AVISTA CORP. RESPONSE TO REQUEST FOR INFORMATION

JURISDICTION: WASHINGTON DATE PREPARED: 11/28/2016

CASE NO: UE-160228 & UG-160229 WITNESS: Andrews/Johnson/Kalich REQUESTER: Bench RESPONDER: Andrews/Johnson/Kalich TYPE: Bench Request DEPT: Rates/Power Supply

REQUEST NO.: Bench Req No. 10.4-Revised TELEPHONE: (509) 495-8601

EMAIL: liz.andrews@avistacorp.com

REQUEST 10.4:

Please provide workpapers supporting Electric Adjustment 3.00 Pro Forma Power Supply to include amounts aggregated by FERC account and subaccount (i.e., Account 555 Purchased Power, Subaccount WNP-3) adjusted for November 1, 2016 power cost update.

REVISED RESPONSE NOV 28, 2016:

Per UTC Order 05 dated November 22, 2016 in these Dockets, Avista is providing this revised response to Bench Request 10.4. The power cost update included in this revised response reflects only the following changes: (1) update for material, known and measurable changes to power contracts; (2) update for forward natural gas and market power prices; and (3) AURORA model-run parameters are the same as those in Avista's as-filed case. In the Multiparty Settlement Stipulation in Avista's prior general rate case, Docket Nos. UE-150204 and UG-150205, the parties to the Stipulation supported a power cost update in that case, which was described as follows on page 3, footnote 2:

As in past proceedings, the purpose of this power supply update would be to: 1) update the three-month average of natural gas and electricity market prices; 2) include new short-term contracts for gas and electric; and 3) update or correct power and transmission service contracts for the 2016 rate year.

The power cost update included in this response is performed the same manner as the prior case. 1/2

With regard to the update to the three-month average of natural gas and electricity market prices, Avista has updated forward natural gas prices using the three-month time period of 7/20/2016 to 10/19/2016, which replaces the originally-filed natural gas prices for the three-month time period of 9/15/2015 to 12/11/2015. The 7/20/2016 to 10/19/2016 period is the same time period that the Company used in its November 1,

¹ As in prior cases, the update to power supply costs not only updates the net power supply costs embedded in retail rates for the rate period, but also resets the Energy Recovery Mechanism (ERM) base for the rate period. The ERM is designed to track the difference between certain actual power supply revenues and expenses, and the power supply revenues and expenses embedded in retail rates. Therefore, the ERM base must match the power supply revenues and expenses ultimately approved in base retail

² In Avista's power cost update originally filed on November 1, 2016, the Company included only one additional change, which was in response to the testimony filed by ICNU (and which Avista explained in its rebuttal testimony). In the originally filed November 1, 2016 power cost update, Avista reduced Noxon generation during hours that have negative market prices. Running Noxon during negative-priced hours results in Avista paying other parties to take our generation. The adjustment to reduce Noxon generation reduced revenue requirement by \$202,700 on a system basis. ICNU was incorrect in its response to Avista's Motion to Supplement Record, in representing that the reduction to Noxon generation increased revenue requirement; in fact, it did the opposite serving to reduce revenue requirement. In this revised power cost update, however, there is no adjustment to Noxon generation from our original filed case, as directed by the Commission.

2016 Power Cost Update provided in its initial response to this Bench Request. The annual prices are shown in the tables below from the filed case and power supply cost update.

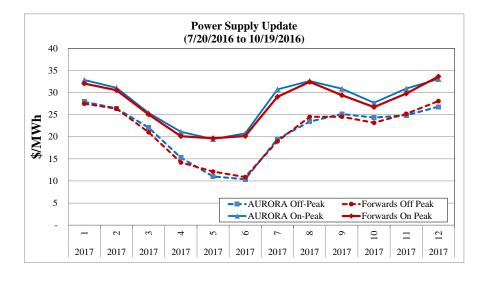
ORIGINAL FILING -- Natural Gas Prices from 9/15/2015 to 12/11/2015

Basis	Price (\$2017/dth)	Price (\$2018/dth)	Basis	Price (\$2017/dth)	Price (\$2018/dth)
AECO	2.24	2.37	Stanfield	2.72	2.85
Malin	2.80	2.93	Sumas	2.50	2.69
Spokane	2.88	3.02	Henry Hub	2.92	3.01
Rockies	2.71	2.82	S. Calif.	2.92	3.11

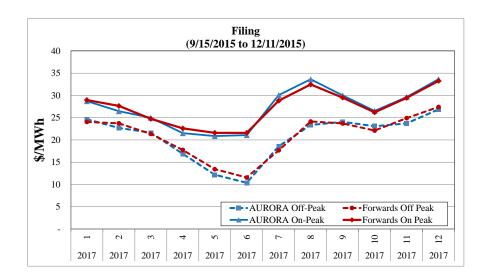
POWER COST UPDATE -- Natural Gas Prices from 7/20/2016 to 10/19/2016

Basis	Price (\$2017/dth)	Price (\$2018/dth)	Basis	Price (\$2017/dth)	Price (\$2018/dth)
AECO	2.23	2.19	Stanfield	2.94	2.77
Malin	3.02	2.85	Sumas	2.76	2.61
Spokane	3.10	2.93	Henry Hub	3.15	2.99
Rockies	2.95	2.78	S. Calif.	3.16	2.99

Consistent with Avista's original filing, as well as prior power cost updates, adjustments were made to AURORA's regional hydro and load assumptions so that electric market prices from the 80 year AURORA study are aligned with current forward market pricing.³ The two charts below show the forward pricing and the resulting prices from AURORA for: 1) the power cost update included in this response, and 2) Avista's original filing for calendar year 2017.



³ These adjustments for this power cost update can be found in the AURORA files (provided with this response) by reviewing the "Change Sets" functionality in the AURORA model.



This power cost update includes four power supply studies (AURORA model runs) as identified below. Due to the voluminous and electronic nature of each study, electronic copies only have been provided with this response. The parameters for each of the studies can be found in the AURORA files by reviewing the "Change Sets" functionality in the AURORA model:

- Confidential Attachment C 2017 Historical Load
- Confidential Attachment D 2017 Pro forma Load
- Confidential Attachment E 2018 Historical Load (used for Jan-Jun 2018 period)
- Confidential Attachment F 2018 Pro forma Load (used for Jan-Jun 2018 period)

New short-term electric and natural gas contracts incorporated in this power cost update are identified in Attachment A, page 1, and have been incorporated in the same manner as power cost updates in prior general rate cases. Updates to "power and transmission service contracts" are shown on lines 1 through 12 of Attachment A, page 1.

Pro Forma/Cross Check Adjustment - See Attachment A

Per Bench Request 10.4, Attachment A provides information and workpapers supporting Electric Adjustment 3.00 Pro Forma Power Supply, including amounts aggregated by FERC account and subaccount (i.e., Account 555 Purchased Power, Subaccount WNP-3) adjusted for November 1, 2016 power cost update.

Attachment A:

<u>Page 1</u> (Power Supply Update detail recap) – provides a detailed recap of 2017 and 2018 changes in short-term electric and natural gas contracts, impact of gas prices on a system basis, and changes in Transmission Wheeling Revenue contracts (FERC acct 456), consistent with prior power supply updates, as noted above. The net change of updating net power supply (expenses and transmission revenues) is a <u>system</u> reduction to net expense of \$715,000 (\$469,000 WA share). The table below summarizes the change in Washington net expense and pro forma revenue requirement.

2017 Pro Forma Power Supply/Tra	Revenue		
	System	WA Share (65.63%	6) Requirement
Power Supply Net Expense	\$679	\$446	\$468
Transmission Revenues (456)	-\$1,394	-\$915	-\$960
Net Power Supply Update		-\$469	-\$493
			-

<u>Page 2-5</u> – (PF 3.00 Power Supply adjustment and workpapers) – page 2 provides the Revised PF 3.00 Adjustment, which replaces Adj. 3.00 provided in Company rebuttal Exhibit No. JSS-5, page 4, column 3.00.⁴ The net impact of this adjustment increases power supply expense \$446,000 (WA share). Page 3 shows the system and Washington impact of updating 3.00. Pages 4-5 provide the system power supply expense detail, including amounts aggregated by FERC account and subaccount.

<u>Page 6-7</u> (PF 3.01 Transmission adjustment and workpapers) – page 6 provides the Revised PF 3.01 Adjustment, which replaces Adj. 3.01 provided in Company rebuttal Exhibit No. JSS-5, page 4, column 3.01. This update adjusts FERC Acct 456 (Other electric Revenue), consistent with prior power supply updates. The net impact of this adjustment increases revenues (<u>reducing overall net expense</u>) \$915,000 (WA share). Page 7 provides system transmission revenues and expense detail, including amounts aggregated by FERC account and subaccount.

Page 8-9 (Proposed ERM Authorized Expenses for 2017 and 2018 – provides the proposed authorized ERM base expense, revenues, retail sales and retail revenue credit rate for calendar 2017 and Jan 2018 – Jun 2018 rate periods.

2017 and 2018 Electric Attrition Studies - See Attachment B

Included as Attachment B are revised electric 2017 and 2018 Attrition models showing the impact of the November Power Supply update. The table below summarizes the overall revenue requirement impact:⁵

Overall Revenue Requirement Impact of Power Supply U	odate:		
	Total (18 months)	2017	2018
Rebuttal Revenue Requirement	\$50,586	\$40,101	\$10,485
Revised Including November Power Supply Update	\$48,678	\$39,772	\$8,906
Overall Net Reduction due to November Power Supply Update (2)	(\$1,908)	(\$329)	(\$1,579)

(Revenue requirement impact will vary from the impact shown in the Pro Forma adjustment noted above as the attrition models include the impact of using forecasted (2017) loads.)

Attachment B:

<u>Pages 1-16</u> – provides Revised Exhibit No. EMA-7 (2017 electric Attrition model) including the impact of the November power supply update for 2017. Pages 14-16 provide the power supply update amounts included in the 2017 attrition model, both using test period and forecasted loads.

⁴ PF Power Supply Adjustment 3.00 was updated by Avista on rebuttal to include the updated Production/Transmission (P/T) ratio of 65.63%, it was otherwise identical to that provided on direct. Use of the updated P/T ratio is also consistent with that used by WUTC Staff.

⁵ In its Post Hearing Brief at Page 1, footnote 3, Avista noted that its updated electric revenue need for the six-month period January to June 2018 of \$10.5 million was reduced to \$9.0 million. Therefore, Avista's revised request for rate relief for the first six months of 2018 was \$9.0 million. This has changed to \$8.9 million, as a result of this revised update to power supply costs.

<u>Pages 17-32</u> – provide Revised Exhibit No. EMA-9 (2018 electric Attrition model) including the impact of the November power supply update for the period Jul 2017-Jun 2018. Pages 30-32 provide the power supply update amounts included in the 2018 attrition model, both using test period and forecasted loads. <u>Pages 33-40</u> – provide the detail power supply system adjustments (2017 PS Adj, Historical Loads; 2017 PS Adj, Forecasted Loads; Jul 2017-Jun 2018 PS Adj, Historical Loads; Jul 2017-Jun 2018 PS Adj, Forecasted Loads).

Attachment G (non-confidential) – provide electronic (native) workpapers supporting the information described above.

Attachment H (Confidential) – provide confidential electronic (native) workpapers supporting the information described above.