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December 3, 2018

VIA ELECTRONIC FILING

Ms. M. Lynn Jarvis
Chief Clerk
North Carolina Utilities Commission
430 N. Salisbury Street, Dobbs Building
Raleigh, North Carolina 27603

Re: Docket No. G-40, Sub 149

Dear Ms. Jarvis:

Pursuant to G. S. § 62-133.4(c) and Commission Rule R1-17(k)(6), I have enclosed the Direct Testimony and Exhibits of Fred A. Steele attesting to the prudence of Frontier Natural Gas Company's ("Frontier") gas purchasing practices and the accuracy of Frontier's gas cost accounting for the twelve month period ended September 30, 2018.

The required fifteen copies of these documents are being sent to the Commission's office via FedEx Overnight.

Thank you for your assistance with this matter. If you have any questions regarding this filing, you may reach me at the number shown above.

Sincerely,

/s/ James H. Jeffries IV
James H. Jeffries IV

JHJ/rkg

Enclosures

cc: Elizabeth Culpepper
Fred Steele
Al Harms

State of North Carolina

North Carolina Utilities Commission
Raleigh

Docket No. G-40, Sub 149

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION:

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

DIRECT TESTIMONY AND EXHIBITS

OF

FRED A. STEELE

December 3, 2018

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

A. My name is Fred A. Steele. My business address is 110 PGW Drive, Elkin North Carolina, North Carolina, 28621. I am employed by Frontier Natural Gas Company ("Frontier"), as President/General Manager.

Q. Mr. Steele, how long have you been associated with Frontier?

A. I began working with Frontier in March 2014.

Q. Mr. Steele, what are your current responsibilities with Frontier?

A. I am responsible for the management and oversight of the natural gas supply group which supports the gas supply and capacity management functions for Frontier. Frontier's gas supply department's specific responsibilities include procurement and optimization of pipeline transportation, storage, and supply assets, system demand forecasting, administration of Frontier's hedging plans, gas cost accounting, state and federal regulatory issues concerning supply and capacity, asset and risk management, and transportation administration.

Q. Mr. Steele, please summarize your educational and professional background.

A. I am a graduate of Ohio University with a degree in accounting. I am a licensed Certified Public Accountant in the State of Ohio. I began working in the oil and gas industry in 1975. Initially I worked as an accountant for an oil and gas exploration and development company. Building upon that experience, I then became the Controller of another oil and gas exploration and development company. Later, I formed and developed an accounting practice primarily serving oil and gas clients. Upon selling the practice in

1986, I became the Chief Financial Officer of an oil and gas exploration and development company and natural gas distribution company. I served in this capacity for ten years. I became the Chief Executive Officer of the company after ten years and then served in that position for an additional thirteen years. The company operated in five states. The company's primary focus was natural gas distribution. Upon sale of the company, I worked as a consultant with clients in the energy industry for almost three years prior to accepting the position with Frontier in March 2014. I became the General Manager of Frontier on September 9, 2014. Over the years I have held various positions of management and oversight related to gas procurement, interstate pipeline and local distribution company scheduling, and preparation of gas accounting information.

Q. Please describe Frontier and its system.

A. Frontier is headquartered in Elkin, North Carolina and is a utility subsidiary of Hearthstone Utilities, Inc. The Frontier natural gas system is physically comprised of approximately 139 miles of transmission line with two Transco take off points located in Warren County and Rowan County. Frontier is engaged in the business of transporting and selling natural gas in North Carolina as a local distribution company, subject to regulation by the North Carolina Utilities Commission. Frontier has transmission and distribution lines that serve customers in Yadkin, Surry, Wilkes, Warren, Watauga, and Ashe Counties. Distribution pipeline construction and the provision of service to existing and additional customers is evaluated on an ongoing basis in all six franchised counties based on the economic feasibility of serving the customer.

Q. Please briefly describe Frontier and the composition of its market.

A. Frontier is a local distribution company primarily engaged in the purchase, transportation, distribution, and sale of natural gas to approximately 3,853 customers in and/or near Wilkesboro, North Wilkesboro, Elkin, Dobson, Mt. Airy, Yadkinville, Hays, Roaring River, Manson, Warrenton, Norlina, Boone, Jefferson, and West Jefferson.

Approximately 69% percent of Frontier's throughput during the review period was comprised of deliveries to industrial or large commercial customers that either purchased natural gas from Frontier or transported gas on Frontier's system. The majority of these customers were and are currently served under interruptible rate schedules. These large customers have the ability to use an alternative fuel other than natural gas (e.g., #2 fuel oil, or propane) and can make the switch to an alternative fuel when its price is less than natural gas. The remainder of Frontier's sales are to residential and small commercial customers served under firm rate schedules. Frontier's primary competition for residential and small commercial customers is electricity, propane, and fuel oil and varies according to geographic area.

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

A. The purpose of my testimony is to demonstrate that all of Frontier's gas costs were prudently incurred during the review period ended September 30, 2018, and therefore meet the requirement for recovery. North Carolina General

Statute § 62-133.4 allows Frontier to track and recover from its customers the cost of natural gas supply and transportation and to adjust customer charges to reflect changes in those costs. Under subsection (c) of the statute, the Commission must conduct an annual review of Frontier's gas costs, comparing Frontier's prudently incurred costs with costs recovered from customers during a twelve month test period. To facilitate this review, Commission Rule R1-17(k)(6) requires Frontier to submit to the Commission, on or before December 1 of each year, certain information for the twelve month test period ended September 30. In addition to my testimony, Frontier is submitting schedules contained in the accompanying exhibits for the purpose of providing the Commission with the data necessary to true-up Frontier's gas costs during the review period. This is Frontier's 20th proceeding under Commission Rule R1-17(k)(6) since we began operations.

Q. Please describe Frontier's gas supply policy.

A. Frontier's system and gas supply procurement policy are designed to serve firm customers reliably on a peak day. Frontier's gas supply procurement policy and mission is to provide safe and reliable service at a reasonable cost 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. The gas supply procurement policy of Frontier seeks supply adequacy, reliability, diversity and minimization of the associated costs. This begins with accurate estimation of the customer usage requirements and how 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. It is Frontier's policy that the gas supply group is established and maintained to pursue this mission. The gas supply group may be comprised of company staff, consultants, industry peers, gas marketers, and from affiliated entities. The information the gas supply group will use includes, but is not limited to, market indicators, seasonal weather forecasts, periodicals and forecast in pricing to gather intelligence on the direction of natural gas and pipeline capacity prices. Frontier's gas supply policy continues to be best described as a best evaluated cost supply strategy. This gas supply strategy is based upon several criteria: operational flexibility, supply security, creditworthiness, reliability of supply, the cost of the gas, and quality of supplier customer service. The foremost criterion for Frontier is the security of gas supply, which refers to the assurance that the supply of gas will be available when needed. This criterion is required for Frontier's firm sales customers, who have no alternate fuel source, due to the daily changes in Frontier's supply requirements caused by the unpredictable nature of weather, and the production levels/operating schedules of Frontier's industrial customers, combined with their abilities to switch to alternate fuels, and the growth of customers during the test period. While Frontier's gas supply agreements have different purchase commitments and swing capabilities (i.e., ability to adjust purchase volumes within the contract volume), the gas supply portfolio as a whole must be capable of handling the seasonal, monthly, daily and hourly changes in Frontier's market requirements. Frontier is still in a growth mode and the variation in bundled load and the need to cover marketer imbalances is important. Frontier understands the necessity of having security of supply to provide reliable, dependable natural gas service and has demonstrated its ability to do so. Frontier's supply strategy and its contracts with its suppliers implementing this strategy have allowed Frontier to accomplish this objective. The other primary criterion is the cost of gas. Frontier is committed to acquiring the most cost effective supplies of natural gas available for its customers while maintaining the necessary operational flexibility, security and reliability to serve their needs.

Q. What are the greatest challenges in the development and implementation of Frontier's gas supply strategy?

A. A significant challenge is to accurately forecast Frontier's gas supply needs. There are several factors that make this difficult. First, Frontier is a growing LDC. The number of customers increased from 3,593 on October 1, 2017 to 3,853 as of September 30, 2018, an increase of approximately 7.2%. Second, Frontier continues to add new customers with undocumented natural gas needs and winter consumption patterns. It is extremely difficult to forecast winter peak load requirements for new industrial/commercial customers that Frontier did not serve the previous winter. Third, most of Frontier's throughput serves large industrial customers, some of whom have alternative fuel supplies. Fourth, large industrial/commercial customers can change procurement strategies and secure their commodity needs from other sources. Fifth, Frontier has a disparity in climate in the territory that is accentuated by the small size of our company, therefore making it difficult to project the load. Frontier has experienced substantial climate variations between the mountains in Boone and the valleys around Yadkinville. We also have a significant residential load in Warren County, with usage characteristics, based on temperature that can vary from those in Surry or Yadkin County. Finally, and perhaps most importantly, is unpredictable, extreme weather patterns. A number of our new customers are poultry hatcheries and grow-out houses, which require fairly constant temperatures for their chickens to survive and thrive. Most of their facilities are not well insulated, and many of them do not have alternative fuels. Many of these poultry operations are family-owned and highly leveraged (i.e. the families rely upon the revenue from the sale of fully-grown chickens to meat processors to pay off their loans procured to cover the expenses to raise the chickens and have enough left over to live off of). Extremely cold ambient temperatures greatly increase the natural gas demand for heating these facilities. All of these factors create additional challenges in predicting needs.

Q. Please describe Frontier's interstate capacity.

A. Frontier has contracted for 8,613 DTH per day of firm capacity on the Transco interstate pipeline. This capacity accesses supply in Transco Zones

3 and 4 with delivery to the Frontier system in Zone 5. The quantities purchased were based on availability, cost, and projected need. Frontier has already outgrown this initial purchased capacity and has had to buy supplemental swing and peaking contracts to offset the additional need. This additional supply is purchased pursuant to an Asset Management Agreement ("AMA") with UGI Energy Services, LLC ("UGI") as described in greater detail below.

Q. What efforts has Frontier undertaken in the past to purchase additional interstate pipeline capacity?

A. In an effort to increase its firm capacity on Transco over the last four years, Frontier has submitted the following bids:

1. Frontier submitted a bid at the maximum rate possible for 1,656 DTHs on June 10, 2014 for a twenty year term but was not awarded that capacity.
2. Frontier submitted a bid at the maximum rate possible for 141 DTHs on September 26, 2014 for a forty-five year term and was awarded that capacity.
3. Frontier submitted a bid at the maximum rate possible for 2,264 DTHs on October 1, 2014 for a forty-five year term but was not awarded that capacity.
4. Frontier submitted a bid at the maximum rate possible for 500 DTHs on November 15, 2014 for a fifty-one year term but was not awarded that capacity.

5. Frontier submitted a bid at the maximum rate possible for 2,337 DTHs on August 19, 2015 for a seventy-eight year term and was awarded the bid.
6. Frontier submitted a bid at the maximum rate possible for 2,663 DTHs on August 18, 2016 for a eighty-seven year term and was awarded the bid. This capacity became available on January 14, 2017, increasing the total capacity held by Frontier to the current total of 8,613 DTHs

Additionally Frontier has sought and continues to seek to partner with other gas companies or municipals attempting to purchase capacity on Transco.

Q. Has there been any significant change to Frontier's gas supply strategy during the test year?

A. No. Frontier is committed to achieving price stability, at a reasonable level, while continuing to provide safe, and reliable natural gas service that is in balance with the requirements of its firm sale customers. Frontier reviewed and implemented policies related to gas planning, system operations and procurement in 2014. Items addressed were Design Day Demand Requirements, Gas Procurement, including Capacity Planning and Resources, and Commodity Planning and Resources, Curtailment Policy and Technical Training. Frontier retained Kan Huston as an independent, unbiased third party consultant which was approved by the Public Staff, to review, critique, and provide comments on these policies. A copy of the Kan Huston 2014 report is attached as Exhibit C to this testimony. This report discusses among other things, peak day forecasts and the determination of contract demand policy. Frontier incorporated the recommendations of Kan Huston and began implementing these policies before September 15, 2014 in anticipation of the upcoming winter season and have continued the implementation of these policies throughout the current test year. We also established appropriate internal controls between the Controller/accounting functions and Frontier's gas purchasing agent and designated a specific, qualified employee responsible for the implementation of these policies. Taylor Younger, an engineer, has been designated as the qualified employee.

Q. Based upon the development of new policies, and the review and evaluation of Frontier's policies, what is Frontier's current practice?

A. Frontier currently contracts with UGI to centralize purchasing and reliability of gas deliveries under a full requirements contract.

The core of Frontier's current strategy is to obtain reliability and price stability by fixing components of the gas cost, including fixing commodity costs and/or transportation costs of the commodity under the terms of the AMA with UGI. Under the terms of the UGI AMA the first 8,613 MMbtu/d of daily requirements is the first through the Transco meter, priced at Zone 3 First of Month (FOM) index if scheduled on a month ahead basis or Zone 3 Daily (GDD) index if scheduled on a day ahead basis. Zone 3 pricing is generally less volatile than Zone 5 pricing.

The UGI AMA further provides for additional daily or monthly gas requirements above the 8,613 up to 20,000 MMbtu/d. If scheduled on a month ahead basist is priced at Zone 5 FOM. Frontier has the additional contractual right under the agreement to purchase all other daily gas supply supply requirements at Zone 5 GDD. This additional supply is available on a no-notice basis, up to 20,000 DTHs/d.

Q. Does this portfolio contribute to Frontier's goal of price stability and supply reliability?

A. Yes. In my opinion Frontier has a diversified gas purchase portfolio priced at a mix of Transco Zone 3 FOM index, Transco Zone 3 GD index, Transco Zone 5 FOM index and Transco Zone 5 GD index. I would note that the published indexes are reflective of the market prices for natural gas. Further, while Frontier is physically located in Transco's Zone 5, the acquisition of Transco Firm Transportation has permitted Frontier to significantly diversify its gas supply purchases, providing the opportunity to stabilize price and increase reliability.

To further stabilize Frontier gas cost we have a gas price hedging strategy. This strategy, depending on market conditions, is approached through three methodologies: 1) Conservative, 2) Moderate, and 3) Aggressive:

1. Conservative: Hedge 0-25% of forecasted volumes when pricing is +/- 10% historical pricing levels for the strip period or for the month.
2. Moderate: Hedge 25-40% of forecasted volumes when pricing is 25% less than historical levels.
3. Aggressive: Hedge 40-75% of forecasted volumes when pricing is 50% less than historical levels.

Q. Please summarize Frontier's efforts to stabilize gas prices.

A. Frontier purchases a diverse basket of gas that can be priced at different physical locations, under different price indexes (FOM and GD) and forward priced gas. The basket of purchases provides price diversity. FOM priced gas provides an effective hedge against daily price volatility.

Q. Does Frontier periodically evaluate suppliers in the marketplace to ensure the most reasonable and prudent terms, conditions and price for its ratepayers?

A. Yes, in June 2014, Frontier issued requests for proposals to four potential natural gas suppliers, including Frontier's supplier at that time. Only two companies responded with proposals for Frontier's consideration. Frontier evaluated the proposals using the criteria of our gas supply policy: flexibility, security/creditworthiness, price, performance/reliability, and quality of supplier customer service. In October 2014, Frontier selected BP Energy Company ("BP") to provide our gas supply needs for the next seventeen months, based on their ability to satisfy these criteria. BP began work as Frontier's new Asset Manager starting November 1, 2014. In January 2016 Frontier issued requests for proposals to four potential natural gas suppliers, including Frontier's supplier at that time. Three companies responded with proposals for Frontier's consideration. Frontier evaluated the proposals using the criteria of our gas supply policy: flexibility, security/creditworthiness, price, performance/reliability, and quality of supplier customer service. In March 2016, Frontier selected UGI to provide our gas supply needs for the next twelve months, based on their ability to satisfy these criteria. UGI began work as Frontier's new Asset Manager starting April 1, 2016. On March 31, 2017 Frontier exercised an option for the renewal of its contract with UGI until March 31, 2020.

Q. Under this approach, does Frontier have the flexibility to meet its market requirements?

A. Yes. The gas supply contracts that Frontier has negotiated, including the current one with UGI, have the flexibility and reliability to meet its market requirements in a secure and cost effective manner. Frontier evaluates and plans to meet all short- and long-term requirements on an ongoing basis.

Q. What actions have been taken by Frontier to accomplish its stated purchasing policy?

A. Frontier has taken the following steps to keep its gas costs as low as reasonably practical while accomplishing its stated policies of maintaining security of supply and delivery flexibility:

(1) Frontier has continued to work with its industrial customers to facilitate the transportation of customer-owned gas. Frontier's transportation service allows these customers to manage their energy supply in a way that ensures that natural gas remains as competitive as possible with alternative fuels and maintains throughput on Frontier's system. This also enables Frontier to focus more on accurately predicting and meeting demand/capacity for its bundled full service customers.

(2) Frontier routinely communicates directly with customers, numerous supply sources, and other industry participants, and actively researches and monitors the industry and gas markets by using a variety of sources, including industry contacts, consultants, industry trade periodicals and the internet.

(3) Frontier has internal discussions when necessary among various senior level personnel concerning gas supply policy and major purchasing decisions.

(4) Frontier evaluates various other capacity and supply options.

(5) Frontier's AMAs during the review period with UGI allowed Frontier to maximize the capabilities of the Transco firm pipeline capacity purchased and manage its supply portfolio in the most cost and operationally effective manner. Frontier continues to adjust its monthly Maximum Daily Quantity ("MDQ") and carefully evaluates forecasted loads prior to each month and makes prudent adjustments to its MDQ.

(6) Frontier's AMA with UGI provides a high degree of operational and supply flexibility.

Q. Did Frontier investigate hedging during the test year and, if so, what were the findings and conclusions?

A. Frontier continually monitors the NYMEX natural gas commodity market and associated hedging developments, trends, activity and costs. Frontier did not engage in financial or forward price hedging activity during the current review period of October 2017 to September 2018. However, as discussed previously, the ability to purchase FOM priced gas and access different purchase locations provides a hedge against gas price volatility. Additionally, Frontier evaluated a peak day proposal from UGI.

Q. Did Frontier mitigate the costs of extra demand capacity?

A. Yes, value is captured through the AMA structure with UGI.

Q. Does Frontier have plans to obtain any additional pipeline capacity in the future?

A. Frontier will evaluate the need to obtain additional capacity on Transco as it becomes available in relationship to its system growth.

Q. Did Frontier have sufficient daily capacity reserved during the months of January and February 2018, during the test period?

A. Yes, Frontier did have sufficient capacity reserved through a combination of its AMA with UGI and its Transco capacity. Frontier was required to buy additional natural gas and utilized its rights under the UGI AMA on the gas daily market to meet customers demand in December, January and February for those quantities of gas purchased over Frontier's firm Transco capacity of 8,613 dth on peak days for Zone 5. Even with the additional peak day purchases Frontier sold gas back to UGI (36,927dth, 54,241 dth, and 109,450 dth for December 2017, and January and February 2018 respectively). The MDQ for the months of December, January, and February were set at the end of the preceding month using the best information available at that time. We believed the monthly MDQs were appropriate, in light of the needs of our customers based on the historical and forecasted information that Frontier reviewed when determining what the MDQ for each of these months should be and in order to ensure security of supply and delivery flexibility. We were particularly cognizant of the potential impact to our poultry grow-out customers.

Q. What is Frontier's uncollected deferred account balance at September 30, 2018?

A. Frontier strategically tries to minimize adjustments in pricing. However, we had to institute an increase in our benchmark city gate delivered cost on April 1, 2018. We anticipate that the current balance owed to Frontier of $330,127 will be moving back toward $0.00 over the winter months.

Q. Did Frontier follow the gas cost accounting procedures prescribed by Rule R1-17(k) for the year ended September 30, 2018?

A. Yes. All accounting was done in accordance with Sections (4) and (5) of Rule R1-17(k) as applied to Frontier in previous Commission prudency review orders. In following Section (5)(c) of the Rule, Frontier is responsible for reporting gas costs and deferred account activity to the Commission and the Public Staff on a monthly basis.

Q. What schedules have you caused to be prepared?

A. The following schedules were prepared under my supervision and are attached to this testimony:

Schedule 1 - Summary of Cost of Gas Expense

Schedule 2 - Summary of Demand and Storage Charges

Schedule 3 - Summary of Commodity Gas Costs

Schedule 4 - Summary of Other cost of Gas Charges (Credits)

Schedule 8 – Summary of Deferred Account Activity

Schedule 10 - Summary of Gas Supply

Schedule 11 – Summary of Natural Gas Hedge Transactions

Q. What activity occurred in the deferred account during the twelve months ended September 30, 2018?

The activity can be summarized as follows:

Beginning balance, October 1, 2017	$	152,846.09
Commodity Cost vs Collections	$	173,005.91
Accrued interest	$	25,961.36
Transport Balancing	$	69,163.70
Adjustments	$	(90,849.91)
Ending balance, September 30, 2018	$	330,127.15

Q. The attached schedules show the gas costs incurred by Frontier and billed to customers during the period October 1, 2017 through September 30, 2018. In your opinion, were all these gas costs prudently incurred?

A. Yes. All of these gas costs were incurred under Frontier's best evaluated cost supply strategy and are the result of reasonable business judgments considering the conditions and information available at the time the gas purchasing decisions were made.

Q. In reviewing the monthly schedules that have been filed throughout the current review period and the attached annual Prudency Review Schedules do you believe that there are any additional adjustments that may be required in the Deferred Account in order for Frontier to recover all of its natural gas costs incurred as of September 30, 2018.

A. No.

Q. Please describe any changes in Frontier's customer mix or customer market profiles that it forecasts for the next ten (10) years and explain how the changes will impact Frontier's gas supply transportation and storage requirements

A. Frontier continues to focus on expanding its system to new customers. The 6" and 10" Steel Transmission (backbone) pipeline system for the Company's franchised area was completed in 2002. Significant PE pipeline construction has occurred since then throughout Frontier's franchised area and will continue wherever economically feasible to extend natural gas service to additional customers. Frontier's market mix will also continue to evolve and change as it matures. Several of Frontier's larger customers have transportation-only service. While service switching has stabilized (because of the relatively low cost of natural gas), fuel switching is still a potential risk if natural gas prices increase relative to alternative fuels. During the test period, natural gas enjoyed a more competitive pricing than alternative fuels.

Over the next five years, the annual forecasted growth is approximately 10.0% annually. Frontier is expecting this rate of growth to remain at this level over the next five years, with an increased focus on residential and small commercial customers. Sales loads are gradually increasing as more people have access to natural gas due to system expansion. Infill customers are slowly converting as current appliances need to be replaced and they become more aware of the benefits and lower prices of natural gas.

Frontier intends to meet its gas supply needs through its current capacity on Transco, and by acquiring additional capacity as it becomes available at reasonable terms, and by buying from wholesale suppliers utilizing an AMA with a third-party wholesale supplier, as needed. Frontier has determined that its current level of purchased capacity is not sufficient for its future, long-term needs -- based on historical winter needs and projected load growth in the future. To supplement Frontier's needs, Frontier purchased an additional 2,337 DTHs of capacity, effective January 1, 2016, and 2,663 DTHs to be effective on January 14, 2017. As Frontier continues to grow, it will look for incremental pipeline capacity on Transco. In addition, Frontier will continue to evaluate storage, LNG, and other opportunities as they arise. Frontier continues to bid on additional pipeline capacity as opportunities present themselves on the Transco system. Frontier evaluates cooperative participation with other companies or municipalities when bidding on the additional capacity, and it plans to meet with other natural gas producers who have purchased capacity on the Transco system –

all in an effort to increase its available capacity to accommodate its anticipated growth and improve reliability.

Q. Please identify the rate schedules and special contracts that the Company uses to determine its peak day demand requirements for planning purposes. Please explain the rationale and basis for each rate schedule or special contract included in the determination of peak day demand requirements.

A. For the peak day demand in January 2018 and the next four (4) winter seasons:

Peak Demand

DTH/Day*	2015	2018	2019	2020	2021	2022
System Forecast	11,845	12,060	15,597	16,774	17,967	19,107
Rate 151 & 161	474	474	474	474	474	474
Rate 121	1,658	1,688	2,183	2,348	2,515	2,675
Rate 111 & 131	8,528	8682	11,230	12,077	12,936	13,757
Rate 101	1,185	1216	1,710	1,875	2,042	2,201
Total	11,845	12,060	15,597	16,774	17,967	19,107

- Review Period (February 2015)

Note: Frontier's peak demand can be impacted by daily imbalances from Transportation Customers anywhere between +/- 10 to 20%. The numbers above do not include the imbalance potential.

CONFIDENITAL Exhibit A shows the projected capacity growth requirements for both special contracts and by rate schedules.

Q. Please provide the base load demand requirements estimated for the review period and forecasted for each of the next four years. Please provide the one-day design peak demand requirements used by the Company for planning purposes for the review period and forecasted for each of the next four winter seasons. The peak demand requirement amounts should set forth the estimated demand for each rate schedule or priority with peak day demand. All assumptions, such as heating degree days, dekatherms per heating degree day, customer growth rates and supporting calculations used to determine the peak day requirement amounts should be provided.

A. CONFIDENTIAL Exhibit B, report on Design Day Study prepared by Dr. Ronald H. Brown, Ph.D utilizing the Marquette University Gas Day, filed confidentially concurrently herewith, shows the projected capacity growth requirements for the 2018-2019 winter. CONFIDENTIAL Exhibit A prepared by Frontier shows the projected capacity growth requirements for the next four years.

In addition Frontier prepares a projected design day demand for its firm customers. This projection is calculated using a historical modeling program prepared by Frontier personal which assumes a 50 heating degree day on a 65 degree Fahrenheit base and uses historical heating degree days to estimate peak-day demand.

Q. Please explain how Frontier determines which type of resource should be acquired or developed for meeting the Company's deliverability needs, and describe the factors evaluated in deciding whether the Company should acquire a storage service, or develop additional on-system storage deliverability.

A. Frontier has historically relied on its gas supplier to provide the commodity and the capacity requirements to deliver its needs. This was an appropriate approach when Frontier was smaller. and and its mix of customers and load was less predictable. Frontier currently has long-term t firm pipeline capacity, but not enough to cover the full winter designed peak day needs. Frontier continues to acquire its own capacity on the Transco System in an effort to reduce reliance upon a third-party gas supplier for its capacity needs. Frontier has addressed the shortage of capacity by buying additional capacity from its wholesale supply contractors, UGI, and on the market.

Frontier acquired a long-term commitment for pipeline capacity to handle the projected gas supply needs for the review period. Frontier's need for additional capacity continues to grow. Over the next five years Frontier is projecting that this need for capacity will continue to increase.

When Frontier initially purchased capacity, Transco had available incremental capacity. This availability, however, did not always align with Frontier's needs to buy the desired increments that strategically correspond with company growth and meet forecasted daily peak day requirements. To more efficiently manage this process, Frontier entered into an AMA to minimize potential stranded gas costs, lower the demand fees, and enable it to meet the supply needs of its growing customer base. During the review period, Frontier's total bundled gas sales were approximately 1,311,894

DTHs, which represents a 29.5% increase from the Prudency Review period ending September 2017. Frontier did not acquire any storage service, or on-system storage capability. During the review period, Frontier's system growth gas sales were approximately 426,967, which represents an 11% increase from the Prudency Review period ending September 2017.

Q. Please describe any significant storage, transmission, and distribution upgrades required for Frontier to fulfill its peak day requirements during the next five years.

A. As discussed above in greater detail, the issue is available capacity on Transco, not infrastructure. At this time, Frontier's system has sufficient infrastructure to handle forecasted gas supply needs for the next five years. Frontier will continue to assess its needs on an ongoing basis.

Q. What action does Frontier request the Commission to take regarding these deferred accounts?

A. Frontier requests that the Commission approve the September 30, 2018 balances and find that the costs incurred by Frontier's gas purchases were prudent during the relevant twelve-month period.

Q. Does that conclude your testimony?

A. Yes, at this time.

Schedule 1

Frontier Natural Gas Company
Docket No. G-40, Sub 149
SUMMARY OF COST OF GAS EXPENSE
For the Twelve Months Ended September 30, 2018
Schedule 1

	ITEM	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
1	NC Demand and Storage Costs Expensed (Sch 2)	$117,369	$108,872	$126,868	$135,889	$127,249	$127,206	$111,108	$109,154	$104,924	$108,846	$107,972	$110,151	$1,395,608
2	NC Commodity Costs Expensed (Sch 3)	297,402	349,760	638,806	1,350,093	601,571	421,036	366,701	158,273	133,505	140,124	179,692	235,032	$4,871,995
3	Other Gas Costs Expensed (Sch 4)	101,531	65,419	(21,945)	(579,001)	(256,932)	83,659	198,435	68,682	89,318	16,412	48,392	31,640	-$154,390
4	Total Cost of Gas Expensed (Sum of L1 - L3)	$516,302	$524,051	$743,729	$906,981	$471,888	$631,901	$676,244	$336,109	$327,747	$265,382	$336,056	$376,823	$6,113,213

Schedule 2

Frontier Natural Gas Company
Docket No. G-40, Sub 149
Demand and Storage Costs Expensed
For the Twelve Months Ended September 30, 2018
Schedule 2

	ITEM	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
	Demand and Storage Charges:													
1	Transco Capacity Charge - Frontier Capacity	$102,220	$98,923	$102,223	$102,220	$92,328	$102,220	$98,772	$102,062	$98,770	$102,062	$102,062	$98,770	$1,202,632
2	Other Capacity Charges	15,149	9,949	24,645	33,669	34,921	24,986	12,336	7,092	6,154	6,784	5,910	11,381	$192,976
3	Peaking Contracts													
4	Total Demand Charges	$117,369	$108,872	$126,868	$135,889	$127,249	$127,206	$111,108	$109,154	$104,924	$108,846	$107,972	$110,151	$1,395,608
5	Storage Charges													
6	Total Demand and Storage Charges Expensed	$117,369	$108,872	$126,868	$135,889	$127,249	$127,206	$111,108	$109,154	$104,924	$108,846	$107,972	$110,151	$1,395,608

Schedule 3

Frontier Natural Gas Company
Docket No. G-40, Sub 149
SUMMARY OF COMMODITY GAS COSTS
For the Twelve Months Ended September 30, 2018
Schedule 3

	ITEM	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
	Commodity Cost at City Gate													
	Supplier #1:													
1	Gas Supply Baseload Purchases	342,798	364,500	567,300	726,248	889,895	525,915	261,360	154,566	135,840	137,175	128,805	252,225	$4,486,627
2	Daily Purchases (Zone 3)	31,101	28,011	51,347	-	-	23,562	116,396	28,553	18,187	29,337	63,738	25,119	415,351
3	Daily Delivered Purchases (Zone 5)			16,133	834,242	1,402	332	13,863						865,972
4	Hedging Purchases													-
5	Other - Sell Back	(76,364)	(51,106)	(77,644)	(264,794)	(296,544)	(138,791)	(31,977)	(26,717)	(27,855)	(17,979)	(11,878)	(29,136)	(1,050,785)
6	Interday Purchases			6,880										$6,880
	Marketer Cash Out	(133)	8,355	74,790	54,397	6,818	10,018	7,059	1,871	7,333	(8,409)	(973)	(13,176)	$147,950
6	Total Commodity Cost Expense	297,402	$349,760	$638,806	$1,350,093	$601,571	$421,036	$366,701	$158,273	$133,505	$140,124	$179,692	$235,032	$4,871,995

Schedule 4

Frontier Natural Gas Company
Docket No. G-40, Sub 149
SUMMARY OF OTHER COST OF GAS CHARGES (CREDITS)
For the Twelve Months Ended September 30, 2018
Schedule 4

	ITEM	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
	Deferred Account Activity													
1	Gas Cost True-up (excluding interest)	(91,020)	62,297	24,979	(546,318)	(162,520)	80,805	190,289	66,567	84,690	21,547	52,290	43,389	(173,005)
2	Transportation Cust Balancing True-up	450	3,300	(46,789)	(34,716)	3,855	4,607	8,148	2,114	7,572	(5,133)	(824)	(11,749)	(69,165)
3	Retro Gas Pricing True-up		-											
	GAS COST ADJUSTMENT	191,961				(98,151)				(2,960)				90,850
4	Miscellaneous Charges (a) Net Cash Out	140	(178)	(135)	2,033	(116)	(1,753)	(2)	1	16	(2)	(3,074)		(3,070)
5	Total Other Cost of Gas	101,531	65,419	(21,945)	(579,001)	(256,932)	83,659	198,435	68,682	89,318	16,412	48,392	31,640	(154,390)

Schedule 8

Frontier Natural Gas Company
Docket No. G-40, Sub 149
Summary of Deferred Account Activity
For the Twelve Months Ended September 30, 2018
Schedule 8

Month	Beginning Balance	Gas Cost True-Up	Adjustments	Transportation Balancing True-Up DB (CR)	Interest	Ending Balance
Oct-17	$152,846.09	91,020.29	(191,960.90)	(449.80)	978.22	$52,433.90
Nov-17	$52,433.90	(62,297.27)		(3,300.26)	335.58	($12,828.05)
Dec-17	($12,828.05)	(24,979.32)		46,789.19	(82.10)	$8,899.72
Jan-18	$8,899.72	546,318.41		34,715.87	56.96	$589,990.96
Feb-18	$589,990.96	162,520.15	98,150.99	(3,854.61)	3,244.95	$850,052.44
Mar-18	$850,052.44	(80,804.63)		(4,607.29)	4,675.28	$769,315.80
Apr-18	$769,315.80	(190,289.12)		(8,148.10)	4,231.23	$575,109.81
May-18	$575,109.81	(66,566.50)		(2,114.35)	3,163.10	$509,592.06
June-18	$509,592.06	(84,689.64)	2,960.00	(7,572.20)	2,802.76	$423,092.98
Jul-18	$423,092.98	(21,546.76)		5,133.00	2,327.01	$409,006.23
Aug-18	$409,006.23	(52,290.21)		823.63	2,249.53	$359,789.18
Sep-18	$359,789.18	(43,389.49)		11,748.62	1,978.84	$330,127.15
TOTALS		$173,005.91	($90,849.91)	$69,163.70	$25,961.36	

ADJUSTMENTS

From December 2014 thru May 2017 we under invoice a Rate Class 161 customer a total of 37,228 dts. The error was discovered in June of 2017 and the customer paid for the 37,228 dts in October of 2017. See Workpaper A of the October 2017 Deferred Account Filing. (191,960.90)

FEBRUARY ADJUSTMENT

Prudency Review Adjustment	$98,159.00
Interest Rate Adjustment for January Change from 7.68% to 6.60%	($8.01)
TOTAL FEBRUARY ADJUSTMENT	**$98,150.99**

JUNE DEFERRED ACCOUNT ADJUSTMENT

MARCH DEFERRED ACCOUNT WORKPAPER A AS ORIGINALLY REPORTED:

1 Actual cost incurred		364,998.88
2 Actual billed (dts)	92,548	
3 Current benchmark	6.00	
4 Gas cost at benchmark		555,288.00
5 Adjustment to deferred gas cost		(190,289.12)

CORRECTED MARCH DEFERRED ACCOUNT WORKPAPER A:

Actual cost incurred		364,998.88
March-April Proration Calculation for Rate Change		
March Actual Billed DTS	1,480	
March Benchmark	$4.000	
Gas Cost at Benchmark		$5,920.00
April Actual Billed DTS	91,068	
April Benchmark	$6.000	
		$546,408.00
Adjustment to deferred gas cost		($187,329.12)
JUNE ADJUSTMENT TO THE DEFERRED ACCOUNT		$2,960.00

Schedule 10

Frontier Natural Gas Company
Docket No. G-40, Sub 149
SUMMARY OF GAS SUPPLY
For the Twelve Months Ended September 30, 2018
Schedule 10

	ITEM	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Total
	Sources of Supply at City Gate: (dts)													
	Supplier #1:													
1	Gas Supply Baseload Purchases	117,800	135,000	186,000	267,003	241,164	201,500	99,000	55,800	48,000	46,500	46,500	88,500	1,532,767
2	Daily Purchases (Zone 3)	10,513	9,001	17,578			8,387	40,825	9,946	6,073	10,204	20,996	8,263	141,786
3	Daily Delivered Purchases (Zone 5)	-	-	1,054	20,316	180	93	4,726	-	-	-	-	-	26,369
4	Hedging Purchases		-	-	-	-	-	-						-
5	Other -Hedge Buy Back	(26,956)	(17,893)	(26,927)	(54,241)	(109,450)	(52,046)	(11,564)	(9,539)	(9,182)	(5,757)	(4,002)	(9,715)	(337,272)
	Intraday Day/Incremental			2,500										2,500
6	Gas Supply Current Period Delivery	101,357	126,108	180,205	233,078	131,894	157,934	132,987	56,207	44,891	50,947	63,494	87,048	1,366,150

Schedule 11

Frontier Natural Gas, LLC
Docket No. G-40, Sub 149
Summary of Natural Gas Hedge Transactions
For the Twelve Months Ended September 30, 2018
Schedule 11

Month	Hedged dts	Actual dts	Projected dts	Percent Hedged	Hedged Cost $/dth 1/	Baseload $/dth 1/	(Savings) Excess $/dth	Hedge (Gain) Loss
Oct-17	-	NO HEDGES		0%			$0.000	$0
Nov-17	-	NO HEDGES		0%			$0.000	$0
Dec-17	-	NO HEDGES		0%			$0.000	$0
Jan-18	-	NO HEDGES		0%			$0.000	$0
Feb-18	-	NO HEDGES		0%			$0.000	$0
Mar-18	-	NO HEDGES		0%			$0.000	$0
Apr-18	-	NO HEDGES		0%			$0.000	$0
May-18	-	NO HEDGES		0%			$0.000	$0
Jun-18	-	NO HEDGES		0%			$0.000	$0
Jul-18	-	NO HEDGES		0%			$0.000	$0
Aug-18	-	NO HEDGES		0%			$0.000	$0
Sep-18	-	NO HEDGES		0%			$0.000	$0
Total	**-**	**-**	**-**					**$0**

EXHIBIT C

Kan Huston Associates

Consultant's Report

To the Management of
Frontier Natural Gas Company LLC
Elkin, North Carolina

Report on the Policy Statements

We have reviewed the accompanying policy statements of Frontier Natural Gas Company LLC (hereinafter referred to as "Company"), as provided in Exhibit A. Kan Huston Associates LLC (hereinafter referred to as "KHA"), an "independent and unbiased third party", was retained to provide "review, critic and comments" (hereinafter referred to as "Review") on the Company's Demand Day, Gas Supply Procurement, Curtailment and Technical Training Policy Statements.

Management's Responsibility for the Policy Statements

Management is responsible for the preparation and fair presentation of these policy statements in accordance with the Stipulation In the Matter of Consideration of Management Performance, Techniques, Personnel, and Operations of Frontier Natural Gas Company, LLC – Docket No. G-40, Sub 124 – before the North Carolina Utility Commission's (hereinafter referred to as "Commission"); dated June 27, 2014.

Management attests that the policy statements contained in Exhibit A are accurate depictions of their policies and practices and are free from material misstatement, whether due to fraud or error.

Consultant's Responsibility

KHA's responsibility is to express an objective opinion on these Policy statements based on our examination of only the statements. We conducted our examination in accordance with generally accepted management principles and standards applicable to a diligence and comprehensive review.

In preparing this Review, KHA has made certain assumptions with respect to conditions that may occur in the future. While we believe these assumptions are reasonable for this Review, they are dependent upon anticipated future events. Actual conditions may differ from those assumed. KHA has drawn upon its utility experience and used policy and practice information provided by other sources. A source of information includes a survey of small municipal natural gas distribution operations in the North Carolina (See Exhibit B - hereinafter referred to as "Survey"). Although the municipal natural gas distribution systems are not regulated by the Commission, they face similar challenges due to their smaller size. The systems do not possess the economies of scale that larger utility systems enjoy. The mode of operation by municipal utility system management may create a standard where a balance is achieved among risk management and control while remaining economically viable.

The examination of Frontier's policy(s) involves comparing the policy and practices to laws and regulations as well as comparison to the policies and practices of other similarly situated entities. The Survey questions selected depended on the consultant's judgment, including the assessment of the risks of material misstatement of policy and practices. The Survey results are taken into account with best practices that KHA has found to be effective at other utilities during our previous utility management engagements.

While we believe the policy statements, information and sources to be reliable, we have not verified the information and offer no assurances with respect to actual practice, accuracy or completeness.

Review

An entity's mission statement(s) is the foundation of its policy as set forth in policy statements. Only when the mission changes or when there is an extraordinary change in environment, conditions or philosophy of the entity does policy change. Thus, policy statements must promote an entity's mission statement. Also, there should be clarity of how the policy will advance a particular aspect of the entity's mission. In turn, objective and goals are the building blocks that must be consistent with and promote the policy.

If an entity finds that it repeatedly updates or revises it policy statement, it could be that the policy statement is too narrowly written with specifics as oppose to bad policy. If the policy statement contains procedures, goals or objective statements rather than policy, this too can lead to continual revisions with an entity's performance.

Policy and Practices for Design Day Demand Requirements

Best Practices

The best practices for design day demand requirements (or peak day) estimation and determination suggest that it is part of a comprehensive econometric forecast and gas supply plan. A written policy should delineate in precise terms the peak day projected quantity to be acquired and is usually stated as a percentage of requirements and/or winter severity (*i.e.,* one-in-fifty year winter), which is pertinent to Commission Rules R6-23. A surplus or safety cushion is usually stated as a percentage that is added to the forecast peak day requirement target for which resources are acquired to meet. Procedures and practices further delineate the details for how the forecast will be constructed and type of model but are not necessarily part of the policy statement. The forecast and plan is compiled by a staff of individuals with training, education and experience in such matters. This minimizes the likelihood of variables being omitted, improves the consistency in forecast assumptions, and factors can be considered in the context of a comprehensive approach. The forecast and plan are approved by committee and submitted to senior management to be ratified and incorporated into budgets.

A gas supply plan and forecast is typically revised and updated each Spring after the heating season. Although the model inputs may be revised intermittently, a formal document is ratified and becomes part of the budget process that occurs each year. A gas supply plan and forecast provides documentation of efforts to implement and follow the policy.

Typically, forecast models estimate the supply and demand components for subset groups separately. These components are then consolidated to form the overall forecast for the total system. For a gas distribution utility, forecasts by rate class or schedule would be the minimum level of detail. To illustrate the need for such detail, gas systems have a variety of different customer usage patterns, sometimes even within an individual rate schedule or class. Econometric models lend themselves to estimating changes in usage patterns due to variety of factors such as improving technology, aging appliances, changing regulation, transforming economy and operational constraints to name a few. In such instances, further detailed estimates within the rate class may be necessary to achieve greater accuracy.

The number of customers and temperature, as measured by heating degree days, are the two most critical forecasting variables for heating load usage. The correlation between heating degree days (hereinafter referred to as "HDD") and residential and commercial heating load usage per HDD per customer is often 90% or greater in the Carolinas. Industrial customers are estimated based on past usage because they are typically non-heating load. Although the usage of interruptible customers is estimated for budgeting and operational reasons, no additional resources are acquired to meet this class of customer's requirements.

In an effort to improve the forecasting model and estimating efforts, best practices suggest that a reconciliation or post-audit analysis is performed the following year to determine accuracy of the forecast versus actual experience. The reconciliation analysis and subsequent changes made to estimating methods is included in the following year's annual gas supply plan.

Survey

Due to the lack of economies of scale, smaller gas systems are constrained by a combination of lack of resources, size and political pressures. The determination of peak day projections and requirements is made informally. Often it is merely made through telephone conversations between one or two individuals within the gas system and their natural gas marketer. The plan of action is implemented immediately and is confirmed in an email. None of the systems perform post-audit or reconciliation analyses that review prior performance.

Natural gas marketers are usually the better and often the sole source of market information and resource intelligence. The great majority of small systems do not have a gas supply committee, written policy or formal procedures regarding estimation of peak day requirements or the amount of contract demand that should be procured. This appears to be due to the nature of service and upstream resources the system has under contract. At present, half of the survey respondents have insufficient upstream resources under contract to meet peak day requirements. Thus, they are forced to test the market at the beginning of the month or during peak periods by acquiring bundled supply and capacity delivered to the city-gate.

This supply strategy is based upon the belief that several years of avoided demand charges will create a savings that surpasses the higher priced bundled supply and capacity delivered to the city-gate during peak periods of demand. Those utilities that have assets to management do project peak day that is in the typical range of usage per HDD per customer protection within our region. For one gas distributor, the system merely overruns its contract, and the overrun quantity becomes their new peak day and contract demand.

Opportunities to acquire additional upstream assets are scarce for most municipal gas systems in North Carolina and are usually brought to the attention of small systems by their natural gas marketer. Since direct capacity from Transco Gas Pipe Line, the sole interstate pipeline in the state, is unavailable at present, third-party capacity is the only feasible option. Thus, most of the effort must come from the gas system to seek out additional upstream resources through request-for-proposals or other means. This requires time and effort by personnel the smaller systems do not have.

Industrial customers wield exceptional bargaining power with small systems. The majority of small systems plan and acquire resources to meet the load of their interruptible customers. These costs are not reflected in the rates charged to these customers due to the political pressure as a large, and sometimes one of the few, employers in the service territory.

Frontier's Policy

The Company's submitted policy statement closely matches the best practice for design day demand requirements or peak day estimation. The Company's Gas Supply Committee will make peak day statistical forecasts as part of a comprehensive gas supply plan. The annual plan forecast will provide monthly and rate class detail using traditional and commonly accepted variables for gas utility forecasting including usage per HDD per customer, number of customers and operational constraints.

The written policy delineates a peak day protection of a one-in-twenty-five year winter. This complies with Commission Rules R6-23. There is a provision to review this in the event of significant changes during the year. The annual plan will be compiled by a gas supply committee and approved by senior management to be implemented before the heating season. The annual plan and post-audit will provide documentation of efforts to implement and follow policy. The documentation of plan deviations will ensure a continued re-visitation of the plan document and will promote adherence to the plan and internal control.

In an effort to improve forecasting and estimating accuracy, a post-audit analysis is performed the following year to determine accuracy of the forecast versus actual experience. This reconciliation analysis, and potential changes to estimating methods, is included in the following year's annual gas supply plan.

The principle concern, as with other small companies, is the lack of expertise in this area. The policy addresses this concern by allowing for individuals outside of the Company to serve on the committee. Per the policy, conflicts of interest by such outside participants must be disclosed. This is a normal concern when using outside personnel. Sophisticated forecasting techniques may not be necessary to achieve accuracy on a smaller system. An experienced person(s) may be able to provide judgment regarding the level of model sophistication.

Recommendation

- We recommend an earnest effort to select individuals with exceptional capabilities and experience to serve on the gas supply committee.
- Review past forecasts and estimates for accuracy. Refine methods and factors used in forecasts and estimates.

Policy and Practices for Gas Supply Procurement

Best Practices

The best practices for gas supply procurement suggest a comprehensive econometric forecast and gas supply plan. A written policy typically states a philosophy and strategy such as "least-cost dispatching" whereby the least costly supply source is used in any situation. Once that source is exhausted, the next lowest cost of supply is used.

Policies governing the use of hedging programs and other derivatives employed to fix forward prices are mandatory in good gas supply procurement policy. This is due to the large financial impact an extreme position can make. Hedging policies normally specify quantitative limits on positions as a percentage of sales relative to spot versus forward prices. Often acceptable timing, tactics and strategies are outlined. The Commission has specified guidelines for regulated North Carolina gas utilities in the past.

Good policy provides that purchase instructions to suppliers as well as derivative positions require countersignatures or authorization by a second person. This internal control thwarts fraud and mistakes by inexperienced personnel. Documentation of gas supply plan deviations are made at this time.

In North Carolina, scarce pipeline capacity is the constraint that normally drives prices. Acquisition of the supply commodity is not nearly as challenging as the acquisition of upstream assets. The development of an annual gas supply plan that delineates the upstream and on-system resources to be used to serve the system requirements throughout the year is paramount. This is pertinent to Commission Rules R6-23.

Annual gas supply plans should analyze the costs of upstream and on-system resources on both a short-term and long-term basis. Bids are acquired on the variety of services that are available from suppliers. The policy dictates the consideration of important features such as price, security, flexibility, deliverability, working relationship, creditworthiness, etc. The policy will outline how bids will be ascertained, vetting process and acceptable contract terms. In the alternative, this is included in the practices and procedures along with the protocol for weighting such attributes and ascertaining bids and cost information (*i.e.,* request for proposals) rather than a policy statement.

Once the portfolio of resources is chosen, costs are segmented on a per unit basis during comparable seasons for each of the supply options under comparison. Then, a matching of throughput versus least-cost resource strategy is performed. A rank order is determined by which a requirement is met with a particular resource during any particular season. A section regarding what specific events, operational procedures and timing of when firm customers' service interruption would commence in the event of a catastrophic winter or event is included.

As with the best practices for design day demand requirements, a plan compiled by a staff of individuals with training, education and experience in such matters is best. This minimizes the likelihood of costs being overlooked and improves the consistency in calculations. The plan is approved by the committee and senior management to be implemented through budgets.

As with the best practices for design day demand requirements, the gas supply plan and resource cost analysis is performed annually. The approach of forecast models estimates the subset components which form the larger forecast for the entire system. Sophisticated forecasting models along with the appropriate forecasting variables will improve estimating accuracy. Post-audits and reconciliation of forecasts versus actual performance will determine over time which variables improve forecasts.

Survey

As with the best practices for design day demand requirements, smaller gas systems are constrained by their lack of resources and personnel. Four of seven surveyed systems do not have formal gas supply policies and procedures. Only two of seven systems have gas supply planning committees. The other responses range from light planning to best practices standards for assessing supply options. Six of seven systems provide nominations and instructions by informal telephone conversation between gas system representative and the natural gas marketer. Supplier orders are implemented immediately and are confirmed in an email. Only one system among the seven that responded had any internal controls regarding orders to suppliers. The majority of small systems do not have generally acceptable gas supply procurement planning practices or internal controls.

A contributing factor for the apparent lack of gas supply procurement plans is that most of the small systems in North Carolina are in economically stagnant areas, opportunities are limited and they lack an appetite for investment. The sold-out capacity on the Transco interstate pipeline has left few resource opportunities to even consider. When opportunities to acquire peaking or storage resources come about, they are often cost prohibitive on their face without performing an analysis. It is not unusual for inquiries to go unanswered by suppliers or receive zero responses to a request for proposals. It is not usual for suppliers to display its disinterest by proposing an absurd price for little service to end the smaller system's inquiry. This fulfills the supplier's obligation to be responsive to inquiries.

On-system resources (*i.e.,* propane-air plant, LNG, storage) are costly to maintain if not used regularly. Recent warm winters have made acquisition or investment in peaking assets difficult arguments to make to Boards and Councils. Most systems have had a propane-air plant at one time but dismantled it as upstream alternatives proved more cost effective over time. The only system with an on-system resource (LNG plant) uses it as an important source in meeting its winter season load, not just peaking periods. On-system storage of significant size is a large investment especially if the facility requires compression.

Six of seven systems use hedging programs and other derivatives to fix forward prices. Three of six systems have formal written hedging policies. Four of six systems specify quantitative limits on positions as a percentage of sales relative to spot prices versus forward prices. The majority of small systems have good hedging policy and practices.

Four of seven systems use asset managers to operate their supply and resource portfolio. The end of the term of such an agreement is the point in time when more systems consider their supply options or when an opportunity is brought to their attention by their marketer. Systems will consider price, security, flexibility, deliverability, working relationship, creditworthiness, etc. Typically, the City's policy will dictate how bids will be ascertained, vetting process and acceptable contract terms. The Systems have non-discriminatory policy and practices in regards to evaluating supply options.

Frontier's Policy

The Company's submitted policy statement closely matches the best practices for Gas Supply Procurement. Its written policy states a philosophy and strategy of "Best Evaluated Cost". This strategy

entails seeking adequacy, flexibility, security/creditworthiness of supplier, reliability/dependability of supply, cost of gas and quality of supplier(s). Although the annual gas supply plan will attempt to ascertain costs and bids for a variety of services for its comparative cost analysis, it will meet the same lack of interest that many smaller gas distribution systems encounter from suppliers.
The Company's hedging policies provide specific quantitative guidelines that govern the use of hedging instruments and other derivatives engaged to fix forward prices. The policy provides for good internal controls that require purchase instructions to suppliers as well as derivative positions to have countersignatures or authorization by senior personnel.

The policy considers Commission Rules R6-23. Its description of its annual gas supply plan appears to be comprehensive in dictating consideration of all traditional and not as common upstream and on-system assets and resources with its annual gas supply plan. It states its general criteria for assessing supply options as including adequacy, flexibility, security/creditworthiness of supplier, reliability/dependability of supply, cost of gas and quality of supplier. The steps for ratification, implementation and control of the annual gas supply plan by management are outlined.

As with the best practices for design day demand requirements, a plan compiled by a staff of individuals with training, education and experience in such matters is preferable. This is not as crucial as for forecasting peak day and annual requirements. Most of the analysis will consist of comparing bids and proposals, which do not require the higher level skill set of forecasting.

Recommendation

- No changes are recommended.

Policy and Practices for Gas Supply Curtailment

Best Practices

The best practices for gas supply curtailment indicate a need for frequent communication with customers on interruptible service plans. Compliance with regulation (Commission Rules - R6-19.2) is mandatory as well as terms and conditions of the system's tariff to ensure fairness to other customers. The necessary plant and equipment to monitor and ability to enforce curtailment is necessary to control the service. A curtailment procedure should provide specific steps in the event of a curtailment and become part of the annual gas supply plan.

Frequent communication ensures that customers on these service schedules maintain familiarity with the terms of their service and that contact information is updated before the winter season. This will minimize the inconvenience of service interruptions. A monthly newsletter with constant reminders of the nature of their service and advanced warnings of approaching weather or constraints are sent electronically. Contact information for working hours and after hours ensures customers are notified immediately of curtailment orders.

Equipment to monitor and ability to enforce curtailment is required for compliance of the terms of service and fairness to other customers. On-site metering, SCADA or other real-time telemetry equipment to render monitored interruptible service is installed at the customer's expense. The cost of equipment may be paid lump sum or through rates charged to the customer. The level of usage and related costs determine whether remote shut-off capability is installed. Enforcement through sufficiently punitive rates or penalties for non-compliance is also important for fairness to other customers. An annual on-site inspection for an operable alternative fuel source is performed in cases where a secondary source is required to qualify for the service schedule.

Commission Rules should become a part of the system's curtailment policy. The policy should refer to a practice or procedural document for precise steps of when and how a curtailment will proceed. The procedure should list the rank and order (per Commission Rules - R6-19.2) of which specific customers' service will be interrupted and the expected approximate flow and line pressure impact on the system. The procedure should list the steps to comply with notification requirements in the system's service schedule and any Commission rules and regulations. Procedures of how crews will be dispatched if physical lock-off at the customers meter is also necessary.

Survey

Communications with interruptible service customers by North Carolina municipal gas systems is the one area in which they appear to have an advantage over larger gas systems. Often the number of interruptible service customers is only a dozen or two, at most. It is practical to telephone each customer individually for notification and answer any questions. All of the survey participants exceed the mandated two-hour notice in terms of frequency and information. As stated previously, the systems often plan resources and operations to keep these customers on-line. They are essentially charged interruptible service prices for firm service.

Four of six systems have the ability to monitor flow and pressure at the interruptible service customers' meters. The other two respondents are making efforts to install equipment. None have SCADA or remote shut-off capabilities at the interruptible service customers' meters. Besides budgetary constraints, enforcement through sufficiently punitive rates or penalties for non-compliance is restrained due to political pressures. Thus, overruns and non-compliance by interruptible service customers can and do occur without repercussions. Inspection for an operable alternative fuel source where a secondary source is required to qualify for the service schedule is absent on the systems.

North Carolina small systems appear to have good communications with interruptible service customers but have weak enforcement.

Frontier's Policy

The Company's submitted policy statement closely matches the best practices for curtailment of natural gas service. The policy complies with the Commission Rules R6-19.2. It incorporates the Commission's priority list into the policy.

The communication policy consists of contacting the pertinent customers with reminders of the nature of their service before the winter season; advanced warnings of approaching weather or constraints; and compilation of current contact information, and thereby is a best practice.

The necessary plant and equipment for real-time monitoring of interruptible service is a requirement of the service. Given the limited number of pertinent customers, physical shutoff is a feasible option. Enforcement through sufficiently punitive rates or penalties for non-compliance is weak. The policy refers to the tariff where the penalty is $25 per dekatherm. This is no longer a satisfactory penalty given that this past winter prices exceeded $125 per dekatherm in Transco Zone 5. The language should be modified to allow pass-through of the highest costs incurred during the period of their non-compliance or unauthorized use, in addition to tariff penalties.

The policy does not refer to measures to verify an operable alternative fuel source for interruptible service customers. This should be performed annually because it is required to qualify for the interruptible service schedule. This issue is more appropriately addressed in the tariff rather than a policy statement. It is mentioned here because the policy refers to the tariff.

The policy does not reference a practice or procedural document of precise steps of when and how a curtailment will proceed. During emergencies and hurried decision making, compliance with Commission rules and regulations and tariff provisions can be forgotten. Compiling an action plan during the emergency can be a challenging task when time is of the essence. The procedure should list the rank and order (per Commission Rules - R6-19.2) of which specific customers' service will be interrupted and the expected approximate flow and line pressure impact on the system. The procedure should list the steps to comply with notification requirements in the system's service schedule and any Commission rules and regulations. Procedures of how crews will be dispatched if physical lock-off at the customer meters is necessary.

Recommendation

- The Company's tariff remedy for unauthorized or non-compliant use within the interruptible service schedules is inadequate. The penalties or rate adjustments do not act as a significant deterrent or reflect potentially high priced supply borne by the Company and other customers. The language should be changed to allow pass-through of higher costs incurred for their non-compliance or unauthorized use in addition to penalties.
- There is no verification of an alternative fuel capability as mandated in the tariff. Policy or tariff requirements of test interruptions or visual inspection of an operable alternative source should be implemented.
- A specific procedural curtailment plan should accompany the annual gas supply plan and be referred to in the policy.

Policy and Practices for Technical Training

Best Practices

Natural gas accidents over the past few decades have brought about a significant amount of regulatory oversight, laws and regulations. This has improved technical training requirements and operator qualifications for pertinent tasks and positions to a higher level. The best practice for technical training includes compliance with federal and state laws and regulations as well as Commission mandates.

Training policies that state how compliance will be achieved and maintained for the affected positions is imperative. Best practices policies dictate that a compliance officer position, with no conflicting duties or lines of reporting, sufficient policing powers and adequate budget to rectify situations, is the most effective measure. As with any policing situation, the effort can be compromised if the compliance position can be a potential violator. Much the same, the effort can be compromised if the compliance position reports to a potential violator. The compliance position should be unfettered with other position conflicts of interest and unrestricted in identifying deficiencies and reporting to senior management. Budget restrictions can defeat a compliance effort, intentionally or unintentionally. Adequate budgeting for the compliance staffing effort and to address training needs will support an earnest compliance effort.

It is the compliance officer who will confirm the particular position's job responsibilities, descriptions and tasks to determine if positions have covered tasks which fall under operations, construction, maintenance, safety, meter testing, billing, and gas control operations and are subject to regulation. These covered task areas require operator qualifications as directed by the Pipeline and Hazardous Materials Safety Administration (PHMSA) under the U.S. Department of Transportation. The compliance officer confirms employees are trained in integrity management protocol and the system's operating and maintenance manual practices and procedures. In cooperation with other operating personnel, operating and maintenance manuals and training materials (*i.e.,* books, manuals, software, etc.) are complete and are updated periodical to reflect changes in rules, regulations, information and improved methods. In the cases of large utility systems, their resources and employees involved allow them to conduct all training needs immediately on-site. In other situations the supervisors, employees and the compliance staff have input regarding the medium (*i.e.,* on-site, off-site, hands-on, etc.) and its effectiveness. Often all methods are used depending on the number to be trained, urgency, cost and effectiveness.

The compliance officer as well as the position's supervisor will meet in person with the new hires to assess their training requirements. Any deficiencies, or further assessment, are determined at that time and an action plan is made to bring the employee into compliance. Periodic review that occur no less frequently than semi-annually will confirm and document training received and training needs. Random field inspections of employee performance will increase the frequency of observations.

Survey

Adherence to and tracking of all of the voluminous laws and regulations can be challenges, especially for a small system. However, regulations ensure that the smaller municipal systems' practice closely matches the best practices for technical training.

Four of seven systems have a compliance officer position. The remaining three have a position that assumes the compliance duties. Three of seven systems have a formal training policy. The others make their policy through job descriptions or requirements.

Employee training is documented and discussed at annual reviews. Six of seven systems review or inspect employee performance more frequently. Once identified, most use all methods depending on the number to be trained, urgency, cost and effectiveness.

Frontier's Policy

The Company's submitted policy statement matches the best practices for technical training. As a small system that lacks economies of scale, compliance with training regulations is a financial burden.

The policy mandates a compliance officer position with no conflicting duties or lines of reporting. The delineated budget and its particulars for training compliance will be evidence of the effort. Confirmation of the policy implementation and adherence will be made in budgets and personnel records.

The policy places the responsibility of training and education record keeping; update of manuals (both training and O&M) to reflect current regulation; and position documentation with the compliance officer. Employee training is document and is discussed at annual reviews. Once identified, the Company will use all methods depending on the number to be trained, urgency, cost and effectiveness.

Recommendation

- No changes are recommended.

In summary, Kan Huston Associates LLC recommends the following changes to Frontier Natural Gas Company LLC documents:

With respect to peak day forecasts and determination of contract demand policy:

- We recommend an earnest effort to select individuals with exceptional capabilities and experience to serve on the gas supply committee.
- Review past forecasts and estimates for accuracy. Refine methods and factors used in forecasts and estimates.

With respect to curtailment policy:

- The Company's tariff remedy for unauthorized or non-compliant use within the interruptible service schedules is inadequate. The penalties or rate adjustments do not act as significant deterrents or reflect potentially high priced supply borne by the Company and other customers. The language should be changed to allow pass-through of higher costs incurred for their non-compliance or unauthorized use in addition to penalties.
- There is no verification of an alternative fuel capability as mandated in the tariff. Policy or tariff requirements of test interruptions or visual inspection of an operable alternative source should be implemented.
- A specific procedural curtailment plan should accompany the annual gas supply plan and be referred to in the policy.

Kan Huston Associates, LLC

Chapel Hill, North Carolina
August 29, 2014

EXHIBIT A

POLICY STATEMENTS

Frontier Natural Gas Company, LLC

Policy and Practice of:

Determination of Gas Supply Requirements - Design Day Demand Requirements and/or Maximum Daily Quantity

Purpose

It is the Frontier Natural Gas Company, LLC (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 resources to meet peak day requirements and to establish financially sound, responsible, and prudent guidelines for the assessment of peak requirements for the operation of the natural gas utility system. Per Frontier's Gas Supply Procurement Policy, a Gas Supply Planning Committee exists to pursue this mission.

Objective

The determination of gas supply requirements and design day demand requirements policy of Frontier seeks to accurately estimate the system peak day usage and requirements. This is accomplished through a diligent effort estimate in a detailed and 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.

Policy

Frontier's Gas Supply Planning Committee (Committee) uses a "Best Evaluated Cost" supply strategy to achieve gas supply procurement objectives and goals. This strategy entails seeking supply sufficiency, flexibility, security/creditworthiness of supplier, reliability/dependability of supply, cost of gas and quality of supplier(s).

Each year the Committee will review in the Gas Supply Plan Report (Annual Plan) to senior management the natural gas historic sales volumes of bundled customers and forecasts of future load requirements based on firm process and heat load required to supply new bundled customers. As part of the Committee's Annual Plan to senior management, a specific section will estimate the system's maximum daily requirement (MDQ). This section of the Annual Plan will be immediately revised and updated before the next winter season when an estimated change in MDQ is significantly greater than the current firm load or firm MDQ.

The Annual Plan section regarding MDQ will be segmented monthly and the MDQ will be determined based on the maximum historic daily load and the projected additional daily volume added to the system by rate class. The MDQ is the volume Frontier's supplier is required to supply at any given time during the month.

Statistical-based forecasts and estimates will be formulated upon factors including, but not limited to, heating degree days, usage per heating degree day, customer growth and other historical correlations and factors that appear to drive natural gas consumption for particular customer classes. 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 to meet an MDQ or design day demand requirements under a most likely scenario and a one in twenty-five years winter scenario. A reconciliation analysis between last year's accepted plan and actual performance will be provided in the Annual Plan. The Annual Plan will explain variations from plan, adherence to policy and areas in which methods can be improved. Potential bias of any Committee members will be disclosed in this Report when their opinion alone is relied upon. The Annual Plan will contain or cite supporting documents for its conclusions and recommendations.

Notwithstanding the above Annual Plan the Committee may continually evaluate the MDQ level and adjusts as necessary on a less formal basis. Representatives of the Committee will evaluate the HDD on a weekly and daily basis and coordinate through the gas marketer/shipper/supplier for necessary adjustments in gas deliveries.

The Committee will utilize, but not be limited to, consultants, industry peers, gas marketers, affiliated entities, market indicators, seasonal weather forecasts, periodicals and forecasts in pricing to gather intelligence on the direction of natural gas and pipeline capacity prices.

The Committee head will be responsible to initiate the Report, its updates, and its delivery to senior management, in a timely manner. Senior management will authorize and direct gas supply staff to implement and execute the accepted plan and any modifications in a timely manner. Adjustments to or deviations from the plan during interim periods will be documented via correspondence from the Committee head to the senior management.

Frontier Natural Gas Company, LLC

Policy and Practice of:

Gas Supply Procurement

Purpose

It is the Frontier Natural Gas Company, LLC (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. This begins with an accurate estimation of the customer usage requirements and how 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

It is Frontier's policy that a Gas Supply Planning Committee (Committee) be established and maintained to pursue this mission. The Committee's individuals may be comprised of persons who are company staff, consultants, industry peers, gas marketers, and from affiliated entities. The information they will use includes, but is not limited to, market indicators, seasonal weather forecasts, periodicals and forecasts in pricing to gather intelligence on the direction of natural gas and pipeline capacity prices. Frontier uses a "Best Evaluated Cost" supply strategy to achieve Gas Supply Procurement objectives and goals. This strategy entails seeking adequacy, flexibility, security/creditworthiness of supplier, reliability/dependability of supply, cost of gas and quality of supplier(s).The Committee will consider the resources available to accomplish this task.

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 required to supply new bundled customers in a Gas Supply Plan Report (Annual Plan) to senior management.

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 connects or losses and other historical correlations and factors that appear to drive natural gas consumption for particular customer classes. 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 to meet requirements under a most likely winter scenario as well as a one in 25-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.

In order to assess the supply needs to best pair with available capacity, a source/use section in the Annual Plan will estimate seasonal and peak demand day requirements (firm base load and heat sensitive consumption) (see also Design Day Demand policy) versus the resources use to meet these requirements. In addition to suppliers' peaking and storage services, upstream resources may include supplies that are base load, swing, seasonal supply, spot purchases, and/or hedging. Peak period resources to be considered will include, but not limited to, air-propane plants, liquefied natural gas (LNG) plants and on-system storage. Per Commission, Rule R6-23 - Adequacy of supply, assessment of the production and/or storage capacity of the utility's plant, supplemented by the gas supply regularly available from other sources, must be sufficiently large to meet all reasonably expectable demands for firm service will be made.

"Suppliers" shall mean any person or entity who locates, produces, purchases, sells, stores and/or transports natural gas or its equivalent to, for or on behalf of the 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 evaluating and determining the proper resources to procure for the system, the Company will consider other important factors such as, but not limited to, adequacy, price, security, flexibility and deliverability. Market pricing, cost and operational considerations may be stable for some resources; a comprehensive evaluation each year may not be necessary for such resources. References to a prior year's Annual Plan may be sufficient for the current evaluation. In some instances, request for quotes or request for proposals may be necessary to acquire price or cost data. In such instances, Frontier will not discriminate against any entity or submitter because of race, color, religion, sex, age, national origin or handicap.

The general strategy is to serve incremental load and peak usage periods following a least-cost dispatch strategy. 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) should be acquired or developed for meeting the Company's deliverability needs 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. Assuming all other things (i.e., security, flexibility, deliverability, etc.) being equal, alternatives will be ranked and selected according to cost. The Committee will evaluate these alternatives each year for their appropriateness in the context of its 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. Potential bias of any Committee members will be disclosed in this Report when their opinion alone is relied upon. The Annual Plan will contain or cite supporting documents for its conclusions and recommendations.

The Annual Plan shall contain an action plan with 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.

Notwithstanding the above Annual Plan, it is the Committee's practice to continually evaluate the current requirements and make adjustments as necessary on a less formal basis. Representatives of the Committee will evaluate the HDD on a weekly and daily basis and coordinates through the shipper/supplier for necessary adjustments in gas deliveries.

Suppliers will be notified of individuals that can execute instructions and orders. 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.

Current Practice

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

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

The objective behind the weighted average approach is to take advantage of any market movements in pricing that may occur as a protective measure and/or saving opportunity. Frontier has a three part pricing strategy in gas purchasing: 1) Hedging, 2) First of the month and 3) daily. Depending on current pricing compared to historical, Frontier will incorporate the best pricing methodology to obtain the optimum opportunity in savings and price stability. Frontier purchases gas in Summer and Winter strips and evaluates their hedging or fixed pricing opportunity based on these individually and as a whole.

To stabilize Frontier gas cost and to obtain pricing opportunities, the strategy is to buy gas through a combination of hedging, first of the month, and daily. This strategy, depending on market conditions, is approached through three methodologies: 1) Conservative, 2) Moderate and 3) Aggressive:

1. Conservative: Hedge 0-25% of forecasted volumes when pricing is +/- 10% historical pricing levels for the strip period or for the month.

2. Moderate: Hedge 25-40% of forecasted volumes when pricing is 25% less than historical levels.

3. Aggressive: Hedge 40-75% of forecasted volumes when pricing is 50% less than historical levels.

If Frontier is unable to meet pricing targets to lock in gas for the upcoming winter period prior to September, then the Frontier will lock in a minimum of each monthly volume of between 25% and 50% to provide upward price protection. In order to procure the most competitive natural gas pricing available for Frontier consumers, the company will seek a minimum of three responses to an RFP for its supply of natural gas.

Frontier Natural Gas Company, LLC

Policy and Practice of:

Curtailment of Natural Gas Service

Purpose

It is the Frontier Natural Gas Company, LLC (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 operation of the system during periods of curtailed natural gas service and to establish financially sound, fair, responsible, and prudent guidelines for operation of the natural gas utility system during such periods.

Objective

The curtailment of natural gas service objectives of Frontier establishes compliance, fairness, responsibility, prudency, and minimization of the associated costs. It is also Frontier's objective to comply with regulatory body policy regarding priority and order of disruption of natural gas service where operationally possible. This is accomplished by having the best available and real-time system and customer gas flow information as well as system operations. The ability to enforce curtailment orders and operations during times of constraint are paramount in maintaining a safe and reliable system.

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 policy is to acquire or construct resources necessary to meet reasonable expectations of natural gas supply requirements, in compliance with Commission rules and regulations under R6-23 – Adequacy of supply and Frontier's gas supply procurement policy, for its firm requirements customers. In the event that Frontier cannot supply the demands of all of its firm customers, curtailment of natural gas service may be necessary to maintain the system's operational status. It is Frontier's policy and its tariff provisions to curtail firm customers under the priority established under Commission rules and regulations R6-19.2 – Curtailment of service.

In compliance with Rule R6-19.2, Frontier follows the policy that, in circumstances where firm customer curtailment of natural gas service is required, customers paying the least margin per dekatherm will be curtailed first. This applies to all customers, be they transportation customers, regular sales rate customers, municipal customers or otherwise. However, if operating conditions require some interruption of service to a particular geographical area instead of a utility's entire system, then curtailment by margin will be applied only to those customers within the affected areas.

If it is necessary to interrupt some but not all customers paying the same margin per dekatherm, then, to the extent practicable, service shall be curtailed to the customers paying the same margin per dekatherm on a pro rata basis for the season. Customers may refer to Frontier's tariff and general terms and conditions for specifics of which rate schedule they receive service under and the rate schedule's curtailment priority. It is Frontier's policy and the Commission's rules and regulations that curtailment categories are:

(i) Priority 1. Residential. Essential Human Needs With No Alternate Fuel Capability. Commercial less than 50 Dth/day.
1.1 Residential requirements and essential human needs with no alternate fuel capability.
1.2 Commercial less than 50 Dth/day.
1.3 Agriculture

Priority 2. Industrial Less Than 50 Dth/day. Process, Feedstock and Plant Protection With No Alternate Fuel Capability. Large commercial requirements of 50 Dth or more per day except for large commercial boiler fuel requirements above 300 Dth/day.
2.1 Industrial less than 50 Dth/day.
2.2 Commercial between 50 and 100 Dth/day.
2.3 Commercial greater than 100 Dth/day, non boiler use.
2.4 Commercial greater than 100 Dth/day, with no alternate fuel capability.
2.5 Industrial process, feedstock and plant protection between 50 and300 Dth/day, with no alternate fuel capability.
2.6 Industrial process, feedstock and plant protection between 300 and 3,000 Dth/day, with no alternate fuel capability.
2.7 Industrial process, feedstock and plant protection greater than 3,000 Dth/day, with no alternate fuel capability.
2.8 Commercial over 100 Dth/day (excluding commercial Priorities 2.3and 2.4 and commercial boiler fuel requirements over 300 Dth/day).

Priority 3. All other industrial requirements not greater than 300 Dth per day.
3.1 Industrial non boiler between 50 and 300 Dth per day.
3.2 Other industrial between 50 and 300 Dth per day.

Priority 4. Non boiler use between 300 and 3,000 Dth/day.

Priority 5. Non boiler use greater than 3,000 Dth/day.

Priority 6. Boiler fuel requirements of more than 300 Dth per day but less than 1,500 Dth per day.

Priority 7. Boiler fuel requirements between 1,500 and 3,000 Dth/day.

Priority 8. Boiler fuel requirements between 3,000 and 10,000 Dth/day.

Priority 9. Boiler fuel requirements greater than 10,000 Dth/day.

Operational considerations of the natural gas system will take precedence over the above priority list.

Per Frontier's Determination of Gas Supply Requirements - Design Day Demand Requirements and/or Maximum Daily Quantity Policy, Frontier acquires resources based on firm requirements only. During high system usage or operational constraints, customers under interruptible service rate schedules or agreements may experience interruption. All firm customers will have priority over interruptible classes of service where possible.

It is Frontier's policy and practice to maintain contact information of the individuals at the entities that are served under interruptible service rate schedules or agreements for notification purposes. Frontier will communicate with interruptible customers at the beginning of the winter season of the nature of their service via letter or electronic means. In the event of high system usage or operational constraints (i.e., operational flow orders, etc.) forecast, Frontier will attempt to notify customers as far in advance as practicable of potential curtailment.

Per Frontier's tariff for customers under Rate Schedule 161 – Large General Interruptible Service, customers will be notified at least two hours in advance of orders to curtail usage. Customers are expected to comply. Customers receiving service under Rate Schedule 171 – Interruptible Transport Service, may have service suspended on any day if system conditions require interruption of supplies. It is Frontier's policy and practice to have equipment and facilities in place to provide telemetry and real time flow information at the city-gate(s) where it receives supply, key operational points on the system, and at interruptible customers' meter(s). Failure by interruptible customers to comply with curtailment orders will resort in the remedies detailed in the tariff which includes penalties and physically locking off the meter at the customer's premises during curtailment.

Frontier Natural Gas Company, LLC

Policy and Practice of:

Technical Training and Education

Purpose

It is the Frontier Natural Gas Company, LLC (Frontier) mission to provide safe and reliable natural gas service at a reasonable price to our customers. The training and education of employees in the operational positions are vital in support of this mission. The purpose of this policy is to set forth the authority to establish financially sound, responsible, and prudent guidelines for the training for the operations employees of the natural gas utility system.

Objective

Frontier's objective is to operate and maintain a safe, efficient and reliable natural gas distribution system. A key factor in pursuing this objective is to have properly trained and educated employees in all operations departments, which include, but are not limited to, operations, construction, maintenance, safety and billing employees. This objective is achieved through adherence to operator qualification requirements, Frontier's operating and maintenance manual (O&M manual), and integrity management principals as provided for by pertinent regulations.

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). The U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration provides operator qualification education and training rules and regulations for those employees performing covered tasks.

Policy

Frontier's policy is to provide training and to acquire training resources for its employees as required to comply with regulations and to assure a safe and reliable system. In order to ensure this policy, the position of compliance officer will be occupied by an individual with no conflicts of interest in Frontier and will report to senior management. This person's responsibilities will include maintaining training and education records of each employee; detailed knowledge of training and education rules and regulations; position descriptions that state all positions' training and education requirements; sources of training that are available; employee reviews that are conducted at least annually to assess training and education compliance; and action plans for employees that are deficient in their training or education. The compliance officer is responsible to ensure that O&M manual is kept up-to-date and complies with the current rules and regulations.

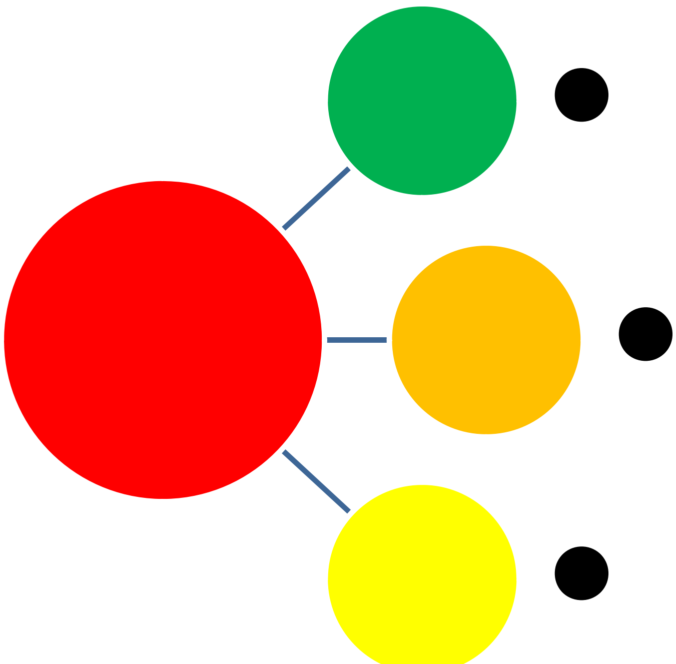
Training and education may be performed off-site or on-site. Frontier may use in-house experienced personnel or outside technical experts to conduct the training. Training and education may come in the form of, but not limited to, hands-on exercises, instruction, videos, manuals, books, and online programs. The compliance officer shall ensure in-house materials are maintained and up-to-date.

In order to ensure the compliance officer's identification of training and educations needs is met, Frontier's annual budget shall delineate funding for such materials and expenses. Frontier's resulting authorized operating budget will specify how, when and where training and education will be provided or acquired.

EXHIBIT B

POLICIES AND PRACTICES SURVEY

North Carolina Municipal Gas Distribution Systems



Practices and Policies Survey

Kan Huston Associates, LLC

August, 2014

North Carolina Survey of Municipal Gas Distribution Systems

Gas Planning, System Operations, and Procurement Practices and Policies

Preface

The following is a survey of seven of North Carolina's eight municipal natural gas distribution systems in August 2014. The survey summarizes their systems and approaches to gas planning, operations, and procurement. More specifically, this survey establishes customary practices and procedures among the municipal gas distribution systems of North Carolina in the determination of peak day requirements, supply procurement, curtailment and training.

Although the municipal gas distribution systems are not regulated by the North Carolina Utilities Commission, they face similar challenges due to their smaller size. The systems do not possess the economies of scale that larger utility systems enjoy. The lack of resources possessed by larger operations requires such systems to seek policy and practice efficiencies that may exist on the lower end of a scale of controls that regulators might prefer. The mode of operation by municipal system management may create a standard where a balance is achieved among risk management and control while remaining economically viable.

The survey was conducted via telephone so that clarification questions could be asked. Kan Huston Associates makes no judgment in this report regarding the practices and procedures outlined in the municipal system's answers to the survey questions. The responses summarized below provide insight as to market forces' influence upon a municipal utility manager's allocation of resources within the economic constraints of a small system.

Kan Huston Associates, LLC

North Carolina Survey of Municipal Gas Distribution Systems

Gas Planning, System Operations, and Procurement Practices and Policies

Policy and practices for Design Day Demand Requirements

1) Do you have formal written policies and procedures with regard to how you determine your peak day, or MDQ, for contact demand or procurement of assets?

> Frequency=5: No. Only discussions amongst gas personnel and gas marketer.
>
> Frequency=2: Perform a long term plan that includes MDQ requirement assessment and how to meet the requirement. The policy is inferred from the plan.

2) Is there a formal process to ratify the final determination of MDQ/peak day/contract demand?

> Frequency=5: No.
>
> Frequency=2: The MDQ and contract demands are specified in budgets that are approved by Board/Counsel.

3) Is there a specified time as to when forecasts are made?

> Frequency=5: No. It is a continual assessment that considers recent history.
>
> Frequency=2: Each year or before the coming winter. However, it is continually monitored.

4) Are there specific assumptions regarding protection against severe cold (i.e., one-in-50 year winter, 50 heating-degree day, etc.) that estimates are based upon?

> Frequency=3: No. Recent history is used as a guideline.
>
> Frequency=1: Uses statistical forecast to estimate a 10% colder than normal winter.
>
> Frequency=1: Uses statistical forecast with heating degree-days per customer as a major assumption for heating load. MDQ requirement is based upon <u>50 HDD</u>. Delineated by class.
>
> Frequency=1: Uses statistical forecast with heating degree-days per customer as a major assumption for heating load. MDQ requirement is based upon <u>53 HDD</u>.
>
> Frequency=1: Uses statistical forecast with heating degree-days per customer as a major assumption for heating load. MDQ requirement is based upon <u>55 HDD</u>.

5) Does your MDQ peak day forecast incorporate interruptible customers' load in determining the acquisition of resources to the MDQ peak day?

> Frequency=1: Not applicable. System has no interruptible customers.
>
> Frequency=4: Yes. MDQ requirement estimate is based upon the total system which includes interruptible customers.
>
> Frequency=2: No. MDQ requirement estimate is based upon firm load only which excludes interruptible customers.

6) Do you have procedures or controls to ensure that decisions and determinations of how MDQ peak day are going to be met are implemented?

> Frequency=5: No. The resulting discussion amongst gas personnel and gas marketer are implemented immediately. Confirmation advice of actions taken is sent electronically to gas personnel.
>
> Frequency=2: Budgets and annual plan details are ratified by Board/counsel.

Policy and practice for Gas Supply Procurement

7) Do you have formal written gas procurement policies and procedures?

> Frequency=4: No.
>
> Frequency=2: Perform a long term plan each year that includes gas supply procurement assessment and how to meet the requirement. The policy is inferred from the plan.
>
> Frequency=1: Committee meetings minutes and action plans document policies and procedures.

8) Are policies enacted by individuals or a group (i.e., gas supply committee)?

> Frequency=5: Individuals.
>
> Frequency=2: Committee.

9) What is the nature of your upstream assets (i.e., pipeline capacity, storage service, peaking service, etc.)?

> Frequency=3: The system has upstream pipeline capacity.
>
> Frequency=1: The system has upstream pipeline capacity and storage service.
>
> Frequency=1: The system has upstream pipeline capacity and peaking service.
>
> Frequency=2: The system has upstream pipeline capacity, storage and peaking.

10) What is the nature of your on-system assets (i.e., air-propane, storage system, LNG, etc.)?

Frequency=6: None.

Frequency=1: LNG.

11) Does your policy delineate the type of resources that should be acquired or how often they should be assessed?

Frequency=4: No.

Frequency=1: Annually.

Frequency=2: During the performance of long term planning or when opportunities present themselves.

12) Do you use an asset manager who utilizes your system's idle upstream assets in return for a share of the proceeds or other compensation scheme?

Frequency=4: Yes.
Frequency=3: No.

13) Did you experience any system outages among your residential and commercial customers this past winter?

Frequency=7: No.

14) Were you forced to buy any high priced and/or penalty gas supply?

Frequency=1: No.

Frequency=6: Yes.

15) How often do you perform an in-depth evaluation of available resources and or strategy?

Frequency=2: Only in the context of an asset management agreement assessment.

Frequency=2: Annually.

Frequency=2: During long term planning.

Frequency=1: When opportunities present themselves.

16) What factors to you consider in such an evaluation? (e.i., price, security, flexibility, deliverability, etc.)

Frequency=2: Price and security are the major factors.

Frequency=2: The four suggested examples with price being the most important.

Frequency=1: The four suggested examples as well as working relationship and creditworthiness.

Frequency=2: The four suggested examples as well as working relationship and creditworthiness, with working relationship being the most important.

17) Have you considered developing on-system storage?

Frequency=1: Once a very long time ago. Determined it was not economical.

Frequency=2: Annually, along with evaluation of other resource alternatives.

Frequency=4: No. Other resource alternatives are more appealing.

18) Do you fix forward prices through purchase of futures contracts or other derivatives?

Frequency=6: Yes.

Frequency=1: No.

19) Do you have a formal written hedging program?

Frequency=3: No.

Frequency=3: Yes.

Frequency=1: Not applicable since the system does not hedge.

20) If so, do you have specific quantitative guidelines in your hedging program?

Frequency=2: No.

Frequency=4: Yes.

Frequency=1: Not applicable since the system does not hedge.

21) Do you have controls in place to prevent unauthorized nominations, purchases, payments, etc. with respect to gas supply?

Frequency=6: No. The instructions by gas personnel are implemented by the gas marketer. Confirmation advice of order or actions taken is sent electronically to gas personnel.

Frequency=1: Gas manager's orders authorized by Supply committee are verified by finance. Suppliers understand that orders must be counter authorized.

Policy and practice for Curtailment Policy

22) Other than the notification the hour or two before interruption of service, what is the nature of your on-going communications with interruptible customers to remind them of the nature of their service?

Frequency=1: Not applicable. The System has no interruptible customers.

Frequency=1: Send a monthly newsletter. Often notification of likelihood of interruption is sent the day before curtailment via fax, email or telephone (telephone during working hours.)

Frequency=1: Annual letter. Constant communication via email leading up to cold weather and potential interruption. Usually, attempt to give two-days notice when interruption is very likely.

Frequency=2: Constant communication via email/telephone leading up to cold weather/OFOs and potential interruption. Usually, attempt to give one-day notice when interruption is very likely.

Frequency=2: Contact by telephone in the Fall to confirm contact information and as a reminder of the customer's type of service. Will often contact the week before in advance of approaching cold weather.

23) What telemetry and SCADA systems do you have to monitor the system pressures, industrial consumption, and compliance with curtailment requests?

Frequency=1: Real-time flow/pressure data at city gate(s) and key points on the system.

Frequency=4: Real-time flow/pressure data at city gate(s), key points on the system and at the interruptible customer meters.

Frequency=1: Real-time flow/pressure data at city gate(s), key points on the system and at some of the interruptible customer meters.

Frequency=1: Real-time flow/pressure data at city gate(s), key points on the system and none of the interruptible customer meters.

24) What enforcement capabilities does your system have in place to curtail interruptible customers?

Frequency=1: Not applicable. The System has no interruptible customers. Frequency=5: Do not have remote capabilities to shut off interruptible customers. Personnel would have to physically go to meter and lock off. Frequency=1: No remote capabilities. Will read interruptible customers meters before and after curtailment. Will bill penalty rate for non-compliance volumes as oppose to shutting off.

25) Does your tariff require alternative fuels capability to qualify for interruptible rate schedule?

Frequency=1: Not applicable. The System has no interruptible customers. Frequency=4: Yes. Frequency=2: No.

26) If alternative fuel capability is required, what does the demonstration entail? Is there an ongoing policing of alternative fuel systems for interruptible customers?

Frequency=1: Not applicable. The System has no interruptible customers. Frequency=3: None. Frequency=2: Not applicable since it is not a requirement. Frequency=1: Every Fall a demonstration is required. Interruptible customers are given advanced notice and are interrupted for one hour.

Policy and practice for Technical Training

27) Do you have written policy or requirements for training for job positions in operations, construction, maintenance, safety, meter testing, billing, and gas control operations?

Frequency=4: No. Frequency=3: Yes.

28) Do you have written or unwritten internal technical training policies for these areas?

Frequency=4: The positions have job descriptions that state that they must comply and adhere to operator qualifications, integrity management protocol and the system operating and maintenance manual.

Frequency=3: Yes.

29) Do you have a compliance officer, or are the duties of a compliance officer assumed by another position?

Frequency=2: Compliance officer responsibilities are assumed by another position.

Frequency=1: There is a compliance officer for the entire combination utility system. Not for just the gas system.

Frequency=4: Yes.

30) How are training needs identified or addressed?

a) annual reviews
b) semi-annual reviews
c) field reports
d) crew meetings
e) employee record reviews by compliance personnel
f) pre-employment interview

Frequency=2: a
Frequency=1: a & c
Frequency=1: c, d & e
Frequency=1: a & b
Frequency=2: a & f

31) How is the type and medium (off-site, on-site, on-hands, video, on-line, manuals, etc) determined?

Frequency=3: Consider all in determining the most efficient, effective and least cost method.

Frequency=2: Consider all in determining the most efficient, effective and least cost method. If time is of the essence, will select the quickest method.

Frequency=2: Almost all on-site or in-house. Use most effective methods.

32) Is there an employee annual review where training goals are discussed?

Frequency=7: Yes.

33) Is completion of training documented in employee records?

Frequency=7: Yes.