State of North Carolina

North Carolina Utilities Commission
Raleigh

Docket No. G-40, Sub 175

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 YOUNGER

December 1, 2023

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" or "the Company"), as Manager of Compliance and Operations.

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

A. I began working with Frontier in August of 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, supply assets, system demand forecasting, administration of Frontier's hedging activity, state and federal regulatory issues concerning supply and capacity, and asset and risk management.

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 also received my Master of Business Administration degree in December of 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 on leadership, system design and modeling, and pipeline integrity.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to provide information establishing the prudence of Frontier's gas purchasing policies and practices during the review period for this proceeding

Q. Do you have any exhibits to your direct testimony?

A. Yes, attached to this testimony is Exhibit_(TBY-1), which is Frontier's current policy and practice for gas procurement last updated in April of 2023 ("Procurement Plan").

Q. Was this exhibit prepared by you or under your direction?

A. Yes.

Q. What is the Review Period under consideration in this docket?

A. As established by Commission Rule R1-17, the review period for this proceeding is the 12 months ended September 30, 2023 ("Review Period").

Q. Please describe Frontier's customer base.

A. Frontier serves approximately 4,950 customers in Ashe, Surry, Warren, Watauga, Wilkes, and Yadkin Counties. Of these customers, approximately 2,911 customers are served pursuant to Frontier's firm residential rate schedule, 1,815 are firm commercial customers, 189 are firm agriculture customers, and 35 are industrial customers (with 31 of these being industrial transportation customers). In terms of system throughput, approximately 25% of delivered volumes for the Review Period were for firm sales service and approximately 75% were for interruptible transportation service.

Q. Please describe how Frontier calculates its need for upstream supply and capacity.

A. Frontier, on average, used 6,454 dth/day in the coldest months of December 2022 and January and February of 2023. Frontier has firm interstate pipeline capacity rights that cover demand up to 8,613 dth/day. On most days of the year, this baseload interstate capacity is sufficient to meet customer demand.

Q. Does Frontier utilize any kind of peak day analysis to determine its customers' needs on days where usage is above average?

A. Yes, a peak day analysis provided by Marquette Energy Analytics LLC ("Marquette") is used to determine peak demand requirements for Frontier's firm customer load. Marquette is a well-known organization with established expertise in peak day calculations for natural gas local distribution companies. For the Review Period, Marquette projected peak daily usage for Frontier of 12,065 dth/day during January of 2023. Marquette projects peak day usage of 13,110 dth/day during January of 2024.

Q. What arrangements did Frontier have in place during the Review Period to meet its firm customers' peak day demand?

A. In April of 2022, Frontier began to follow its Procurement Plan to hedge gas supply for the winter months of the Review Period in six equal installments. The Company completed two rounds of the six rounds of hedges anticipated by its Procurement Plan in April and May of 2022, but hedge prices at that time were at an all-time high compared to historical prices. For example, the price paid in May of 2022 for January 2023 gas was $20.251/dth. Because of the unusual and unprecedented industry activities involving natural gas pricing, Frontier determined that it was not in its customers' best interest to continue to follow its Procurement Plan with regard to future hedging activity. The Company met with the Public Staff -- North Carolina Utility Commission ("Public Staff") on June 22, 2022 to discuss alternative options for procuring gas supply for the upcoming winter. This meeting contributed to a Company decision to utilize a peaking plan which allowed for up to 24,000 dth of coverage on 12 days between January and February of 2023. Frontier had the ability to call on up to 2,000 dth daily on any of those 12 days. The 24,000 dth was purchased as needed at Transco Zone 4 ("Z4") daily pricing, as Z4 pricing was historically less volatile and would lead to customer savings over physically hedging Transco Zone 5 ("Z5") gas. Frontier's daily nominations, which are a combination of physical hedges and first of the month ("FOM") priced gas, still offer coverage to the expected average, with swing gas available for Transco Zone 3 ("Z3") daily purchases, providing Frontier sufficient coverage for most days. In fact, using the covered dth amounts in Table 1 row 26 below, Frontier had available sufficient coverage for 97% of days in January and February prior to the Review Period. Because weather is unpredictable, Frontier insured that peaking gas was available if needed in January and February to meet projected peak demand. Frontier resumed physically hedging gas in October and November of 2022 to ensure coverage as it relates to the Marquette expected peak for each winter month. Please see Table 1 below.

Table 1

[BEGIN CONFIDENTIAL]

	A	B	C	D	E	F
1						
2		Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
3	Marquette Expected Peak	[redacted]				
5	Marquette Expected Avg					
18	Noms for Month:					
19	Hedged Z3					
20	Hedged Z5					
21	Added Nom Z3 FOM					
22	Added Nom Z5 FOM					
23	Expected Nom (Hedge Included)					
24	Flex Amount Z3 Daily					
25	% Hedged					
26	Covered Up To					
27	Peak Additional					
28	Covered Up To w/ Peak Additional (Meaning No Z5 Daily Purchases)					
38	Ultimate Daily Coverage with Gas South Contract					

[END CONFIDENTIAL]

Q. What does hedging mean in the context of this testimony?

A. Frontier locks in, or hedges, gas prices for the winter months in advance for *physical* delivery of that gas to the City Gate. Thus, Frontier did not participate in any purely *financial* hedges with respect to its gas supplies during the Review Period.

Q. Was Frontier able to meet its firm customers' needs during the winter of 2022/2023?

A. Yes. Frontier continuously met its firm customers' demands for gas throughout the 2022/2023 winter heating season, without curtailment or interruption of any firm customers.

Q. What arrangements does Frontier have in place to meet its firm customers' peak day demand for the 2023/2024 winter heating season?

A. With natural gas prices coming back down to historical averages, Frontier resumed application of its Procurement Plan to purchase physical hedges in six equal installments April through September 2023 to cover the winter period of November 2023 through March 2024. Table 2 below shows Frontier's planned physical hedges and FOM purchases as well as a Z3 daily swing amount. Expected daily nominations (row 24) should cover the Marquette Expected Average (row 5) without Frontier being issued operational flow orders ("OFO") by Transco. In the past few years, Frontier has witnessed OFO penalties being assessed to other parties for being too far over or under their daily nominations. For this reason, as reflected on row 27 below, Frontier is nearly covered up to the Marquette Expected Peak (row 3). Frontier will closely monitor daily weather forecasts during the upcoming winter and make intraday Z5 purchases if it is anticipated that Frontier may be over its coverage amounts in row 27.

REDACTED

Table 2

[BEGIN CONFIDENTIAL]

	A	B	C	D	E	F
1						
2		Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
3	Marquette Expected Peak	[redacted]				
5	Marquette Expected Avg					
19	Noms for Month:					
20	Hedged Z3					
21	Hedged Z5					
22	Added Nom Z3 FOM					
23	Added Nom Z5 FOM					
24	Expected Nom (Hedge Included)					
25	Flex Amount Z3 Daily					
26	% Hedged					
27	Covered Up To (Meaning No Z5 Daily Purchases)					
29	Ultimate Daily Coverage with Gas South Contract					

[END CONFIDENTIAL]

Q. Will these arrangements be sufficient to provide firm service to Frontier's firm sales customers on an uninterrupted basis during the upcoming winter heating season?

A. Yes. Frontier believes that it will be able to continuously meet firm customers' demands for gas throughout the 2023/2024 winter heating season without curtailment or interruption of service.

Q. Please explain the payment arrangements associated with Frontier's 2022/2023 winter supply and capacity assets.

A. As part of Frontier's contract with UGI Corporation ("UGI") beginning April 1, 2020, Frontier paid purchase fees of 1 cent per dth of Z3 gas and 3 cents per dth of Z5 gas.

Q. Are these the same arrangements that Frontier has in place for the winter of 2023/2024?

A. No. Frontier entered into a new asset management arrangement ("AMA") with Gas South in April of 2023 which has more favorable terms than those available under the UGI AMA previously in place. With Gas South, Frontier has no fees associated with Z3 or Z5 purchases. Frontier will also receive a credit against its Transco demand charges of $9,500 dollars per month for potential unused capacity.

Q. In Docket No. G-40, Sub 149 the North Carolina Utilities Commission ("NCUC") 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 the NCUC Pipeline Safety Section to discuss Frontier's Procurement Plan. The main purpose of this meeting was to share how Frontier planned to utilize its Procurement Plan going forward. After conversations with Public Staff, the Procurement Plan was updated in April of 2020. Frontier met with Public Staff again on June 22, 2022 to discuss Frontier's procurement strategies for the upcoming winter. As a result of this meeting, the Procurement Plan was revised slightly in April of 2023 and is the current Procurement Plan that is included in Exhibit_(TBY-1). Further, Marquette will annually provide Frontier a monthly forecast report for the upcoming year to assist Frontier in supply planning.

Q. How 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. The report provided by Marquette is derived from actual historical usage, historical weather patterns, and projected customer growth. Frontier's supply planning for each review period is based on this forecast, as the Company receives this report each March to aid in its physical hedging decisions for the upcoming winter. To ensure a best cost scenario without speculation, Frontier plans to make 1/6 of its total planned physical hedge purchases in each month of April to September to cover projected gas supply purchases for the months of November through March under normal circumstances.

Q. How is the physical hedge volume of Z3 purchases determined under normal circumstances?

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

Q. How is the physical hedge volume of Z5 purchases determined under normal circumstances?

A. The minimum quantity of Z5 gas to be forward hedged will depend on the expected maximum daily flow for each winter month. Current firm Z3 transportation capacity of 8,613 dth should be subtracted from the expected maximum daily 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 Z5 purchases are anticipated, there will be no required Z5 hedge volumes. The 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 NCUC 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 the support of its parent company, Hearthstone Holdings, Inc. d/b/a/ Hope Utilities, Inc. ("Hope Utilities"), to assist in its gas supply functions, which currently includes daily gas supply tracking activities for Frontier. Frontier expects that Hope Utilities' gas supply group, led by Jeff Nehr, Senior Vice President Corporate Development for Frontier and Hope Utilities, will continue to bolster Frontier's gas supply planning function as prescribed in Docket No. G-40, Sub 149. Utilizing Mr. Nehr's and his team's broad gas supply expertise will provide Frontier with access to resources necessary for successful gas supply procurement and planning.

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. The UGI AMA that was in place during the Review Period and the current AMA with Gas South covers Frontier up to 20,000 dth/day. Frontier utilized the Gas South AMA to limit Frontier's exposure to the volatile Z5 daily market. For example, in January of 2023, Frontier was covered up to 12,148 daily dths through a combination of forward hedged Z3 and Z5 gas, Z3 and Z5 FOM nominations, and the peaking plan discussed above. The 12,148 dth covered the potential maximum daily use from Marquette. The goal was to avoid being subject to volatile Z5 daily pricing.

Q. In your opinion, were Frontier's gas purchasing policies and practices during the Review Period prudent?

A. Yes.

Q. Does that conclude your testimony?

A. Yes, at this time.

Docket No. G-40, Sub 175

EXHIBIT_(TBY-1)

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. 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.

In the event of unprecedented industry pricing, there can be a price floor set forth based on historical averages if the Gas Supply Planning Committee determines this is necessary. If a price floor is set, and the all-in quoted hedge price (NYMEX plus Basis) is equal to or less than historical average, we can forego the 6 equal installments and purchase the full amount for that winter month. If a price floor is set for the hedging season, our floor prices can change during that hedging season of April to September with rationale as to the change. If there is a significant rise or fall in pricing for the natural gas market, our floor prices will be reset based on newly calculated averages.

In the event of unprecedented industry pricing, the Gas Supply Planning Committee may also consider peaking plan options. Frontier will work with our AMA to produce different cost scenarios for modeling to see if this might be a good option for securing enough gas to cover us for the upcoming winter.

Under normal circumstances, Frontier would like to stick to our procurement plan of hedging 6 equal installments from April to September, but, if we must modify our procurement strategies because of unusual or unprecedented industry activities, the NC Public Staff will be consulted.

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. There will be discussion 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 Planning 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.