State of North Carolina

North Carolina Utilities Commission
Raleigh

Docket No. G-40, Sub 163

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION:

In the Matter of	)
	)
Application of Frontier Natural Gas	)
Company for Annual Review of	)
Gas Costs Pursuant to G.S. 62-133.4(c)	)
and Commission Rule R1-17(k)(6)	)

DIRECT TESTIMONY

OF

Taylor B. Younger

December 1, 2021

Q. Please state your name, business address, by whom you are employed, and in what capacity.

A. My name is Taylor B. Younger. My business address is 110 PGW Drive, Elkin North Carolina, 28621. I am employed by Frontier Natural Gas Company ("Frontier"), as Regulatory Compliance Engineer.

Q. Mrs. Younger, how long have you been associated with Frontier?

A. I began working with Frontier in August 2017.

Q. Mrs. Younger, what are your current responsibilities with Frontier related to gas supply planning?

A. I am responsible for the management and oversight of natural gas supply planning and purchases for Frontier. Specifically, my responsibilities include oversight of procurement and optimization of pipeline transportation, and supply assets, system demand forecasting, administration of Frontier's hedging plans, state and federal regulatory issues concerning supply and capacity, asset and risk management, and transportation administration.

Q. Mrs. Younger, please summarize your educational and professional background.

A. I am a graduate of North Carolina State University with a B.S. degree in Industrial and Systems Engineering and a minor in Business Administration. I am also currently a student in NC State's Jenkins MBA program, with an anticipated graduation date of December 2022. Since beginning my career at Frontier, I have had the opportunity to attend various training sessions to enhance my professional development. I have obtained certifications focused around leadership, system design and modeling, and pipeline integrity.

Q. In Docket No. G-40, Sub 149 the North Carolina Utilities Commission Ordered "That Frontier and the Public Staff shall work together collaboratively to address future gas purchasing practices by Frontier, including hedging and other price mitigation practices, to reduce or eliminate concerns over customer exposure to potential gas cost volatility while maintaining reasonable up-front charges to customers for the right to call on gas under high demand scenarios." Please summarize the steps taken by Frontier to address this point in the Order.

A. On June 4, 2019, Frontier met with Public Staff and North Carolina Utilities Commission Pipeline Safety Section to discuss Frontier's updated Gas Supply Procurement Policy. The main purpose of this meeting was to share how we plan to utilize our Procurement Policy going forward. After conversations with the Public Staff, Frontier revised the Gas Supply Procurement Policy in April of 2020. The revised Gas Supply Procurement Policy is attached to my testimony as Exhibit A. Under a contract with Marquette Energy Analytics ("Marquette"), Frontier will be provided with an annual report showing a monthly forecast for the upcoming year.

Q. Is the forecast from Marquette used for supply planning?

A. This forecast includes an expected daily average flow and an expected daily maximum flow for each month of the upcoming year. This report provided by Marquette is derived from actual historical usage, historical weather patterns, and projected customer growth. Our supply planning for each review period is based off this forecast as we receive this report each March to help us make hedging decisions for the upcoming winter. To ensure a best cost scenario without speculation, we make 1/6 of our total planned hedge purchase in each month of April to September.

Q. How is the Hedge volume of Z3 purchases determined?

A. Frontier is only able to swing on the portion of our Z3 firm transportation capacity that is firm primary to our City Gate. 3,613 dth of our 8,613 dth capacity is currently delivered on a firm primary basis to our City Gate, with the remaining 5,000 dth, delivered under a firm contract which has a firm primary delivery point south of our City Gate. This means that we will either need to hedge the 5,000 dth for each day of the month or purchase it for the month at a FOM index price.

Q. Are there any changes to the gas supply policy in the current review period?

A. No. Pursuant to Frontier's current policy, Frontier targeted up to sixty percent of the amount to be hedged and purchased the rest at a FOM index price. If the remainder of the 3,613 dth of capacity was needed on top of the total nominated daily gas amount consisting of Z3 hedged gas, Z3 FOM index priced gas, Z5 hedged gas, and Z5 FOM index priced gas, Frontier purchased the gas at the Z3 Daily index price.

Q. How is the Hedge volume of Z5 purchases determined?

A. The minimum quantity of Z5 gas to be Forward Hedged will depend on the expected max day flow for each winter month. Current firm Z3 transportation capacity of 8,613 dth should be subtracted from the expected max day flow to conclude how much Z5 gas should be purchased for that month. It is concluded that up to sixty percent of this amount should be hedged, while the rest of Z5 purchases should be executed at FOM index price. When the estimated peak day requirements for a month indicate that no Zone 5 purchases are anticipated, there will be no required Z5 hedge volume. Z5 Forward Hedged quantity will be reviewed annually and re-established based on changes in system needs. Z5 FOM purchase quantity will be based upon considerations of the current market prices and the most current weather forecast at the time FOM nominations are due.

Q. In Docket No. G-40, Sub 149 the North Carolina Utilities Commission concluded that Frontier should examine options for bolstering its gas supply planning. Please summarize the steps taken by Frontier to address this point in the order.

A. Frontier has made a conscious effort to engage the Hearthstone Utilities Risk and Supply Committee in all aspects of our gas supply planning by providing committee members with not only our weekly usage updates, but also more insight into our hedging plan and purchases. This creates a more collaborative approach to gas supply planning by giving committee members a chance to offer their opinions. Additionally, Frontier has sought to seek outside expertise for all gas supply endeavors by utilizing Hearthstone's gas supply consultants, Al Harms and Len Gilmore. Frontier now includes Mr. Harms and Mr. Gilmore in all internal gas supply planning meetings. These consultants gave insight in revising our Gas Supply Procurement Plan. They also helped guide us through the process of rationalizing and choosing our Gas Supply Asset Manager for the period of April 1, 2020 through March 31, 2023.

Q. It is known that Frontier does not have firm transportation capacity sufficient to cover winter peak days. How did Frontier handle this during the review period?

A. Our current AMA contract with UGI covers us up to 20,000 dth a day. Frontier utilized our current AMA to limit our exposure to the volatile Z5 daily market. For example, in January of 2021, Frontier was covered up to 13,500 daily dths through a combination of forward hedged Z3 and Z5 gas and Z3 and Z5 FOM nominations. The 13,500 dth covered the potential maximum daily use from Marquette while including the potential for marketer imbalances. The goal was to avoid being subject to volatile Z5 Daily pricing.

Q. Are there any proposed changes to Frontier's gas supply planning policy for the upcoming winter period?

A. No, we will treat gas supply planning for the 2021-2022 winter as discussed above.

Q. Does this conclude your testimony?

A. Yes, it does.

EXHIBIT A

Frontier Natural Gas Company

Policy and Practice of:

Gas Supply Procurement

Purpose:

It is the Frontier Natural Gas Company (Frontier) mission to provide safe and reliable natural gas service at a reasonable price to our customers. The purpose of this policy is to provide direction for the procurement of natural gas for resale and to establish financially sound, responsible, and prudent guidelines for the procurement of natural gas from available sources for the operation of the natural gas utility system.

Objective:

The Gas Supply Procurement policy of Frontier seeks supply adequacy, reliability, diversity, and minimization of the associated costs while stabilizing prices. This begins with an accurate estimation of customer usage requirements and a plan to meet them in an efficient manner. This is accomplished through a diligent effort to assess available supply options to meet system and customer requirements in an organized approach.

Regulatory Authority:

Frontier is a natural gas local distribution company and is as a public utility under the laws and regulations of the State of North Carolina pursuant to Chapter 62 of the North Carolina General Statutes. Frontier is also regulated per the rules and regulations set forth by the North Carolina Utilities Commission (Commission).

Policy:

Frontier’s Gas Supply Planning Committee (Committee) has been established and maintained to pursue this objective. External Information evaluated by the Planning Committee will include, but is not limited to, market indicators, seasonal weather forecasts, periodicals and forecasts of natural gas prices, and all available intelligence on the direction of natural gas and pipeline capacity availability and prices.

Each year the Committee will review the natural gas historic sales volumes of bundled customers and forecasts of future load requirements, based on added process and heat load to supply new bundled customers, in a Gas Supply Annual Budget to senior management. The Gas Supply Annual Budget in combination with the gas purchasing practices stated in this Gas Supply Procurement Plan will be referred to as the Annual Plan.

The Annual Plan will estimate the segmented monthly and daily quantity based on the historic loads and the projected additional daily volume added to the system by rate class as well as firm and interruptible customers. Statistical-based forecasts and estimates will be formulated using heating degree days, usage per heating degree day, customer additions or losses and other trends and correlations that appear to drive natural gas consumption. Engineering concerns regarding system pressure during peak periods and the challenges of skewed growth will be addressed in the Annual Plan. The Annual Plan will delineate the estimated supply requirements under a most likely winter scenario as well as a one in 30-years (or heating degree-day equivalent) winter scenario, and thus will project reasonably expectable demand for firm service under North Carolina Utilities Commission Rule R6-23 for adequacy of supply.

To best pair identified supply requirements with available gas supply capacity, Frontier will review estimated monthly, seasonal and peak demand day requirements for full service customers to resources available to meet these requirements. Upstream resources may include peaking and storage services, supplies that are base load, swing, seasonal supply and/or spot purchases. Long-term planning for peak period resources to be considered will include, but not be limited to, air-propane plants, liquefied natural gas (LNG) plants and on-system storage. Per Commission, Rule R6-23 - Adequacy of Supply, there will be an assessment of the production and/or storage capacity of the utility's plant, supplemented by the gas supply regularly available from other sources, to determine if there is sufficient supply to meet all reasonably expectable demands for firm service.

"Suppliers" shall mean any entity which locates, aggregates, produces, purchases, sells, stores and/or transports natural gas or its equivalent to, for or on behalf of Frontier. Suppliers may include, but not be limited to, interstate or intrastate pipeline transmission companies, producers, brokers, marketers, associations, joint ventures, providers of Liquefied Natural Gas, Liquefied Petroleum Gas, Synthetic Natural Gas and other hydrocarbons used as feed stock, other local gas distribution companies and end-users.

In annually evaluating and determining the proper resources to procure for the system, the Company will consider other important factors such as, but not limited to, current supply and capacity portfolio, adequacy, price, security, flexibility and deliverability. In some instances, requests for quotes or requests for proposals may be necessary to acquire price or cost data. In such instances, Frontier will not discriminate against any qualified entity.

The general strategy is to serve current and incremental base load and peak period usage following a best-cost dispatch strategy. Frontier uses a “Best Evaluated Cost” supply strategy to achieve Gas Supply Procurement objectives and goals. This strategy entails seeking adequacy, flexibility, and security/creditworthiness of supplier, reliability/dependability of supply, cost of gas, stability of costs incurred and quality of supplier. The Committee will consider the resources available to accomplish this task. Typically, Frontier compares the price at which it can acquire bundled supply and capacity versus the cost of other alternatives. A determination of what type of resource(s) can be reasonably acquired or developed for meeting the Company's deliverability needs is necessary in deciding whether the Company should acquire pipeline transportation capacity; peaking service; acquire liquefied or compressed natural gas plant (LNG or CNG) and facilities; acquire a propane air plant and facilities; acquire a storage service; develop additional on-system storage deliverability or any other supply options. The Committee will evaluate available alternatives each year for their appropriateness in the context of its long-term strategy, portfolio and Annual Plan, and will produce a gas procurement plan that best meets the Frontier system demand for both capacity and supply.

A reconciliation analysis between the previous year’s approved Annual Plan and actual performance will be provided in the current Annual Plan. The Annual Plan will provide an explanation of significant variations from the approved plan, adherence to policy, and areas in which methods can be improved. The Annual Plan will contain or cite supporting documents for its conclusions and recommendations.

The Annual Plan shall contain an action plan with a time table to implement the Annual Plan recommendations. The Committee head will be responsible to initiate the Annual Plan, its updates and delivery to senior management in a timely manner. Senior management will direct staff to implement the accepted plan and any modifications in a timely manner.

Suppliers will be notified of individuals that can execute instructions and orders on behalf of Frontier. Instructions and orders will be counter-signed by another individual familiar with the Annual Plan. Document or notation will be made at this time if significant deviation from the Annual Plan is instructed or ordered. Suppliers will provide written confirmation of instructions and orders via fax or electronic communication to appointed individuals as documentation.

Supply Contracting Practice

It is Frontier's current practice to employ one supplier to centralize purchasing and reliability of gas deliveries under a full requirements contract called the Asset Management Agreement (AMA). It is Frontier's policy to evaluate this and different strategies and tactics to promote reliability, price stability and cost efficient purchasing in the Annual Plan or as opportunities arise.

The core of Frontier's current strategy is to obtain supply reliability and price stability by fixing components of the gas cost, including fixing commodity costs and/or transportation costs of the commodity for physical delivery to the Company.

Supply Pricing Practice

Frontier has a three part pricing strategy in gas purchasing: 1) Hedging, 2) First of the month and 3) Daily. The objective behind the weighted average approach is to reduce the risk of gas cost volatility by purchasing gas priced at diverse times reflective of market-based gas price indexes. Execution of the Pricing Strategy will be for the purpose of creating a hedge against market volatility, both seasonal and daily, and not for price speculation

Frontier may procure hedges in winter strips (any period within the months of November through March) . During the summer months, Frontier will seek to obtain reliable and stable commodity prices by fixing forward commodity prices for high demand periods. Although these hedges may be purchased at a premium to average supply rates during this period, bundled customers will be insulated from extremely volatile price swings that have been characteristic to Transco Zone 5.

Guidelines for Hedging Quantities:

Frontier will undertake the best alternative to hedge the market area price, using fixed forward hedges, or fixed options based on the regional index price that coincides with Frontier's gas supply agreement in effect at the time. Frontier will obtain periodic price quotes from its firm service provider to best evaluate the condition of the forward natural gas market.

Frontier will employ a dollar-cost averaging technique when buying the forecasted throughput for each forward hedge position. The intent of this approach is to reduce the variability on the purchases made on each hedge position. The quantity of supply to be hedged will depend on the Annual Plan. With the AMA now in place for April 1st 2020 through March 31st, 2023, it has become apparent that because of new balancing rules issued from Williams Transco, Frontier will only be able to swing on the portion of our capacity that is physically delivered to our City Gate. 3,613 dth of our 8,613 dth capacity is currently delivered to our City Gate, with the remaining 5,000 dth delivered south of our City Gate. This means that we will either need to hedge the 5,000 dth for each day of the month or nominate it with FOM nominations. It is concluded that up to sixty percent of this amount will be hedged, with the rest being purchased with FOM nominations.

If the remainder of the 3,613 capacity is needed on top of the total nominated daily gas amount made up of Z3 hedged gas, Z3 FOM nominated gas, Z5 hedged gas, and Z5 FOM nominated gas, it will be priced at Z3 Daily.

The minimum quantity of Z5 gas to be Forward Hedged will depend on the expected max day flow for each winter month. Current firm Z3 transportation capacity of 8,613 dth should be subtracted from the expected max day flow to conclude how much Z5 gas should be purchased for that month. It is concluded that up to sixty percent of this amount should be hedged, while the rest of Z5 purchases should be executed with FOM nominations. When the current estimated peak day requirements for a month indicate that no Zone 5 purchases are anticipated, there will be no required Z5 hedge volume. Z5 Forward Hedged quantity will be reviewed annually and re-established based on changes in system needs. Z5 FOM purchase quantity will be based upon considerations of the current market prices and the most current weather forecast at the time FOM nominations are due.

The quantities established in the Annual Plan for Forward Hedging will be equally divided into 6 parts with one part hedged each month from April to September. Each month's hedge will be entered into between the 10th and 25th of that month.

Schedule of Actions Required before Hedging:

Frontier will follow a schedule of items each year leading up to the beginning of its winter or summer seasons. These time-driven items will constitute a consistent mechanism for Frontier to complete in order to accomplish the stated objectives of the Annual Plan.

• Starting in March, Frontier will reevaluate the Annual Plan by completing its load forecast of anticipated throughput for the next twelve months. Each twelve month period will run from April through March of the following year. The forecast will determine the quantities necessary to secure to meet the requirements of each hedge position.

• Starting in April, Frontier will request various fixed price quotes for the quantities it has designated to hedge over the winter period. All pricing information will be archived and a summary will be reported at each weekly Risk and Supply Meeting to include an assessment of any potential market event that would impact forward market prices.

• During the winter period Frontier will secure the necessary first-of-month ("FOM") or spot purchases necessary to complete the supply pricing strategy for the month.

Any deviation from the Guidelines for Hedging Quantities will be identified and reported to the Gas Supply Policy Committee. The report will identify the variation, the event or events that lead to the variation and an explanation discussing how the variation addressed the events that lead to the variation.