

Natural Gas Hedge Plan Washington Public Utilities Commission

December 14, 2018

Hedging Objectives and Goals

Mission

To provide a diversified portfolio of reliable supply and a level of price certainty in volatile markets.

•Avista cannot predict future market prices, however we use experience, market intelligence, and fundamental market analysis to structure and guide our procurement strategies.

•Avista's goal is to develop a plan that utilizes customer resources (storage and transportation), layers in pricing over time for stability (time averaging), allows discretion to take advantage of pricing opportunities should they arise, and appropriately manages risk.



Oversight and Control

Risk Management Committee



•Comprised of Executive Officers & Sr. Management

- Responsible for the Risk Management Policy
- Provides oversight and guidance on natural gas procurement plan

Strategic Oversight Group

- Cross functional group consisting of:
 - Credit, Electric/Gas Supply, Rates, Resource Accounting, Risk
- Co-develops the Procurement Plan
- Meets regularly

Natural Gas Supply

- Monitors and manages the Procurement Plan on a daily basis
- Leads in the annual Procurement Plan review and modification

Commission Update

- Semi-Annual Update
- New Procurement Plan is communicated semiannually in the fall and spring
- Intra-year changes communicated to staff on an ad-hoc basis



Plan Changes and Performance

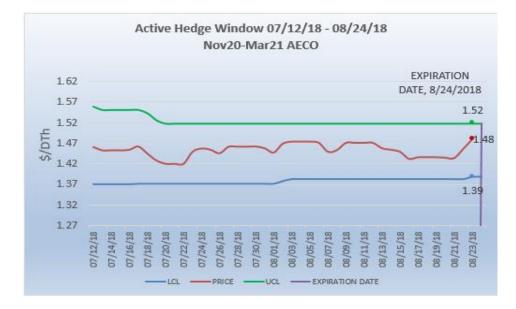
	2017-2018	2018-2019		
Hedge percent of firm LDC	100/	100/		
average load – Dynamic Window Hedge	46%	40%		
Operative Boundary – Risk	\$3.50 up to \$4.50	\$2.76 up to \$3.53		
Responsive Hedging Tool (RRHT)	(program in development and for monitoring only)			
Percent of Portfolio - RRHT	40% up to 70%	20% up to 60%		
	(program in development and for monitoring only)			

Number of Hedges	Total Volume (Dth)	Average Hedge Price (\$/Dth)	Average Daily Cash Price (\$/Dth)	Difference (\$/Dth)	Total Difference	
23	1,745,000	\$1.23	\$1.20	\$0.027	\$47,375	



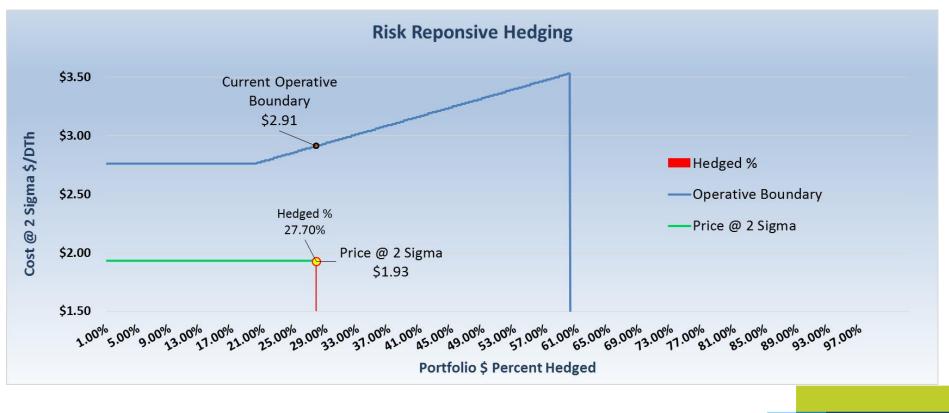
Dynamic Window Hedging

[Phy	sical Positio	ns	Dynamic Window Hedging									
	Load Estimate (DTh/Day)	Completed Hedges (DTh/Day)	Net Position (DTh/Day)	Window Hedging Threshold	Load Hedged (%)	Hedges Left	Set Date	Expire Date	Low Price Trigger (\$/DTh)	Today's Price (\$/DTh)	High Price Trigger (\$/DTh)	Hedge Required (DTh/Day)	Preferred Basin
November-18	-146,612	67,500	-79,112	40%	46%	0							
December-18	-188,306	82,500	-105,806	40%	44%	0							
January-19	-185,510	77,500	-108,010	40%	42%	0							
February-19	-163,647	70,000	-93,647	40%	43%	0							
March-19	-129,735	62,500	-67,235	40%	48%	0							
Apr19-Oct19	-47,220	10,000	-37,220	25%	21%	1	12/08/17	03/01/19	0.86	1.05	1.61		AECO
Nov19-Mar20	-163,902	50,000	-113,902	32%	31%	1	08/21/18	3 10/01/19	1.31	1.60	1.86		AECO
Apr20-Oct20	-47,653	7,500	-40,153	25%	16%	2	09/25/18	8 06/14/19	0.85	1.04	1.31		AECO
Nov20-Mar21	-166,667	17,500	-149,167	32%	10%	15	08/28/18	3 10/18/18	1.48	1.57	1.58		AECO
Apr21-Oct21	-48,316	0	-48,316	25%	0%	5	10/01/18	03/26/19	1.08	1.25	1.45		AECO



Risk Responsive Hedging Tool (RRHT)

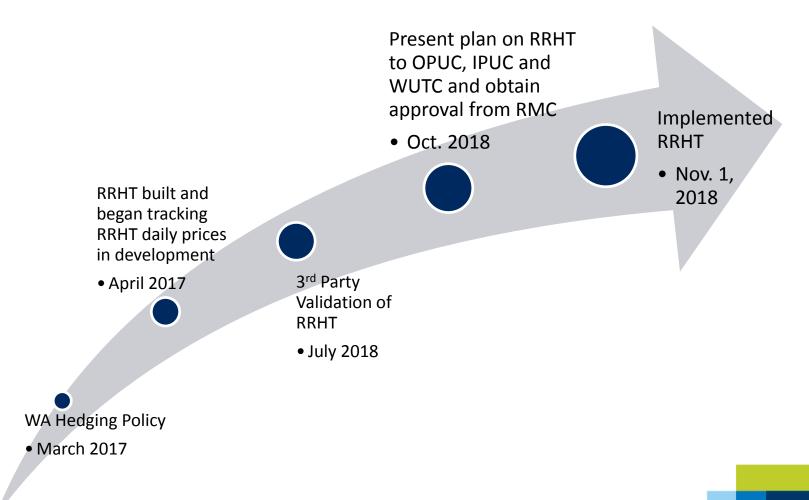
- The Program includes all utility purchase and sales transactions and estimated customer load
- Positions and market volatility are then used to calculate VaR by basin



ANIS

*The RRHT produces a daily Price @ 2 sigma \$/Dth

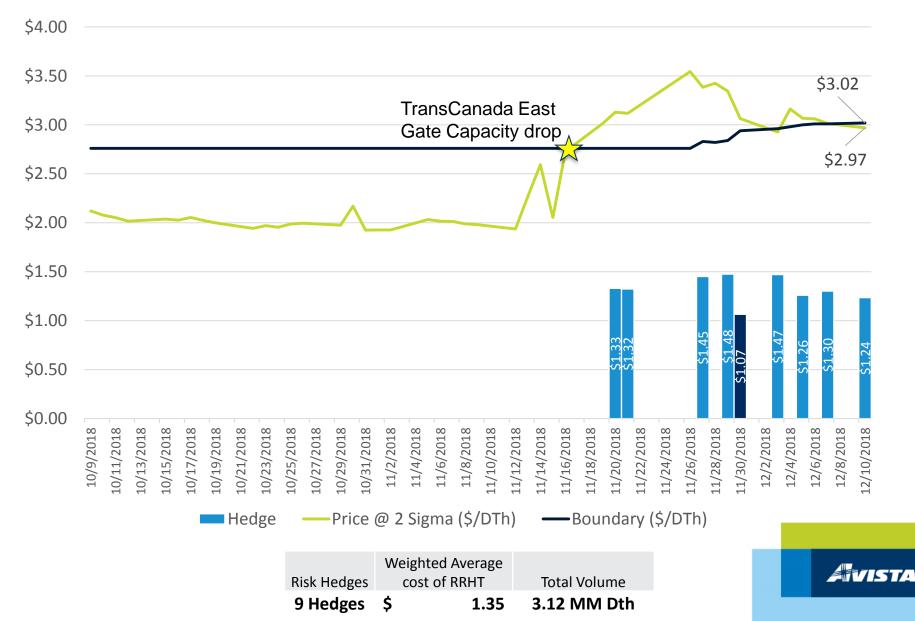
Timeline



7

AVISTA

Winter '18 – '19 Volatile Market to RRHT



8