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January 19, 2018

Steven V. King
Executive Director and Secretary
Washington Utilities & Transportation Commission
1300 S. Evergreen Park Drive S. W.
P.O. Box 47250
Olympia, Washington 98504-7250

RE: Docket No. UE-160082 – Avista Request for Extension of its “Washington Electric Vehicle Supply Equipment Pilot Program” WN U-28 – 2nd Substitute Filing

Dear Mr. King,

On December 14, 2017, Avista submitted proposed revisions to its tariff Schedule 77 in the above referenced docket. After discussions with Commission Staff regarding several elements of the filing, the Company has modified its proposal as described herein.

First, the Company has extended the requested effective date of the tariff to February 12, 2018, to allow time for Staff to review the modifications. Second, the Company has clarified its intent with the reporting schedule described in the tariff. Specifically, the Company has now included the proposed reporting schedule and addition of a final evaluation report to be filed with the Commission on or before December 31, 2019.

Lastly, the Company has removed its request for a banded rate structure for its DC Fast Charging (DCFC) stations. The Company continues to believe that a banded rate structure would be valuable in its DCFC service offering to update rates in line with the market. Following this filing, the Company will continue to discuss and work with Staff to provide the information that is necessary to support a banded rate offering.

With the elimination of the banded rate proposal the Company now proposes to move to a fee based on energy consumed (per kWh), rather than continue with the current fee based on charging time (per minute). The following are the average charging characteristics witnessed by the Company, based on initial charging sessions at the Rosalia and Kendall Yards DCFC locations:

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Table No. 1 – Average DCFC Charging Session Results with \$0.30/minute User Fee

	Rosalia (n=48)*	Kendall Yards (n=26)*	Average
Charging Session Time	17.4 minutes	25.7 minutes	21.6 minutes
Power Delivery	35.1 kW	37.7 kW	35.4 kW
Energy Consumption	9.8 kWh	16.3 kWh	13.1 kWh
Fees per Charging Session	\$5.85/session	\$8.67/session	\$7.26/session
Fees per kWh Delivered	\$0.61/kWh	\$0.53/kWh	\$0.57/kWh
Gasoline Fuel Price Equivalent	\$4.28/gal	\$4.22/gal	\$4.25/gal

**n = number of total charging sessions through November 29, 2017*

Upon analysis of the data, many of the vehicles have not been charging at the rated power of the unit¹, as was originally assumed with the proposed fee of \$0.30 per minute. This resulted in much higher costs for certain customers, based on the amount of electricity consumed. For example, assuming an efficiency of 3.3 miles per kWh for an EV and 26 mpg for the equivalent gasoline vehicle, a high number of charging sessions resulted in fuel costs of over \$5 per gallon of gasoline equivalent, with some over \$10 per gallon. Discussions with several customers indicated that the DCFC usage fee of \$0.30/minute is not competitive with a gasoline powered vehicle, and that they will choose to use a gasoline fueled vehicle when making the trip between Pullman and Spokane rather than pay the higher cost to charge their electric vehicle.

In order to be competitive in the market and encourage EV adoption, the DCFC user fee should result in an electric fueling cost at or below an equivalent cost to travel using a gasoline vehicle. Therefore, the Company believes that altering the DCFC usage fees to a per kWh basis is the best solution to support charging at the DCFC stations at this time, given the relatively low adoption rates. The Company proposes a fee of \$0.35/kWh, which results in \$2.76/gallon of gasoline equivalent². As utilization of the DCFC stations increases, a per minute fee may be reconsidered to encourage users to complete their charging sessions more quickly and move their vehicle, allowing others that may be waiting to then charge their vehicle.

The effect on utility revenues from the proposed \$0.35/kWh fee is expected to be relatively small over the course of the pilot program. Estimates for this effect are sensitive to charging session assumptions including energy consumption, time of charging, and the number of sessions over a given time frame. Higher levels of energy consumption, time of charging, and number of sessions generally result in higher net revenues from the DCFC user fees, relative to the meter

¹ Vehicles have not charged at the rated power of the unit for reasons such as, the state of the EV battery or the make/model of the EV itself. Some older generations of certain EVs appear to limit the maximum rated DCFC charging rate.

² This calculation assumes the average session time of 21.6 minutes, based on the session data from Rosalia and Kendall Yards DCFC stations.

billing expense. Less than 30 charging sessions per month at each DCFC station are expected in the near term, given that over the month of November, 17 charging sessions occurred at Kendall Yards and nine occurred in Rosalia. The number of charging sessions should increase with higher EV adoption each year, bounded by a practical limit of an estimated 450 sessions per month (equivalent to 15 per day) over the long-term. Table No. 2 below provides annual net revenue estimates for the proposed rate of \$0.35 per kWh at the assumed averages of 12.7 kWh and 21.6 minutes per charging session.

Table No. 2 – Annual Net Revenue Estimate for DCFC at \$0.35 per kWh

# of Charging Sessions per Month	Meter Billing	DCFC User Fees	Net Utility Revenue
1	\$2,034	\$53	-\$1,981
15	\$2,288	\$801	-\$1,311
30	\$2,560	\$1,601	-\$641
58	\$3,068	\$3,096	\$28
90	\$3,648	\$4,804	\$1,156
150	\$4,736	\$8,007	\$3,271
450	\$9,433	\$24,022	\$14,588

Although the effect on utility revenues will be immaterial over the course of the pilot program and in the relative near term, the proposed rate structure will allow for valuable information to be gathered, in terms of customer participation and satisfaction, enabling better modeling and proposals for longer term programs.

Avista requests the tariff revisions described herein become effective February 12, 2018. If you have any questions regarding this filing please contact Shawn Bonfield at 509-495-2782 or shawn.bonfield@avistacorp.com.

Sincerely,

Linda M. Gervais

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Enclosures