Agenda Date: February 8, 2018
Item Number: A1

Docket: UE-160082
Company Name: Avista Corporation

Staff: Kathi Scanlan, Regulatory Analyst

Recommendation

Staff recommends the commission grant the revised petition filed on February 2, 2018, in Docket UE-160082, and issue an order to:

(1) Extend effective date of Tariff WN U-28 Schedule 77 "Electric Vehicle Supply Equipment Pilot Program" through June 30, 2019, and

(2) Allow the proposed tariff revisions filed on February 2, 2018, to become effective on February 12, 2018.

Background

On April 28, 2016, the Washington Utilities and Transportation Commission (commission) issued Order 01 in Docket UE-160082 approving Avista Corporation (Avista or company) tariff Schedule 77 for its Electric Vehicle Supply Equipment (EVSE) Pilot Program (Program). The commission's order also required quarterly reporting through August 1, 2018, and the company has complied.

On December 14, 2017, Avista filed with the commission a petition requesting an extension to the company's electric tariff Schedule 77. This revision would allow the company to extend the date of its current program through June 30, 2019, to provide more operational cost data and more modeling for networked and non-networked AC Level 2 installations in residential, apartment, workplace, fleet, and public locations, as well as completion of DC Fast Chargers (DCFC) installations. It would also change the reporting basis from quarterly to semi-annual. As part of this filing, the company submitted an *Interim Evaluation of the EVSE Pilot*, which is included as Attachment A, as requested by staff.

On January 19, 2018, Avista filed revised workpapers and proposed a new effective date of February 12, 2018, for the tariff revisions. The company also removed its request for a banded rate structure for its DCFC stations. In 2018, staff will continue discussions with the company about the information that is necessary to support a future banded rate proposal for the EVSE pilot.[1]

On January 26, 2018, the company filed a revised petition, which inadvertently included an incorrect date and information. At staff's request, and to reflect the changes on January 19, 2018, a subsequent revision was filed on February 2, 2018. This filing summarized the changes to modify Order 01 in Docket UE-160082, including its proposed tariff revisions and commitment to completing a final evaluation report, which will be filed before December 31, 2019.

[1] As outlined in WAC 480-80-112(2), electric companies may file banded rate tariffs for any nonresidential electric service that is subject to effective competition from energy suppliers not regulated by the commission. In its filings, Avista did not include a cost of service study or petition for a waiver from the rule, as outlined in Order 01 Docket UE-160082, at ¶ 21 (footnote 10).

Discussion

The two-year installation term of the program began with the first residential EVSE installation on July 20, 2016. Table 1 provides a summary of the installation status and the number of ports remaining to be installed.

Table 1: Installation Status (as of December 6, 2017)

	2-Year Goal of Port Installations	# Ports Installed	# Ports Scheduled for Installation	# Ports Remaining
Residential SFH[1]	120	113	5	2
Workplace\Fleet\MUD[2]	100	48	7	45
Public	45	19	9	17
DC Fast Chargers (DCFC)	7	2	3	2

Staff has concerns with the ongoing lack of DCFC participation. It appears that 30 charging sessions per month or less are expected at each DCFC station in the near term, where only 17 charging sessions occurred at Kendall Yards and 9 occurred in Rosalia in the last month. However, the company *does not* propose additional DCFC port installations in the pilot extension—and staff agrees.

The company requests to extend the installation period to June 30, 2019, increasing the number of ports, which will allow for more installations and a greater number of participants for residential and public/workplace installations. The primary benefit of extending the pilot program and increasing the number is to continue to test EVSE from multiple hardware vendors, where the competition from multiple vendors can provide valuable information about differing EVSE. In terms of cost, the original estimate for the program was $3,096,000. With the proposed additional port installation expenses, including $743,000 of capital costs and $345,000 of O&M costs, the total EVSE pilot program cost estimate is $4,184,000 through June 30, 2019.

Avista appropriately discussed this petition and tariff revision with the newly formed Joint IOU EV Stakeholder Group and provided the proposal to the stakeholder group prior to making the filing.[2]

Table 2: Pilot Program Extension Proposal and Total Port Installations

	Original Targeted # Port Installations	Additional Port Installations (Max Allowed)	Cumulative Total Port Installations (Max Allowed)
Residential SFH	120	120	240
Workplace/Fleet/MUD	100	75	175
Public	45	15	60
DCFC	7	0	7
Total	272	210	482

As shown in Table 2, Avista proposes to install additional residential and workplace/fleet/MUD port connections with non-networked EVSE and test different manufacturers' EVSE hardware. The extension will also allow for more time for the additional 7 DCFC ports along the I-90 and US-395 corridors to be installed, as well as public and workplace level 2 chargers across the

[2] Avista discussed the changes to the pilot with the Joint IOU EV Stakeholder Group on October 9, 2017, and updated its proposal on November 7, 2017, after receiving additional feedback.

region. The pilot program extension would also allow more robust cost comparisons and provide more demand response experiment data. In addition, Avista proposes to request customers participate in a time-of-use rate structure for EV charging in the future.

DCFC Fee Modification. Staff agrees with the company's proposed change to the pilot design, moving from a time-based fee of $0.30 per minute to an energy-based fee of $0.35/kWh.[3] In the last year of the pilot, many of the vehicles were not charging at the rated power of the unit, and resulted in much higher costs for certain customers.[4] The new energy-based $0.35/kWh fee is commensurate with gas prices, resulting in a $2.76/gallon of gasoline equivalent. The effect on utility revenues is expected to be relatively small over the course of the pilot program.

Incentive Changes. Avista also plans to decrease the premises-wiring reimbursement to 50 percent of premises-wiring costs up to $1,000 for residential customers and $2,000 per port for non-residential customers. Decreasing the reimbursement will allow the company to understand the impact that differing levels of premises-wiring reimbursements have on customer participation levels.

For automobile dealers, Avista indicated that it has experienced little to no interest in participation and will test an increased incentive (from $100 to $200). This increase is intended to spur more participation from dealers; however, the cumulative cap for dealer incentives will remain at $25,000. Overall, staff agrees more time to develop and analyze existing data is warranted and will ultimately be beneficial to evaluating the pilot program.

New Reporting Schedule. The company also proposes to move to a semi-annual report filing schedule, instead of its current quarterly basis, and will continue to provide the commission an update on the port installation status, pilot-program costs, and utilization of DC Fast Chargers. Staff supports the change to semi-annual reporting. Reports will be filed on or before May 1, 2018, with data through March 31, 2018; November 1, 2018, with data through September 30, 2018; and May 1, 2019, with data through March 31, 2019. No later than December 31, 2019, Avista will provide a final evaluation report of the EVSE Pilot Program.[5] The company has also agreed to provide informal quarterly updates to staff and other interested parties.

EVSE Low-income Pilot Modifications. The commission's final policy statement on electric vehicle charging services instructs utilities to provide *direct services* to low-income customers as part of the public interest and fairness determination for EV charging service programs.[6] Further, RCW 80.28.068 authorizes the commission to approve discounted or preferential services to low-income and low-income senior customers.[7]

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[3] With the previous time-based per-minute rate, a high number of charging sessions resulted in fuel costs of over $5 per gallon of gasoline equivalent, with some over $10 per gallon. Avista's discussions with several customers indicated that the DCFC usage fee of $0.30/minute is not competitive with a gasoline-powered vehicle—instead choosing to use a gasoline-fueled vehicle, rather than pay the higher cost to charge their electric vehicle.

[4] Avista's proposed energy-based fee (per kWh rate) will be independent of the *state of charge* and *age of battery*. As batteries approach full charge the charge rate slows down—typically around 80%. As a battery ages over time and completes a higher number of charge and discharge cycles, its energy capacity (overall health) becomes degraded and the allowable power delivered to the battery may be reduced.

[5] The reports will contain the information specified in Order 01 of Docket UE-160082.

[6] UE-160799. The Commission's *Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services* (June 14, 2017) at ¶ 86.

[7] RCW 80.28.068. "Upon request by an electrical or gas company, or other party to a general rate case hearing, the commission may approve rates, charges, services, and/or physical facilities at a discount for low-income senior customers and low-income customers. Expenses and lost revenues as a result of these discounts shall be included in the company's cost of service and recovered in rates to other customers."

In-line with the commission's EV policy statement, Avista's tariff revision includes a carve-out for a new low-income initiative to spend up to $100,000 on low-income services. In early 2018, the company plans to solicit proposals from agencies supporting low-income customers and select proposals that will benefit low-income customers, including but not limited to:

- Providing an electric vehicle to a Community Action Agency that uses the vehicle for outreach events, weatherization audits, and transportation services.
- Providing an electric vehicle and EVSE to an agency that provides transportation and/or grocery delivery service for low-income customers unable to access groceries.
- Education and outreach opportunities for agencies that serve low-income customers.

Staff supports the company's efforts on low-income preferential services, including providing discounts for an electric vehicle, supply equipment, and premises wiring for community action agencies providing direct services to low-income customers. Staff will work with the company during the review process for low-income EV proposal review and awards.

Advanced Meter Infrastructure (AMI) and EVSE. Avista's AMI project schedule proposes a three-year installation period beginning in August 2018, where a limited number of meters will be deployed, followed by a six-month period to ensure all systems are working as planned. Avista indicated that a full deployment of AMI is planned in early 2019. The company plans to augment EVSE to allow it to communicate with AMI systems, as well as conduct field tests, and assess the reliability, costs and benefits associated with using AMI communications, compared to other methods such as owner WiFi and cellular.

Next Steps. The company is still in the installation phase of its EVSE pilot program and the early stages of demand response (load management) experiments. Given the current state of the program, staff supports an extension of the EVSE pilot program and will continue discussions with the company about the information that is necessary to support a future banded rate proposal for the EVSE pilot. Avista has indicated that it may propose a long-term EVSE program beginning in mid-2019.

Conclusion

Staff recommends the commission grant the revised petition filed on February 2, 2018, in Docket UE-160082, and issue an order to extend effective date of Tariff WN U-28 Schedule 77 "Electric Vehicle Supply Equipment Pilot Program" through June 30, 2019. Staff also recommends the commission allow the proposed tariff revisions filed on February 2, 2018, to become effective on February 12, 2018.