

**Exh. CRM-4
Dockets UE-170485/UG-170486
Witness: Chris R. McGuire**

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

**AVISTA CORPORATION d/b/a
AVISTA UTILITIES,**

Respondent.

**DOCKETS UE-170485 and
UG-170486 (*Consolidated*)**

**EXHIBIT TO
TESTIMONY OF**

Chris R. McGuire

**STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

Avista Response to UTC Staff Data Request No. 98

October 27, 2017

**AVISTA CORP.
RESPONSE TO REQUEST FOR INFORMATION**

JURISDICTION:	WASHINGTON	DATE PREPARED:	08/31/2017
CASE NO.:	UE-170485 & UG-170486	WITNESS:	Mark Thies
REQUESTER:	UTC Staff	RESPONDER:	Jason Lang
TYPE:	Data Request	DEPT:	Finance
REQUEST NO.:	Staff - 098	TELEPHONE:	(509) 495-2930
		EMAIL:	jason.lang@avistacorp.com

REQUEST:

Please provide a description of how the Interest Rate Risk Management Plan was utilized in connection with the 3.54% Series of debt issued on December 15, 2016.

RESPONSE:

The interest rate hedges were executed in accordance with our Interest Rate Risk Mitigation Plan. The Company's Interest Rate Risk Management Plan is designed to reduce uncertainty of the effective interest cost of future debt issuances. The plan provides guidelines for hedging a portion of interest rate risk with financial derivative instruments.

The interest rate risk management plan provides that hedge transactions are executed solely to reduce interest rate uncertainty on future debt that is included in the Company's five-year forecast. The hedge transactions do not involve speculation about the movement of future interest rates.

Under the Company's interest rate hedging program, Avista "averages in" the cost of an upcoming debt issuance by entering into multiple swaps over a period of time (through hedge windows). The hedges are essentially a surrogate for pricing and issuing debt in each of the windows over time. For example, for the December 2016 debt issuance of \$175 million, the first hedge was entered into on April 5, 2013. At that time, interest rates (excluding the "spread" related to Avista's credit risk) was 3.2%. Avista entered into a swap for \$20 million at a fixed rate of 3.2%.

At the time Avista priced the full \$175 million in August 2016, the comparable rate was 1.77%. From April 2013 to August 2016, interest rates decreased. This decrease in interest rates represents a benefit, and is reflected in the coupon rate of the debt issued in December 2016 (the \$175 million was priced in August 2016, and issued in December 2016). This benefit, however, is offset by the cost associated with the swap that was executed in April 2013.

If Avista had "averaged in" the cost of the \$175 million debt by actually pricing and issuing debt during each of the seven hedge windows, the overall cost of the \$175 million debt would be the same as it is today, including the cost of the swaps. The benefit from the decrease in interest rates is offset by the cost of the swaps. A spreadsheet illustrating these costs and benefits is provided in Staff_DR_098 Attachment A.

The goal of the Company's Interest Rate Risk Management Plan is to reduce cash flow volatility related to future interest rate variability (associated with forecasted debt issuances). The plan reduces interest rate risk associated with the single future date that the forecasted debt is expected to be priced by entering

into fixed rate contracts on different dates over the period leading up to the issuance. The fixed rate contracts are entered into based on the guidelines in the Plan.

In summary, the contracts entered into, related to the 2016 debt issuance, can be viewed the same as issuing debt on seven different dates. Utilizing the swaps allows the Company to lock in interest rates for customers over a period of time without having to make interest payments until the contract is settled. The total interest expense reflects the cost of issuing debt based upon a blended rate of each contract. In addition, use of swaps rather than issuing debt on seven different occasions, reduces the overall issuance cost of the final debt issuance.

Staff_DR_098 Attachment B, shows how the seven interest rate hedges executed, related to the 2016 debt issuance, protected customers from the risk of interest rate variability. It shows the potential cost to customers associated with interest rates moving higher based upon a statistical analysis of the interest rate volatility. The statistical analysis also demonstrates the potential benefit related to interest rates moving lower. The charts illustrate the asymmetrical risk that was inherent in the market at the time each swap was transacted.

The analysis calculates the volatility present in the interest rate market at the time each of the seven hedges were executed, and the potential risk of interest rates moving higher (VaRC) and the potential risk of interest rates moving lower (VaRL) that existed for each executed interest rate hedge (based on historical interest rate volatility and calculated at a 98% confidence factor). The VaRC is the maximum amount of interest payments avoided if the interest rates increased above the swap rate. The VaRL is the maximum amount that would be paid if interest rates declined below the swap rate. Both are based on a 98% confidence factor.

Chart 1 shows the range interest rates could have moved, until settlement, for each interest rate hedge based on the 1-day volatility over the preceding year, time to expiry, and a 98% confidence factor. Chart 2 shows the range based on a present value basis utilizing the same statistical analysis. Based upon the analysis, the potential impact from interest rates moving higher could have resulted in approximately \$72 million of increased interest costs to customers. Entering into these hedges protected customers from this interest rate variability. The main tab is a summary of the analysis for each of the hedges that were executed.

Trade Date	Fixed Swap Rate	Notional Amount	Counterparty	Estimated Benefit
04/05/13	3.20%	\$20,000,000	JP Morgan	\$ 7,244,472
11/08/13	4.32%	\$20,000,000	UBS AG	12,740,009.0
01/15/14	4.33%	\$20,000,000	Wells Fargo	12,776,727.5
04/25/14	3.81%	\$20,000,000	BNY Mellon	10,255,389.9
08/15/14	3.39%	\$15,000,000	Wells Fargo	6,132,841.7
01/09/15	2.66%	\$20,000,000	JP Morgan	4,595,843.7
07/27/16	1.81%	\$10,000,000	Wells Fargo	228,221.9
				\$ 53,973,506

Trade Date	Fixed Swap Rate	Notional Amount	Counterparty	Fixed Payments (A)	Variable Payments (B)	VaRL (C)	VaRC (D)	Volatility	VaRL (C)	VaRC (D)
04/05/13	3.20%	\$20,000,000	JP Morgan	\$ 15,646,981	\$ 8,402,509	\$ 5,919,845	\$ 31,652,756	1.43%	1.21%	6.47%
11/08/13	4.32%	\$20,000,000	UBS AG	21,142,518	8,402,509	9,536,499	36,102,476	1.24%	1.95%	7.37%
01/15/14	4.33%	\$20,000,000	Wells Fargo	21,179,236	8,402,509	10,502,455	32,626,468	1.13%	2.15%	6.66%
04/25/14	3.81%	\$20,000,000	BNY Mellon	18,657,898	8,402,509	9,962,653	28,074,256	0.93%	2.03%	5.73%
08/15/14	3.39%	\$15,000,000	Wells Fargo	12,434,723	6,301,881	6,769,248	19,041,829	1.07%	1.84%	5.19%
01/09/15	2.66%	\$20,000,000	JP Morgan	12,998,352	8,402,509	5,785,121	25,195,398	1.92%	1.18%	5.15%
07/27/16	1.81%	\$10,000,000	Wells Fargo	4,429,476	4,201,254	3,083,499	6,081,342	2.49%	1.26%	2.48%
				\$ 106,489,185	\$ 52,515,679	\$ 51,559,321	\$ 178,774,526			

Notes:

- A - The fixed payment amount based upon the contract
- B - The variable payment amount based upon the contract
- C - Based upon a 98% confidence level the spot price at settlement was not expected to be less than this value
- D - Based upon a 98% confidence level the spot price at settlement was not expected to be greater than this value

Difference between Fixed Payment Amount & VaRL VaRL	Difference between Fixed Payment Amount & VaRC VaRC
54,929,863	72,285,341



