# Avista Utilities Natural Gas Procurement Plan and Hedging Framework

### I. <u>Background</u>

On October 30, 2013, the Commission opened a Staff Investigation in Docket No. UG-132019 regarding policy issues related to the Washington natural gas utilities' hedging practices and transaction reporting. Staff and Public Counsel co-sponsored a White Paper on natural gas hedging practices written by Michael Gettings of RiskCentrix, LLC. The White Paper provided examples and detailed instruction concerning hedge practices and how to incorporate risk-responsive hedging methods into the overall portfolio. Avista provided comments in this docket and participated in several workshops. In UG-132019, the Commission distributed a <u>"Policy and Interpretive Statement on Local Distribution Companies' Natural Gas Hedging Practices</u>" ("Policy Statement"). This Policy Statement outlines the process each LDC should follow in order to incorporate such risk-responsive hedges into their individual portfolios. In summary, the Policy Statement provided the following guidance:

- We therefore direct each company to submit, as part of the 2017 PGA filing, a
  preliminary hedging plan that outlines the company's intended path to incorporate
  risk-responsive hedging strategies for the upcoming year. This plan should
  articulate the company's hedging objectives and communicate its approach to
  address the basic elements of risk-responsive hedging: objectives and goals,
  exposure quantification, strategic initiatives, and oversight and control.
- When making their 2018 PGAs filings, we require the Companies to submit annual comprehensive hedging plans that demonstrate the integration of risk responsive strategies into the Companies' overall hedging framework. The Commission expects full implementation will take no longer than 30 months.
- As part of the comprehensive annual hedging plan, the Companies should incorporate a retrospective hedging report. This report should provide a narrative of the utility's perspective on the execution of its prior year hedging strategy. Additionally, the report should include a discussion providing insight about whether the metrics and tolerances identified in the previous year's plan continue to be appropriate and how the Company's retrospective evaluation has informed modifications to the forthcoming year's hedging plan.

The information required by the Commission is contained within this report as follows:

	Description	Page
I.	Background	1
II.	Objectives and Goals	2
III.	Oversight and Control	3
IV.	Strategic Initiatives	6
V.	Procurement Plan Components	7
VI.	Hedge Windows	9
VII.	Retrospective Report and Exposure Quantification	13
/III.	Next Steps	15

## II. Objectives and Goals

Avista's foundational purpose/goal of the natural gas procurement plan (Plan) is to provide a diversified portfolio of reliable supply while at the same time managing the volatility and cost of that supply. The Plan, approved by the Risk Management Committee, is a guide for transactions that fulfill the anticipated load requirements for core gas customers. The Plan is disciplined, yet flexible, allowing for modifications due to changing market conditions, demand, resource availability, or other opportunities. Should economic or other factors warrant, any material changes to the Plan are communicated to senior management and Staff.<sup>1</sup> It is not intended to dictate a strict course of action, to limit decisions or replace management judgment. Rather, the intent is to utilize a combination of strategies to acquire natural gas supplies to meet load requirements, while reducing exposure to short-term price and load volatility in a rapidly changing natural gas environment. Market conditions and experience help shape Avista's overall approach to natural gas procurement.

Avista manages the Plan by layering in hedges over a period of time based on average system load per month. Avista does not measure the success of the Plan based on a certain cost or loss risk, rather the plan is considered successful when we have secured firm load at a reasonable price while addressing risk inherent within these markets. The measurable objectives monitored toward this goal include a daily financial position of the overall portfolio, tracking of all new and previously transacted hedges, and the tracking of a percentage of forecasted load as specified in the Plan. A portion of hedges will be

١

<sup>&</sup>lt;sup>1</sup> If discretionary actions are taken outside the approved procurement plan, the Director of Energy Supply will modify the remaining natural gas procurement plan to reflect discretionary actions taken, changes in estimates, or other changes deemed appropriate. When the natural gas hedging plan is modified, the extent and reasons for changes will be fully communicated to the RMC within two business days; such communication may be highlighted and included with the daily position report or it may be done by means of a separate report, memo or presentation.

focused on the concentration risk of fixed-price natural gas purchases and another portion will target reducing risk in a volatile market. This allows Avista to set a risk level to help reduce exposure to variability due to weather, physical and operational limitations and other factors which are out of the Company's control.

Hedge transactions may be executed for a period of one-month through thirty-six months prior to delivery period and are for the Local Distribution Customer (LDC) only. No hedging in this report or the Plan include any hedges for Avista's Power Supply or other entity.<sup>2</sup> Due to Avista's geographic location, transactions may be executed at different supply basins in order reduce our overall portfolio risk.

In addition to hedges, the Company's Plan includes storage utilization and daily/monthly index purchases. It is diversified through time, location, and counterparty in accordance with Risk Management credit terms.

## III. Oversight and Control

The Avista Utilities Energy Resources Risk Policy (Risk Policy) is the governing document for the Plan, containing provisions for risks inherent in supplying energy and managing energy resources. It is the intent of this Risk Policy to recognize and actively manage the interaction and dynamics among these variables by establishing processes for load estimation, resource procurement (including gas storage), and management of the expected Short Term and Immediate Term gas requirements. In addition, it provides authority guidelines and responsibilities and limitations for certain important roles, responsibilities, and processes to manage and control those risks including approved time horizons to hedge, the type of load to hedge and those credit worthy entities approved for trade. The Risk Policy governs Avista Utilities' transactions to purchase and sell natural gas in the wholesale energy market, financial contracts and derivatives (relating to natural gas and fuel), and agreements for use of Avista Utilities' natural gas storage and transportation rights.

The Risk Management Committee (RMC), which includes corporate officers and seniorlevel management, is responsible for oversight of the Risk Policy and associated Natural Gas Plan (which includes hedging). The RMC establishes the Risk Policy and monitors compliance through regular meetings (typically monthly, unless otherwise scheduled) including, but not limited to, hedge activity, discussions on market conditions, and other natural gas-related matters.

The Risk Policy addresses several variables which affect natural gas supply and customer load. It is the intent of the Risk Policy to recognize and actively manage the interaction and dynamics among these variables by establishing a process for load estimation, resource procurement (including natural gas storage), and management of

<sup>&</sup>lt;sup>2</sup> The Company maintains, and carefully tracks, transportation resources and commodity purchases in separate "books" for the Local Distribution Company (addressed in this report) and for the Electric side of the business. The electric side of the business is reviewed for prudence annually through the Energy Recovery Mechanism (ERM).

the expected Short Term and Immediate Term gas requirements. The Risk Policy spells out the following processes:

- Natural Gas Load and Obligations estimation, Natural Gas Resource estimation, and management of associated surplus or deficit.
- Responsibility and approvals for transactions and operating decisions related to natural gas procurement, storage management, transportation, wholesale gas purchases and sales, and scheduling gas resources to meet obligations and proving good stewardship of gas resources.
- Reporting. All changes that affect the Short-Term natural gas position will be reflected each business day in a natural gas position report. This includes status of estimated load and obligations, and estimated system open positions (net surplus or deficit) for each month in upcoming 30-36 months. The position report also includes the current status of the Plan including percent hedged, current open transaction windows, daily prices, and estimated current market value of overall natural gas positions. Due to the voluminous nature of the Position Reports, the Company will make available for review upon request.

The Risk Policy gives the Director of Energy Supply the authority to enter into or direct their staff to execute transactions that mature no more than a set number of months ahead. The Director of Energy Supply may delegate transacting authority to employees in his/her work group by specifying the transaction types and any limitations (such as term and size) that each delegate is authorized to execute. The Director of Energy Supply is responsible for oversight of all Short-Term transactions in their areas. The Vice President of Energy Resources (VP-ER) may authorize transactions that mature no more than 60 months in the future.

The Director of Energy Supply or VP-ER may set more restrictive term limits and may impose transaction value limits for any or all of their employees at any time by communicating to the affected employees. The CEO must approve any transactions for energy resources that are not authorized above before they may be executed.

The VP-ER is responsible to provide information to the RMC so the RMC may review new transaction types and consider relevant risks. Relevant information about the proposed transaction should be presented to the RMC, including:

- Market characteristics
- How it fits within Avista Utilities' operations and strategy
- Risks and procedures to manage risks
- Accounting implications and tax treatment
- Regulatory and legal implications
- Information systems requirements

Avista Utilities conducts natural gas planning, procurement, sales, and gas resource management activities to assure an adequate supply of natural gas to meet customer load and other obligations and to optimize natural gas resources. Several variables affect natural gas supply and customer load. It is the intent of the Risk Policy to recognize and actively manage the interaction and dynamics among these variables by establishing processes for load estimation, resource procurement (including gas storage), and management of the expected Short Term and Immediate Term gas requirements. The Director of Energy Supply is responsible to estimate future natural gas loads and obligations. It is understood that many factors cause actual loads to differ from estimates. Nonetheless, forward load and obligation estimates are a foundation for establishing gas supply requirements. Since Avista Utilities relies on external sources for its gas supply, the forecast of gas resources involves tracking the company's contracts and storage gas. Gas resources may be constrained because of contract terms, delivery constraints or storage withdrawal constraints. The Director of Energy Supply will review the natural gas hedging plan and present any recommended changes for approval by the RMC prior to each gas operating year. Any significant changes in gas resource estimation practices must be communicated to the RMC.

The approved Plan is a guide for transactions that fulfill the anticipated load requirements for core gas customers. The Plan is not intended to dictate a strict course of action, to limit decisions or replace management judgment. If discretionary actions are taken outside the approved Plan, the Director of Energy Supply will modify the remaining Plan to reflect discretionary actions taken, changes in estimates, or other changes deemed appropriate. When the natural gas hedging plan is modified, the extent and reasons for changes will be fully communicated to the RMC within two business days; such communication may be highlighted and included with the daily position report or it may be done by means of a separate report, memo or presentation.

The Director of Energy Supply is responsible for transactions and operating decisions related to natural gas procurement, storage management, transportation, wholesale natural gas purchases and sales, and scheduling gas resources to meet obligations and providing good stewardship of gas resources. Long-Term natural gas supply or resource transactions may be executed with specific prior approval of the VP-ER or Senior Management. Finally, transaction authority as per Exhibit 5 of the Risk Policy applies to all transactions.

In addition to the RMC, the Company also has an internal Strategic Oversight Group (SOG) comprised of natural gas-related stakeholders who provide guidance and input on decisions regarding the Plan through regularly scheduled meetings, typically monthly, which precede RMC meetings. While the overall responsibility lies with the Director of Energy Supply per the Risk Policy, the SOG serves as a reference/sounding board for strategic decisions made by the Energy Supply department regarding procurement of natural gas for Avista's Local Distribution Company (LDC). Examples of input provided to Energy Supply made through SOG collaboration include:

1. Review, discussion, and final recommendation of overall hedge percentages for the Plan.

- 2. Review, discussion, and recommendations of possible mechanisms and analytical methods to manage hedge programs and determine limits.
- 3. Review and discussion of risks to supply and market availability combined with methods to address these risks.
- 4. Reporting, review, and discussion of the status and trending of deferral balances, as well as the management of these balances.

SOG members include representatives from the Energy Supply, Resource Accounting, Regulatory Affairs, Credit Management, and Risk Management departments. SOG meetings are fully documented by the Risk Management Department with all information and decisions fully shared for transparency and accountability. SOG meeting presentations and minutes will be made available upon request. Ultimately, the Director of Energy Supply is responsible for the management of the overall Plan and associated hedge transactions, however, the SOG provides critical input, feedback, and advice. The structure of Avista's Oversight and Control can be seen in Illustration No. 1.



## IV. Strategic Initiatives

Strategic Initiatives are generally defined as the means through which a vision is translated into practice. These initiatives are a group of projects and programs that are outside of the organizations daily operational activities and help an organization achieve a targeted performance.

The two primary roles of the Energy Supply Department is two-fold:

- 1. Serve Load Assure adequate and reliable energy supplies for Avista Utilities natural gas customers.
- 2. Manage Resources Exercise prudent stewardship of Avista Utilities energy supply facilities and related Company resources.

The Plan is the foundational basis for meeting these objectives through the Plan utilizing a combination of fixed-priced hedges<sup>3</sup>, daily balancing transactions and storage injections and withdrawals. Through the use of Hedge Windows, we strive to provide a level of price certainty in volatile commodity markets while reducing exposure to cost risk. In addition to commodity management, we have secured firm natural gas transportation capacity in order to ensure we are able to reliably deliver the commodity to our customers. Should opportunities arise where there is un-utilized capacity on these fixed transportation contracts<sup>4</sup>, the Company will look for opportunities to release capacity to other entities on a short-term basis, or lock in a differential between supply basins when applicable.

Finally, We have secured a level of storage (through ownership at Jackson Prairie) providing Avista with an additional level of firm supply and associated transportation contracts. Jackson Prairie storage provides an additional level of certainty for our customers both as a physical "hedge" as well as financial. The benefits of storage are a secure physical natural gas source to meet peak needs and/or daily balancing needs, capture the benefit of season or month price differentials. For instance, in the Spring when prices may be lower, commodity can be purchased and injected, and withdrawn in the winter when prices may be higher. In addition, we are able to capture the monthly or daily price differentials when economics dictate. In all scenarios, Avista ensures compliance with the fill requirements associated with the facility.

As previously mentioned, Avista is focused on continuous improvement in order to meet the needs of our customers and be good stewards of our resources. As such, our plan is monitored on an ongoing basis, considering evolving market conditions, new supply opportunities, and regulatory conditions in order to meet our established goals.

## V. <u>Procurement Plan Components</u>

The Procurement Plan is intended to provide a framework under which natural gas supply is acquired, but it should not be viewed as an automatic or mechanistic approach to natural gas procurement. It provides a process to fix prices for a portion of the natural gas supply portfolio. Energy Supply surveys the market conditions and fundamental signals

<sup>&</sup>lt;sup>3</sup> Hedges for storage optimization are allocated 90% Washington/Idaho<sup>3</sup> and 10% Oregon, based on the appropriate proportion of retail load for each of our natural gas jurisdictions. This allocation amount was adopted in settlement agreements with all three states in Docket UG-100468 (Washington), Case AVU-G-10-1 (Idaho) and UG-201 (Oregon).

<sup>&</sup>lt;sup>4</sup> Allocation between Washington and Idaho for Commodity purchases and sales is based on actual calendar load for each respective month.

on an ongoing basis to assist in procurement decisions. The Procurement Plan requires Energy Supply to use judgment as market conditions warrant. Material deviations from the plan will be documented in the daily position report or other timely communication and approved by the Director of Energy Supply and the VP-ER. It is formally reviewed no less than annually, with existing results discussed monthly with the SOG and RMC.

The basis for the Plan is the development of the load forecast. This load forecast is developed for each individual area and class of customer by day for each of our major service areas (Klamath Falls, OR; La Grande, OR; Medford, OR; Roseburg, OR; Washington State and Idaho State). The key inputs for the load forecast model are the forecasted number of customers, a set of demand coefficients (Dth consumed per customer per heating degree day) and historical heating degree-days.

For purposes of the Plan, the daily load forecasts are consolidated into average daily volumes for each month for customers in Oregon and for the combined Washington and Idaho jurisdictions. These estimates are adjusted to compensate for pipeline fuel and estimated daily requirements for Interruptible Customers to derive "Average Load".

The Plan is reviewed with senior management and state regulators in the fall of each year, and after Company approval, the plan is implemented. As previously noted, the Plan may be updated throughout the year as market conditions, available resources, and/or changes in demand dictate. Any material mid-year changes in the Plan are communicated and discussed with senior management and regulators.

In order to serve load, and optimize its resources for the benefit of customers, the Company secures/purchases natural gas supply through the transactions and procedures described below:

1. Fixed-Price Purchases: To provide a level of price certainty in volatile natural gas commodity markets, Energy Supply will hedge some of its load with fixed-price transactions, either with fixed-price physical purchases or with financial swaps or financial futures which will be matched to purchases of index-priced physical products prior to the products settlement. These hedges will be structured to diversify procurement in terms of timing of the transaction and duration of committed supplies.

The fixed-price purchases portion of the Plan, or hedges, are triggered through delivery period specific Hedge Windows (described in Section VI of this paper).

2. Storage Injections and Withdrawals: Avista owns and contracts for storage services at Jackson Prairie. Avista has a contractual operational obligation to have its share of Jackson Prairie full by September 30 of each year. Energy Supply retains flexibility in terms of the timing and volume of the injection and withdrawal schedules. Actual storage injections and withdrawals will be executed to optimize the economic value of storage within the reliability constraints of the project and the ability to serve retail customers' peak day needs.

- 3. Index-Based Physical Purchases: Energy Supply generally purchases physical index-based natural gas for up to the difference between the average daily load forecast for each month and the sum of the fixed-price purchases. Energy Supply retains flexibility to modify the components of its purchases in a month due to operational or other reasons. The selected indices may be first-of-month indices or daily-based indices.
- 4. Daily Adjustments Due to Load Variability: To the extent actual loads differ from the average daily load forecast for the month, the difference will be managed through a combination of: a) Daily purchases or sales of natural gas, or b) withdrawals from, or injections into, natural gas storage facilities.
- 5. Use of Derivative Contracts: Subject to limitations in the Energy Resources Risk Policy, Energy Supply may enter into derivative-based contracts intended to reduce or manage exposure to rising prices or fluctuating loads.
- 6. Resource Optimization: Energy Supply may enter into transactions that create value for customers using unutilized supply, transportation or storage assets. Utilization of these resources reduces fixed costs and lowers overall costs to customers.

As described above, The Company secures the fixed-priced portion of our portfolio through delivery period specific Hedge Windows.

## VI. Hedge Windows

Hedges provide the primary by which the Company strives to provide price certainty for customers in volatile markets. As previously noted, the Hedge Strategy is continuously evaluated in order to determine the most optimal method to meet this goal. On September 19, 2022, the RMC approved changes to the Plan. The primary changes are summarized in Table No. 1.

Previous Plan	Current Plan
Two Distinct Windows – Dynamic Window	One Combined Hedge Window.
Hedges and Risk Responsive	Maintaining the Risk Responsive
	component in accordance with
	Commission Guidelines.
Timing: 3 Years into future	Timing: Three years, one month black out
	prior to delivery period

Table No. 1 Comparison in Natural Gas Hedge Plan

While the changes are not significant, there are several benefits, including more current market conditions, math simplification and transparency, less management intervention, and hedges only increase in delivery periods with increasing risk. Exhibit No. 2 provides additional information in the form of a PowerPoint presentation. This presentation was provided to the RMC in September 2022.

Several components are taken into consideration in the development and implementation of Hedges in the Plan. These "Hedge Window" secure a pre-determined, minimum hedge portion for LDC load with fixed priced purchases. These transactions are diversified in terms of time, location and delivery period. The target delivery periods, development, procurement, and execution are described below. Executing hedges through Hedge Windows reduce the <u>cost risk</u> and increase the <u>loss risk</u>.<sup>5</sup>

Hedges are comprised of the following components:

#### Hedge Ratios

A hedge ratio is the proportion of forecasted load which has been hedged or is targeted to be hedged. The Minimum and Maximum Hedge Quantities will be reviewed and established by the Risk Management Committee and monitored for execution under the following criteria:

- a) Hedge transactions up to the Minimum and Maximum Hedge Quantities will be managed by the Hedging Tool.
- b) The Minimum and Maximum Hedge Quantities will be calculated as a percentage of average forecasted load for the month(s) in the Hedging Delivery Period.

#### **Hedging Delivery Periods**

The Table of Hedging Delivery Periods is depicted on the last page of this exhibit. For any given month as the current date (the Hedge Assessment Month in the Table), an assessment of potential hedges would look to the sequential future periods shown in the column below that month. The first five to eleven months are addressed in monthly blocks, depending on the time of year and the rolling nature of the specified gas supply target delivery periods. After these monthly blocks, a minimum of four seasonal blocks are addressed in consecutive November – March and April - October blocks. Additional November – March or April – October blocks are added so that in any given delivery period, there are between 30 and 36 months to be monitored and eligible for hedge. By the time the delivery period is reached, each individual month will have been available for hedging for a full 36 months prior to delivery.

#### Hedge Window Development

A Hedge Window is defined by its Set-Price (SP), an Operative Boundary (OB), a lower control limit (LCL), a Time Trigger (TT)and an expiration date. The SP is the closing price on the first day of the window. The OB and LCL are developed using quantitative mathematics to define boundaries in relation to the SP. The expiration date of each window is determined by the window size necessary to accomplish the hedging targets. Each Hedge Window's SP is based upon the closing price of the selected supply basin for the delivery period. The supply basin for each Hedge Window will be selected from available term markets, based on whichever market has the highest volatility.

<sup>&</sup>lt;sup>5</sup> Loss risk is the <u>potential</u> to pay more than the daily gas price with a forward hedge. Cost risk is the <u>potential</u> for daily prices to rise above the hedge price.

The duration of each Hedge Window for the Hedging Horizon is equal in length. When a window is closed the next window will be opened.

Each delivery period to be hedged includes a Hedging Horizon, which incorporates hedging triggers to determine when hedges will occur. LCL's and TT's are used throughout the entire Hedging Horizon. Risk Responsive triggers are used only during the Risk Responsive Horizon.

Illustration No. 2 depicts the eligibility for Hedge Window components during the hedging horizon (as described in the section above):

Illustration No. 2



#### Hedge Window Triggers

The LCL's and TT's will be in effect if the percent hedged is less than the Minimum Hedge Quantity for the delivery period being hedged. OB's will be in effect if the percent hedged is less than the Maximum Hedge Quantity for the delivery period being hedged. The TT will not be in effect for a given window if another hedge has been transacted during the window. OB's, LCL's and TT's, if in effect, remain static for the duration of the window. All hedging suspends for a blackout period of one month prior to the delivery period.

LCL's are triggered when the current price falls below one of the three LCL's. TT's are triggered when the trading date is greater than or equal to the TT date. OB's are triggered when the price @ n-Sigma rises above one of the three OB's. The price @ n-Sigma uses current price, volatility, confidence level and a holding period to create a Value at Risk metric for each trading day. Illustration No. 3 depicts an example Hedge Window.

#### Illustration No. 3



#### **Hedge Window Procedures and Execution**

A Hedge Window will remain open until the window has reached its time expiration. The Hedge Window's status is examined each trading day to determine if one of the Hedge Window's control limits (OB, LCL, TT) has been triggered. If one of the Hedge Window's control limits is triggered, Energy Supply will transact on the following trading day, or as market liquidity allows.

Illustration No. 4 depicts an example hedge report. This report summarizes many of the components discussed in this report and is used on a daily basis by both Risk Management and Energy Supply.

Illustration No. 4

January 18, 2023																											
		_								Activ	ve Window I	nformation								_							
	Min Maximum									1																	
	i i	Total		Hedge	Hedge	Min	Max	Weig	hted	Mark To	Active			Triggered			Timed			Current							1
	Load	Hedged		Required	Limit	Hedges	Hedges	Avg P	rice	Market	Timed	Active	Active	Hedges	Hedged		Trigger			Price	Operative						
Period	(DTh/Day)	(DTh/Day)	Hedged (%)	(DTh/Day)	(DTh/Day)	Left	Left	(\$/D	Th)	(\$)	Trigger	LCL	OB	(DTh/Day)	(DTh/Day)	Set Date	Date	Exp Date	Market	(\$/DTh)	Indicator	LCL1	LCL2	LCL3	OB1	OB2	OB3
Feb-23	191,760	112,500	58.7%	75,000	115,000	-		\$	2.78	115,115	1																1
Mar-23	141,849	87,500	61.7%	55,000	85,000	-		\$	3.04	(1,007,694)	1																1
Apr-23	95,755	27,500	28.7%	37,500	55,000	- 4	↓ 11	\$	1.77	(154,500)	•	٠	•	-	-	12/20/22	! 2/22/23	2/28/23	SUMAS	2.82	3.93	2.55	2.30	2.14	5.98	6.65	7.14
May-23	55,716	17,500	31.4%	20,000	32,500	1	i 6	\$	2.78	(313,991)	•	•	-	<u> </u>		11/18/22	3/27/23	3/31/23	SUMAS	2.34	3.43	2.23	1.96	1.81	6.12	6.94	7.55
Jun-23	40,280	17,500	43.4%	15,000	22,500	-	2	\$	2.78	(236,213)	1		•	-	-	11/7/22	<u>)</u>	5/1/23	SUMAS	2.49	3.57				6.94	7.94	8.68
Jul-23	31,406	17,500	55.7%	12,500	17,500	-		\$	2.78	(342,318)	1																
Aug-23	32,187	17,500	54.4%	12,500	17,500	-		\$	2.78	(293,454)			-										-		-		
Sep-23	43,056	17,500	40.6%	15,000	25,000	-	3	\$	2.78	(287,438)	1		•	-	2,500	8/11/22	<u>)</u>	2/6/23	AECO	2.06	2.71				5.62	6.29	6.79
Oct-23	94,665	22,500	23.8%	37,500	55,000	e	i 13	\$	2.16	(146,204)	1	•	•	2,500	2,500	11/21/22	<u>)</u>	1/31/23	AECO	2.36	3.02	2.29	2.10	1.98	4.68	5.12	5.43
Nov23-Mar24	184,403	85,000	46.1%	70,000	110,000	-	5	\$	3.57	(6,136,833)			•		-	12/2/27	2	2/16/23	AECO	3.09	3.67				4.94	5.24	5.45
Apr24-Oct24	56,109	20,000	35.6%	20,000	32,500	-	5	\$	2.54	(1,807,544)	1		•	5,000	5,000	9/15/22	<u>)</u>	1/26/23	AECO	2.47	2.90				4.38	4.71	4.94
Nov24-Mar25	186,552	20,000	10.7%	70,000	110,000	10	18 ل	\$	2.74	(573,425)	•	•	•		-	11/16/27	1/25/23	1/31/23	AECO	3.40	3.74	3.12	3.00	2.92	4.58	4.46	4.29
Apr25-Oct25	56,584	2,500	4.4%	22,500	32,500	. 8	3 12	\$	-		•	•			-	11/23/22	2 3/15/23	3/21/23	AECO	2.76		2.34	2.21	2.12			
	1									,	1																
	i i										1																

The entire Hedge Window process is managed through the Plan and ultimately guided by the Risk Policy. The hedges are made by persons approved to transact on the company's behalf for a period of time (also described in Exhibit 5 of the Risk Policy). These persons are knowledgeable in hedging mechanisms, approved hedging types, entities with the proper credit approval, and market dynamics and are considered subject matter experts for Avista in the procurement of natural gas. Guided by the Plan and Risk Policy, they operate within approved limits, methods, and boundaries as directed by the SOG, the Risk Department, and Avista executives through the RMC.

## VII. <u>Retrospective Report and Exposure Quantification</u>

#### Market Overview

Natural gas prices have experienced a great deal of volatility during the 2023 PGA year. In the fall of 2022, the US benchmark Henry Hub market was experiencing the lingering effects of a large upward price move caused by the War in Ukraine and the destruction of the Nord Stream 2 pipeline. By January of 2023, however Henry Hub started to move lower. See Illustration 5. The US storage imbalance had flipped from a deficit to a surplus relative to the 5-year average due to mild temperatures and weak demand in the midwest and eastern US. This trend continued through the winter and resulted in a large storage surplus by the end of winter. Strong production growth combined with average demand nationwide in the spring and summer has maintained the storage surplus and kept Henry Hub prices depressed.

Regionally the situation was much different. Starting in early November and continuing through most of February the western US experienced mostly below average temperatures which drove above average gas for heating demand across the region. The cold coincided with a below average hydro year in the pacific northwest which reduced hydro generation and increased demand for gas fired power generation. The competing components of demand at times drove prices to extreme levels, the highest of which occurred during December of 2022 (see Illustration 5). The cold also resulted in a large regional storage deficit to the 5-year average by the end of winter.

During the spring and early summer in the West, temperatures were mostly mild resulting in below average heating demand. In California, a heavy winter snowpack led to above average hydro generation and reduced demand for gas fired generation. Increased renewable penetration and battery capacity in California also played a role in reduced gas fired gen demand. The lower demand allowed the region to eliminate most of the storage deficit by the end of July. The second half of the summer has been much warmer and demand for power generation has been strong, but the improved storage situation has limited the upside movement in prices.

#### Illustration No. 5



#### **Exposure Reports**

Positions are reported on a daily basis for a forward time horizon of approximately 3 years. Overall financial exposure is quantified volumetrically and in dollars, calculated by valuing the volumetric positions using the associated forward prices. Avista documents all transactions within the daily position report which includes our exposure based on the most recent prices. This report is then distributed to all persons in Energy Supply, Risk Management, Resource Accounting, Credit and our executive leadership for any day the market is open for trading.

#### **Current Portfolio of Hedges**

Avista's portfolio of hedges includes hedges previously executed and labeled DWH (Dynamic Window Hedge), RRH (Risk Responsive Hedge) or LDC Prompt Year Hedges. Hedges executed under the new position report format are labeled TT, (Time Trigger) LCL1,2 (Lower Control Trigger) and OB1,2,3 (Operative Boundary Trigger) as described earlier in this document. This year, OB purchases for prompt winter played a larger role in our procurement plan due to market volatility experienced primarily in July and August of this year. These purchases have resulted in a higher percentage of average winter load being hedged. See Exhibit 1 for Summary and Detail of the current hedges.

## Next Steps

- In response to the significant volatility experienced in the day ahead natural gas price market, the Company has increased its upper control limit to 75% for certain critical periods in the year. This change is concurrent with recommendations made by Mr. Getting's in UG-130219. This change is on a trial basis not to exceed one year at which point, Avista will re-assess to determine if it is appropriate for permanent implementation. Avista will continue to monitor the results of this change and will provide relevant insights to Staff as needed throughout the year through semi-annual updates.
- Continue to carefully monitor the market to watch for fundamental changes in prices or conditions that might warrant changes to the Plan.