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Northwest Natural Gas Company

Washington Annual Hedge Plan
2021-22 PGA

1. Background

The Washington Utilities and Transportation Commission (WUTC) issued a Policy Statement in March 2017 pertaining to its Inquiry into Local Distribution Companies' Natural Gas Hedging Practices. That Policy Statement required the filing of "comprehensive hedging plans that demonstrate the integration of risk responsive strategies into the Companies' overall hedging framework."

Per the Policy Statement, the annual hedging plan filing should include a retrospective hedging report. This report should provide a narrative of the utility's perspective on the execution of its prior year hedging strategy, insights regarding metrics and tolerances identified previously, and how the retrospective evaluation has informed modifications in the current year's plan.

With the completion in 2019 of the specific hedge plan filings required under the Policy Statement, clarification was sought and received from WUTC Staff in early 2020 that these annual hedge plan filings should continue. The only change is that, rather than constituting a separate docket, they now are to be included as part of the annual Purchased Gas Adjustment (PGA) filings.

2. Compliance Items

NW Natural has implemented a risk responsive hedging program for its Washington customers that is consistent with the WUTC's Policy Statement[1]. This program was implemented on April 1, 2019. Since that time, hedge decisions have been, and continue to be, re-evaluated on a weekly basis.

2.a. Objectives and Goals

The objective of NW Natural's risk-responsive hedging program continues to be constraining rate increases while also protecting against hedge losses within specified limits.

[1] WUTC acknowledgement letter dated March 17, 2020, in Docket UG-190725 - Northwest Natural Gas Company 2019 Gas Hedging Plan

NW Natural has selected specific goals that it feels are reasonable and appropriate:

- To protect against upside cost increases, NW Natural has set a goal of mitigating the risk of year-over-year rate increases to customers [redacted]
- To protect against losses incurred by customers during falling markets, NW Natural performs an analysis once per year to determine maximum loss tolerance, designed to rein in losses as tightly as is feasible to prevent alternating purchase/unwind/purchase/unwind transactions during an exceptionally volatile period.

2.b. Exposure Quantification

After the completion of our annual calibration in October 2020 (discussed below), and to be consistent with the goals above, NW Natural set the following limits:

- Period 1 (Nov20 through Aug22)
  [redacted]
- Period 2 (Sep22 through Aug23)
  [redacted]

It should be noted that the Period 2 cost limit is less than Period 1 due to the fact that, at the time of the recalibration, the gas market was projected to decline over time (i.e. backwardation); as Period 2 is benchmarked from Period 1's estimated weighted average cost of gas (WACOG), this decline of the market is reflected in the lower Period 2 goal.

As of August 16, 2021, the company's estimated WACOG is as follows:

- Period 1 (Nov20-Aug22)
  [redacted]
- Period 2 (Sep22-Aug23)
  [redacted]

Please note that these estimates are modeled values based on expected loads and the forward curve; they are not realized results.

2.c. Oversight and Control

The current methodology was back tested with data from the winter of 2018/19, i.e., the period most influenced by the Enbridge pipeline rupture event, to ensure even in extreme circumstances the model produces viable results. The back testing suggested a minimum level of hedges in the range of 20-25% for Period 1. Period 2 hedges are approximately half this value to provide for additional hedges through time.

In October 2020, just prior to the beginning of the PGA gas year effective period, NW Natural performed an annual reset calibration of the model. This recalibration involves updating new periods, and updating boundary conditions for the new periods.

NW Natural continues to employ a front, middle and back office structure around gas procurement and hedging. This structure ensures separation of duties, policy compliance and overall independent review.

2.d. Material Changes to the Hedge Model

NW Natural continuously considers improvement of the model. The model is running as expected and there is currently no plan for making any modifications.

2.e. Risk-responsive Triggers and Programmatic Hedges

The model first triggered at the end of April 2020 during the COVID-19 crisis and the oil price crash, requiring the execution of defensive hedges. The necessary hedges were placed in order to mitigate the risk quantified by the model. The model has triggered eleven (11) times since April 2020 for both rising and falling volatilities and future prices. Both defensive and contingent[2] hedges were placed to mitigate the identified risks.

In addition to defensive and contingent hedges, NW Natural will continue to monitor the need to place programmatic hedges in accordance with its plans to ensure that by the time of the annual reset in October 2021, the newly defined Period 1 (Nov21-Aug23) will have a minimum of 20% of the expected sales volume hedged by financial derivatives, and Period 2 (Sep23-Aug24) will be hedged at a minimum of 10%.

We believe the model is producing results that are consistent with achieving our goals to a 95% level of confidence.

2.f. Execution Strategy

NW Natural will continue to run and execute its risk-responsive hedging model on a weekly basis. Annual re-calibrations will continue each Fall. In addition, any enhancements or material improvements made within the model over the next year will be included in next year’s Annual Hedge Plan.

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[2] Contingent hedges are in response to risk measurements indicating a threat to an interim or final “hedge-loss tolerance.”

3. Retrospective Report

NW Natural has developed the following retrospective assessment to articulate the details and progress of the hedging program.

3.a. Instruments Used to Reduce Exposure to Commodity Markets

In the 2020/2021 PGA year, the following instruments were used by NW Natural to reduce financial exposure to fluctuations of prices in the natural gas markets:

- Financial Swaps – Used to hedge the first-of-the-month index price to a specific price in a specific basin
- Physical Baseload with tied Hedges– Physical purchases that are matched to financial derivatives which contain a small price adjustment, referred to as a basis adjuster.
- Storage – NW Natural uses a combination of underground and LNG storage facilities which, once injected, fixes the price for that gas volume.
- Fixed Price Physical Purchases – A combination instrument that hedges financially while also providing physical delivery. The company occasionally used these instruments in the past but does not expect to enter into any more of these agreements due to restrictions in its accounting systems, with one exception:
  - Mist Production – A very small volume of native gas produced from the Mist field (less than 1% of the portfolio) is part of NW Natural's projected supply portfolio for 2021-2022, but the pricing of these supplies is fixed prior to the filing of the PGA and so acts as a hedge.
- Options (puts and calls either alone or in combination) and other financial instruments – These instruments do not pose an advantage to NW Natural at this time, and we are currently not considering entering into any of these agreements in the immediate future.

3.b. Hedging Program Results

The following table outlines the current results of NW Natural's hedging program for the 2020-2021 PGA year.[3]

NW Natural is providing the results below at the request of the WUTC. We believe these results should not be used to measure the effectiveness of the hedging program. NW Natural believes this hedging program should be evaluated based on its goals of constraining rate increases while also protecting against hedge losses within its specified limits listed above.

[3] Through August 2021.

[redacted]

The hedge gains and losses in the above table did not impact customer deferrals. This is due to the hedge being included within the final WACOG in the 2020-21 PGA filing. The hedging gains were realized by customers by building in the hedged price into WACOG and the resulting settlement prices, on average, being higher than the hedge price. Therefore, customers experienced a lower WACOG over the course of the PGA year due to the hedges placed. If the hedges were not placed into the 2020-21 WACOG, a surcharge would have occurred in the deferral.

3.c. Cost Allocations

NW Natural still has "combined" hedges (hedges intended for both Oregon and Washington customers) from multi-year deals placed before the implementation of the risk responsive hedging plan. These "combined" hedges have been allocated based on forecasted PGA sales volumes. All hedges placed since early 2019 have been state-specific. For simplicity, combined hedges are allocated 10.35% to Washington, and they are classified as a part of our defined programmatic hedge targets. All combined hedges will end by October 31, 2021, thus no combined hedges will be in place for the 2021-2022 PGA year.

3.d. Individual Hedging Transactions included in 2020-21 PGA

[redacted]

3.e. Individual Hedging Transactions included in future PGA's

[redacted]

4. Conclusion

In conclusion, NW Natural continues its hedging plan and has been executing a risk-responsive hedging program since April 1, 2019, in compliance with the Commission’s Policy Statement. We have engaged in continuous improvement in the model and will continue to enhance and improve the model over time as we gain experience and additional insights into risk responsive hedging.