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November 15, 2018

Mark L. Johnson, Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Dr. SW
P. O. Box 47250
Olympia, Washington 98504-7250

RE: 2018 Energy Emissions Intensity Reports Submitted by Avista Corporation, Pacific Power & Light, and Puget Sound Energy
Dockets UE-180480, UE-180502, and UE-180526

Dear Mr. Johnson:

This letter is Staff's response to the three investor-owned utilities' (IOUs) Annual Energy Emissions Intensity Metrics Report (EEI report), filed on May 31 (Avista Corporation [Avista]) and June 1, 2018 (Pacific Power and Light [Pacific Power] and Puget Sound Energy [PSE]). The EEI reports are required by WAC 480-109-300, which states that by June 1 of each year, each utility must report its carbon dioxide (CO₂) emissions "from all generating resources providing service to customers of that utility in Washington State, regardless of the location of the generating resources."¹ The WAC specifies that generators serving both out-of-state as well as in-state customers be "prorated to represent the proportion of the resource used by Washington customers."² Each year, the WAC requires the companies to calculate five metrics for each of the preceding 10 years: average megawatt-hours (MWh) per residential customer; average MWh per commercial customer; MWh per capita; million short tons of CO₂ emissions; and comparison of annual million short tons of CO₂ emissions to 1990 emissions.³

The previous set of EEI reports (covering the 2007-2016 period) were filed by June 1, 2017, with the current reports coming in by June 1, 2018. Staff did not share informal feedback on the 2007-2016 reports with the companies until April 2018. The Commission sent acknowledgement letters to the companies on June 26, 2018; those letters contained the informal feedback as attachments. Staff is pleased that the companies largely incorporated that informal feedback for

1 WAC 480-109-300(1).

2 *Id.*

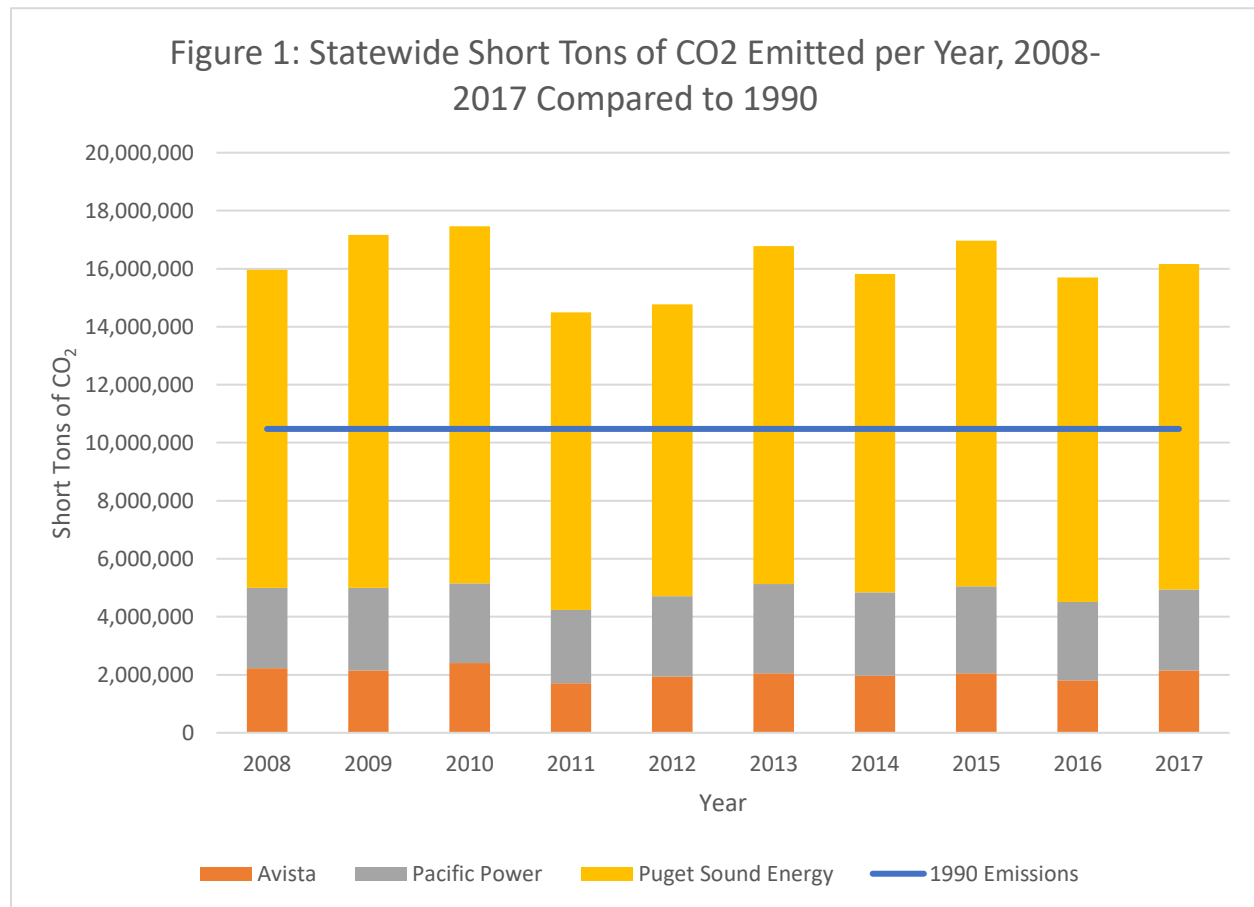
3 WAC 480-109-300(2).

the current reporting period, and has offered additional informal feedback to the companies.

Staff has reviewed the reports filed by each company, and offers the following insights.

Staff Analysis of 2008-2017 CO₂ and MWh Trends

Figure 1 below displays the total short tons of CO₂ emitted annually by the three companies from 2008 to 2017, compared to 1990 emissions. In 1990, the companies emitted 10,477,099 short tons of CO₂; from 2008 to 2017, the companies averaged 16,127,912 short tons per year. Total statewide emissions from the three IOUs in 2017 were 1.2 percent higher than they were in 2008.⁴ This increase comes despite a 7.7 percent drop in the average MWh per capita over the same time period. Whereas statewide 2008 emissions were 152 percent of 1990 levels, 2017 emissions stood at 154 percent of 1990 levels.



Avista (Docket UE-180480): Avista reports an overall decline in average MWh consumed by both residential and commercial customers, and a corresponding decrease in MWh consumed per capita of 1.5 percent over the last 10 years. The company's annual emissions (consistently the

⁴ The statistics cited in this letter fluctuate annually. Staff's comments focus on the overall 10-year trends.

lowest among the three utilities) have dropped by 3.6 percent in the same period. Overall, Avista's total 2017 emissions stand at 190 percent of 1990 levels.

Avista credits energy efficiency and improved codes and standards for lowering its energy intensity (MWh per capita), as well as its emissions. On the other hand, population growth has pulled total energy usage upwards, and fluctuations in annual hydro production can lead to significant year-to-year changes in emissions.

Pacific Power (Docket UE-180502): Pacific Power has seen a decline in MWh use per capita of 4.3 percent since 2008, despite a jump in average electricity usage by commercial customers of nearly 17 percent. Total emissions over the 10-year period have increased by about one percent. Pacific Power's total 2017 emissions stand at 116 percent of 1990 levels, compared to 115 percent in 2008.

Pacific Power cites the 2007-2008 financial crisis and resulting recession as one possible suppressor of emissions in the ensuing years. This explanation fits with the leap in commercial electricity usage seen between 2012 and 2014. Significant renewable energy additions in the 2006-2015 period helped keep the company's emissions down. Additionally, low natural gas prices have led to less use of coal, though the company notes that its 2008 acquisition of the Chehalis Generating Facility increased its overall emissions.

Puget Sound Energy (Docket UE-180526): While PSE shows an impressive decline in per capita electricity usage (down 9.8 percent since 2008), it has also seen an emissions increase over that period. Total emissions have gone up by 2.3 percent since 2008; its emissions were 162 percent of 1990 levels in 2017, while in 2008 that figure stood at 158 percent of 1990 levels.

PSE's annual emission levels depend on its generation mix between owned, contracted, and spot market-purchased resources. The company's generation from coal (both owned and firm contracted coal) has increased in recent years, helping to drive an increase in emissions. Helping to mitigate this emissions increase are the company's firm renewable contracts, which supplied more than 25 percent of its load in 2017.

Conclusion

Staff recommends that the Commission acknowledge the EEI reports submitted by Avista, Pacific Power, and Puget Sound Energy in 2018.

Sincerely,

Andrew Rector
Regulatory Analyst