AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION: WASHINGTON DATE PREPARED: 1/4/2017 WITNESS: UE-170485 & UG-170486 Clint Kalich CASE NO: **REQUESTER:** Public Counsel **RESPONDER:** Clint Kalich TYPE: Data Request DEPT **Energy Resources REQUEST NO.:** PC-160 **TELEPHONE:** (509) 495-4532 EMAIL: clint.kalich@avistacorp.com

REQUEST:

With respect to Avista modeling practices:

- a) Please describe each and all the occasions for which the AURORA_{XMP} model was used by Avista during the previous five-year period, 2012-2017, and note whether this is a recurring or non-recurring exercise.
- b) For each of the occasions described in part a), note whether the AURORA_{XMP} market price forecast is aligned to forward electricity prices and provide the justification for doing so or not.
- c) For each of the occasions described in part a), note whether Avista made adjustments to load inputs such that the load values contained in the AURORAXMP model were not representative of Avista's most recent and best forecast of expected load at the time the model runs were conducted.
 - i) Please quantify any adjustments to load that were made by Avista, providing the beginning load value and the adjusted value for each of the occasions in part c).
 - ii) Please describe Avista's justification for making such changes.

RESPONSE:

- a) AURORAxmp is used on a recurring basis for each of our rate filings in Washington and Idaho, as well as the 2013, 2015 and 2017 Integrated Resource Plans in Washington and Idaho.
- b) For each rate filing Avista aligns forward electricity prices. In these filings, market price assumptions are used to estimate power supply expenses and revenues, these prices must reflect the best available information at the time (i.e. forward prices), to do otherwise would value Avista's resources at prices not reflective of the market.

For Integrated Resource Plans (IRPs), these plans do not align prices to forwards. These plans are used for long-term resource valuations where there is no market information to align market prices for the entire period. In these analyses resource options relative values are compared, therefore the choice of one power plant over another is more about the relative value of resource option than the absolute value of the resource.

c) For rate filings, Avista uses the Company's actual test-period native loads adjusted for normalized weather conditions. Adjustments were made to these values in various studies described in 'i' below.

For IRPs, Avista uses the latest Company load forecast for its loads in its Expected Case. In this case, forecasted loads are the mean of a stochastic study (a normalized distribution of 500 expected loads based on different weather conditions). The Company also conducts load studies with higher or lower loads due to the economy or changes in roof-top solar penetration, for example.

- i) The Company in this rate filing studied alternative load levels, in response to discovery questions or the Kalich supplemental testimony, including:
 - a. Loads currently authorized (as shown in the supplemental testimony on page 25), this change increases system cost by approximately \$1.6 million.
 - b. Staff DR 151, corrects data error to filed test period loads, this increases system costs by \$392,522.
 - c. Staff DR 247, uses Staff's normalized load methodology, which results in an increase in system cost of approximately \$1.655 million over the corrected loads in Staff DR 151.
 - d. Public Council DR 16. This request uses forecasted loads in addition to other proforma adjustments. The total system cost increase was approximately \$5.6 million, but no specific study was complete on the impact to costs from loads.
 - e. In previous rate filings between 2012-2017 no other studies were conducted other than using test period loads.

ii) The alternative load studies in this rate proceeding were completed due to Avista showing the impact of new test period loads in the supplemental testimony, Staff DRs 151 and 247, and Public Council's DR 16. For IRP analysis, state statute requires analysis of alternative loads in resource plans.