758	537,698	99.6%
Avista	96,741	106,644	91%
PacifiCorp	89,647	98,921	91%

Discussion by Company

Puget Sound Energy (UE-210822 & UG-210823)

In its 2023 Annual Conservation Plan (ACP), PSE anticipates 2022 actual electric and gas savings totals, which will be reported in its coming annual conservation report, will end up short of its 2022-2023 Biennial Conservation Plan (BCP) first-year projections. Because of this, PSE outlines in its 2023 ACP the ways PSE plans to adapt its programs to compensate in the second

³ The Total Utility Conservation Goal consists of each utility's statutorily required target (the EIA Target per RCW 19.285 for the electric utilities, and the Biennial Acquisition Target per RCW 80.28.380 for the gas utilities), any established decoupling commitments, and any additional savings identified outside of these targets. More detail about the various conservation terms can be found in Tables 3 and 4 of Staff's Comments on the 2022-2023 Biennial Conservation Plans, in Dockets UE-210822 & UG-210823 (PSE), UE-210826 & UG-210827 (Avista), UE-210830 (PacifiCorp), UG-210831 (NW Natural), and UG-210838 (Cascade), pages 3 and 4, December 17, 2021.

year of this biennium. Based on the achievements in 2022⁴ and new projections for 2023, PSE's 2023 ACP projects that it will achieve 535,758 MWh of electric savings, and 9,491,518 therms of gas savings, this biennium. These savings represent 99.6 percent of PSE's electric, and 96 percent of its gas Total Utility Conservation Goal for the 2022-2023 biennium.

PSE cites certain challenges in meeting its savings goals at the midpoint of this biennium. Broad challenges noted in this 2023 ACP include code changes which reduce the savings that PSE can claim for certain measures; staffing shortages and supply-chain issues which affect the speed with which PSE can complete energy-saving installations; and inflation and rising interest rates which can increase measure costs and reduce costumers' appetites for upgrading their energy systems.

PSE's ACP describes the ways the PSE is working to increase savings in 2023 including through increasing incentives, adding more recipients to its gas Home Energy Reports behavioral program, and including new conservation measures and limited-time-offers. PSE also plans to direct its outreach efforts into named communities⁵ by developing more non-English materials and focusing small-to-medium business outreach on women- and Black, Indigenous, and People of Color-owned businesses.

The tables below show how PSE anticipates its 2023 savings and budgets will change with respect to those in the 2022-2023 BCP.

PSE Electric Conservation Savings and Budget. In its 2023 Annual Conservation Plan, PSE expects to increase its second-year electric savings by 5.3 percent, with a 5.2 percent budget increase. The table below shows 2023 projected savings and budget by program/sector. PSE is expecting its 2023 electric conservation portfolio to maintain cost effectiveness with benefit-cost ratios of 1.5 per the Total Resource Cost (TRC) test, and 1.9 per the Utility Cost Test (UCT).⁶

⁴ Because the ACP was filed on 11/15/2022, before the end of the year, 2022 savings achievement numbers represent a mix of actual savings for earlier in the year and projected savings up to the end of the year.

⁵ "named communities" refers to the communities named in Washington's Clean Energy Transformation Act (19.405 RCW): Highly Impacted Communities and Vulnerable Populations.

⁶ Low-income weatherization is excluded from cost effectiveness calculations as required by WAC 480-109-100(10)(c).

Program/ Sector	2023 ACP Budget	Change from BCP	2023 ACP Savings (MWh)	Change From BCP
Residential	\$39,538,503	2%	90,278	80%
<i>Low-Income</i>	\$8,079,753	32%	1,999	1%
Non-Residential ⁷	\$53,969,097	(2%)	140,407	(15%)
Pilots	\$1,961,260	154%	359	(85%)
NEEA/Regional ⁸	\$5,580,281	4%	20,628	(4%)
EM&V/CPA ⁹ / Portfolio Support	\$21,744,072	33%	-	-
Total	\$122,793,213	5%	251,673	5%

PSE Natural Gas Conservation Savings and Budget. In its 2023 Annual Conservation Plan, PSE expects to increase its second-year gas savings by 23 percent, with a 12 percent budget increase. The table below shows 2023 projected savings and budget by program/sector. PSE is expecting its 2023 gas conservation portfolio to maintain cost effectiveness with benefit-cost ratios of 1.01 per the Total Resource Cost (TRC) test, and 1.30 per the Utility Cost Test (UCT).

Program/ Sector	2023 ACP Budget	Change from BCP	2023 ACP Savings (therms)	Change from BCP
Residential	\$13,537,202	8%	2,817,937	69%
<i>Low-Income</i>	\$1,265,186	24%	19,471	(6%)
Non-Residential	\$7,178,510	9%	1,575,302	(16%)
Pilots	\$871,984	46,529%	0	(100%)
NEEA/regional	\$1,892,868	1%	0	0%
EM&V/CPA/ Portfolio Support	\$2,999,983	17%	-	-
Total	\$26,480,546	12%	4,393,239	23%

Avista (UE-210826 & UG-210827)

Avista expects electric savings for 2022 to fall short of the annual goal. Consequently, Avista adjusted its 2023 budget to reflect the increased participation required to make up for the previous year's shortfall. Avista plans to make several incentive increases and program changes, including the launch of a new residential midstream program during 2023 that will focus on high efficiency space and water heating equipment.

⁷ Non-Residential represents commercial and industrial class customers.

⁸ NEEA/regional represents savings associated with the Northwest Energy Efficiency Alliance (NEEA) and other regional conservation impacts such as the Regional Technical Forum (RTF) measure updates.

⁹ EM&V/CPA represent the costs of evaluation, measurement, and verification of conservation programs, as well as the costs associated with conducting a conservation potential assessment.

A slow start to Avista's Always-On behavioral program has contributed to the Avista's current residential savings shortfall. Avista has expressed to Staff that the size of the internal information technology system required to run the program was larger than expected, and determined through testing that more time was needed prior to program rollout. While Avista has seen a reduction in some customer loads, by late 2022 the program participants were showing an overall net increase in energy use. Avista is currently working with the program implementer (ADM) to determine whether this is a normal variation in the early stages of program adoption. Avista plans to increase the number of participants by about 33 percent in 2023, from 75,000 to 100,000 customers. The program changes will take effect in quarter two of 2023, when the program will graduate from a pilot into a permanent residential program.

In the commercial and industrial sector, Avista is considering the addition of a per-kWh installed incentive to its largest program – its Site-Specific program. The goal of this incentive would be to combat labor and supply chain challenges that currently persist in the energy efficiency market. Avista will also be increasing the incentive for its second largest commercial and industrial program – Prescriptive Lighting – from \$0.23 to \$0.26 per kWh.

Avista is facing similar struggles with its natural gas energy efficiency programs this biennium as it is with its electric programs, and in turn has implemented several strategies to adaptively manage in the face of a savings shortfall. Avista has made incentive increases to several residential prescriptive programs, and similar to its electric portfolio, plans to transition its residential water heating and HVAC programs to the Midstream program in mid-2023.

Electric Conservation Savings and Budget. Avista describes a 37 percent increase in its annual electric conservation budget, along with a 31 increase in projected 2023 savings compared to the BCP. The benefit-to-cost ratio for Avista's 2023 electric portfolio is projected to be 2.86 using the Total Resource Cost test (TRC) and 2.60 using the utility cost test (UCT).

Program/ Sector	2023 ACP Budget	Change from BCP	2023 ACP Savings (MWh)	Change From BCP
Residential	\$4,635,849	84%	8,822	4%
<i>Low-Income</i> ¹⁰	\$5,149,285	23%	1,654	53%
Non-Residential	\$13,441,298	53%	47,285	21%
Pilots	\$1,000,000	0%	TBD	-
NEEA	\$1,358,000	0%	5,782	0%
EM&V/CPA	\$278,645	(29%)	-	-
Portfolio Support	\$3,718,257	2%	-	-
CVR ¹¹	TBD	-	7,365	-
Total	\$29,581,334	36%	70,878	31%

¹⁰ Includes savings and expenditures associated with named community conservation.

¹¹ Conservation volt reduction – Avista is utilizing advanced metering infrastructure to strategically reduce transmission voltage as it travels to customer meters, reducing energy waste.

Natural Gas Conservation Savings and Budget. Avista’s natural gas plan includes an 11 percent increase in its projected 2023 savings acquisition compared to the BCP, as well as a 10 percent increase in its annual natural gas conservation budget. The table below summarizes the 2023 ACP’s natural gas savings and budgets by program as they compare to the 2022-23 BCP. The benefit-to-cost ratio for Avista’s 2023 natural gas portfolio is projected to be 2.28 using the TRC test and 2.31 using the UCT.

Program/ Sector	2023 ACP Budget	Change from BCP	2023 ACP Savings (therms)	Change from BCP
Residential	\$4,907,725	(4%)	628,866	13%
<i>Low-Income</i>	\$1,716,618	(0.8%)	24,345	0.3%
Non-Residential	\$3,070,256	166%	618,556	21%
Portfolio Support	\$626,528	(0.7%)	-	-
Total	\$10,321,127	10%	1,272,767	11%

PacifiCorp (UE-210830)

PacifiCorp details several economic challenges that have persisted from the earlier years of the COVID-19 pandemic and are expected to continue to impact savings in 2023. PacifiCorp describes inflation, rising prices, and higher interest rates as factors that are creating general economic uncertainty and influencing customer decisions to participate in energy efficiency programs. PacifiCorp also notes that labor shortages and product availability continue to stifle project implementation.

While PacifiCorp is currently projecting to fall short of its biennial target, it plans to implement several adaptive management strategies to boost 2023 savings. One strategy involves the expansion of Home Energy Reports to reach 15,000 new customers and the reduction of the measure life from two years to one, increasing the expected savings from the program.¹² PacifiCorp has also increased customer and vendor incentives for the Wattsmart Business program to increase non-residential participation in 2023.

Electric Conservation Savings and Budget. PacifiCorp’s plan describes slight decreases in 2023 savings and expenditures of 5.4 and 1.7 percent respectively, compared to the BCP. The table below summarizes PacifiCorp’s current projection of 2023 electric savings and budgets by program, as they compare to projections from the 2022-23 BCP. The benefit-to-cost ratio for PacifiCorp’s 2023 portfolio is projected to be 2.28 using the TRC test and 2.31 using the UCT.

¹² PacifiCorp notes that the reason for the reduction in measure life from two years to one was due to a review completed by another Washington investor-owned utility, and an update to the related RTF measure. See Docket UE-210830, *Annual Conservation Plan*, November 15, 2022, page 49.

Program/ Sector	2023 ACP Budget	Change from BCP	2023 ACP Savings (MWh)¹³	Change From BCP
Residential	\$6,128,776	(39%)	7,708	(29%)
Low-Income ¹⁴	\$1,193,659	14%	140	(23%)
Non-Residential	\$13,694,628	34%	43,988	16%
NEEA	\$877,438	1.8%	4,024	(1%)
EM&V/CPA/ Portfolio Support	\$753,750	(7.2%)	-	-
Total	\$22,648,250	(1.7%)	55,861	(5.4%)

Northwest Natural Gas (UG-210831)

NW Natural notes that upcoming code changes in 2023 will likely reduce annual savings in both residential and commercial new construction, but a strong showing in 2022 has NW Natural on track to meet and possibly exceed its biennial savings target.

NW Natural still plans to employ several key improvements to its energy efficiency programs in 2023, including increased collaboration with community-based organizations and increased incentive distribution for underserved populations in NW Natural's service territory, several outreach activities to improve commercial participation, and the proposal of a \$4,000 per customer spending increase for low-income health and safety or energy efficiency measures. NW Natural is also in the process of implementing a pilot program for industrial customers, a class that NW Natural has not historically served. The pilot program offers energy efficiency audits to qualifying industrial and transportation customers and is expected to inform the development of a permanent industrial program to launch in 2024.

Natural Gas Conservation Savings and Budget. The benefit-to-cost ratio for NW Natural's 2023 portfolio is projected to be 1.70 using the TRC test and 1.85 using the UCT.

Program/ Sector	2023 ACP Budget (\$)	2023 ACP Savings (therms)
Residential	\$1,556,820	112,663
Low-Income	\$135,318	5,425
Non-Residential	\$1,696,286	169,245
Pilots	\$140,596	-
NEEA/RTF	\$98,948	-
Total	\$3,627,968	287,333

¹³ MWh savings at generation.

¹⁴ Includes named community conservation.

Cascade Natural Gas (UG-210838)

While the 2022 annual reports will not be ready until June of 2023, Cascade’s latest estimates show that Cascade has achieved roughly 36 percent of its residential and just 30 percent of its commercial and industrial biennial goals at the mid-point of the biennium. Cascade expects this savings lag to continue in 2023 and notes further challenges on the horizon with the recent approval of natural gas limitations in Washington State building codes, expected to go into effect July 1, 2023. Cascade notes in its plan that it will need to work with its conservation advisory group (CAG) to review the viability of the biennial goals considering the removal and reduction of rebate measures caused by these looming code changes.

Cascade plans to continue efforts described in its BCP, including a New Home Air Sealing Pilot and a Home Energy Report Behavioral Pilot (both targeted towards residential customers), improved user experience for its online residential rebate portal, and various procedural streamlining improvements for contractors and low-income participants.¹⁵ In addition to these actions Cascade hopes to reduce the gap between projected savings and its biennial target by employing several adaptive management techniques, such as increased outreach and direct customer engagement efforts.

Natural Gas Conservation Savings and Budget. Cascade’s savings and budget projections remain the same. The benefit-to-cost ratio for Cascade’s 2023 portfolio is projected to be 1.83 using the TRC test and 2.31 using the UCT. Staff continues to discuss challenges to achieve target savings within the Advisory Group.

Program/ Sector	2023 ACP Budget (\$)	2023 ACP Savings (therms)
Residential	\$6,116,333	507,695
Low-Income	\$1,925,910	19,665
Non-Residential	\$4,755,818	537,858
NEEA/RTF	\$380,208	-
Program Support	\$230,000	-
Total	\$13,408,270	1,065,218

Stakeholder Comments

The Commission did not receive any comments in these dockets.

¹⁵ See Docket UG-210838, 2023 Washington Annual Conservation Plan, Pages 6 and 7, February 13, 2023.

Conclusion

Staff recommends that the Commission take no action, acknowledging receipt of the 2023 Electric and Natural Gas Annual Conservation Plans on November 15, 2022, in Dockets UE-210822 & UG-210823, UE-210826 & UG-210827, UE-210830, and on February 13, 2023, in Dockets UG-210831, and UG-210838.