Before the
North Carolina Utilities Commission

Docket No. G-9, Sub 791

Annual Review of Gas Costs Pursuant to G.S. 62-133.4(c) and Commission Rule R1-17(k)(6)

Testimony of Todd Breece

on Behalf of
Piedmont Natural Gas Company, Inc.

Piedmont Natural Gas

August 2, 2021

Q. Please state your name and your business address.

A. My name is Todd Breece. My business address is 4720 Piedmont Row Drive, Charlotte, North Carolina.

Q. By whom and in what capacity are you employed?

A. I am employed by Duke Energy Corporation ("Duke") and work on behalf of Piedmont Natural Gas Company, Inc. ("Piedmont" or the "Company"), a wholly owned subsidiary of Duke, as the Manager of Natural Gas Trading & Optimization.

Q. Please describe your educational and professional background.

A. I graduated from North Carolina State University in May of 2002 with a Bachelor of Science Degree in Civil Engineering. I joined the Company as an Engineer in June of 2002. In June 2003 I was promoted to Design Engineer and in June 2007 I was promoted to Senior Engineer. In November 2007 I took a position in the Company as a Gas Supply Representative. In May 2011 I was promoted to Senior Gas Supply Representative and then promoted to Senior Gas Trader in January 2018. In October 2018 I was promoted to Manager of Natural Gas Trading & Optimization.

Q. Please describe the scope of your present responsibilities.

A. My current major responsibilities include supervision of the long and short term purchasing of supply, optimization of pipeline transportation, storage, and supply assets, and administration of the Company's Hedging Plan.

Q. Have you previously testified before this Commission or any other regulatory authority?

A. Yes. I have previously testified before this Commission and before the Public Service Commission of South Carolina.

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

A. My testimony will describe the Company's gas purchasing policies and hedging activity during June 1, 2020 through May 31, 2021 ("Review Period"). This testimony is in response to Commission Rule R1-17(k)(6), which provides for an annual review of the Company's gas costs. I will also discuss the Company's hedging activity during the Review Period.

Q. Please explain the Company's gas purchasing policies.

A. The Company has previously utilized and continues to maintain a "best cost" gas purchasing policy. This policy consists of five main components: 1) the price of the gas, 2) the security of the gas supply, 3) the flexibility of the gas supply, 4) gas deliverability, and 5) supplier relations. As all of these components are interrelated, we continue to weigh the relative importance of each of these factors when developing the overall gas supply portfolio to meet the needs of our customers.

Q. Please describe each of the five components.

A. 1) The "price of the gas" refers to the final cost of gas delivered to the Company's city gates. The majority of the Company's supply purchases take place at "pooling points" or at interconnects into the pipeline on which the Company holds firm transportation capacity rights. In the case of "bundled" city gate supply purchases, the Company may pay the gas supplier an all-inclusive price that covers the cost of gas, fuel, and transportation charges. The use of storage services may add additional injection, withdrawal, and related fuel charges to the city gate cost of gas. In order to accurately assess prices at a comparable transaction point, the Company evaluates purchase prices at the receipt point and adds the applicable fuel and transportation costs associated with delivery to our pipeline city gates

2) "Security of gas supply" refers to the assurances that the supply of gas will be available when required. It is imperative to maintain a high level of supply security for the Company's firm customers. Security of gas supply is less important for our interruptible customers who may have access to alternate fuels and whose service is subject to interruption in order to provide service to the Company's firm customers. Fixed supply reservation fees are generally required, in addition to the commodity cost of gas, in order to contract for and reserve firm gas supplies. In addition, the geographic source of supply, the nature of the supplier's portfolio of gas supplies, and negotiated contract terms must be considered when evaluating the level of supply security. Thus, the security of gas supply is interrelated with the price of gas as well as other components of the Company's "best cost" purchasing policy.

3) "Flexibility of gas supply" refers to our ability to adjust the volume of a supply contract as operating and market conditions change. For example, the demand of firm heat-sensitive customers will vary depending on the weather conditions. Interruptible customers will adjust their purchases depending on factors such as the price of alternate fuels and the demand for their products. Thus, the Company must arrange a portfolio of gas supplies and storage services that are flexible enough to meet the daily and monthly "swings" in demand. Contractual "swing rights" are implemented through monthly and daily elections with gas suppliers and through injections into and withdrawals out of storage.

4) "Gas deliverability" refers to the ability to deliver the Company's gas supplies at the city gate through reliable transportation and storage capacity arrangements. The interstate pipeline industry has created a complex system of multiple pipeline service and storage service combinations. Transportation arrangements can involve intrastate pipeline transportation, interstate pipeline transportation, interstate pipeline storage arrangements, interstate pipeline lateral lines, interstate pipeline pooling services, and interstate pipeline balancing and peaking services. The marketplace for pipeline capacity service is limited, with little to no unused capacity available during periods of high demand conditions such as extreme cold or hot weather conditions. Consequently, it is important that we secure and maintain firm transportation and storage capacity rights to ensure the

deliverability of our gas supplies to meet the design day, seasonal, and annual needs of our customers. Pipeline transportation and storage capacity contracts require the payment of fixed demand charges to reserve firm transportation and/or storage entitlements. The Company is active in proceedings at the Federal Energy Regulatory Commission ("FERC") not only with respect to the level of pipeline charges under these contracts, but also the tariff terms and conditions that apply to these pipeline services.

5) "Supplier relations" refers to the dependability, integrity, and flexibility of a gas supplier. We contract with gas suppliers who have a reputation of honoring their contractual commitments and have proven themselves as reliable suppliers. Conversely, we avoid suppliers which have a reputation of defaulting on contract obligations or who unilaterally interpret contracts to their advantage. We prefer to deal with suppliers who are constantly looking for ways to improve service and offer "win-win" solutions for meeting customer needs. We also prefer to deal with suppliers providing natural gas produced with low levels of methane emissions.

Q. Please describe the arrangements under which the Company purchases gas.

A. The Company purchases gas supplies under a diverse portfolio of contractual arrangements with several gas producers and marketers. In general, under the Company's firm gas supply contracts, the Company may pay negotiated reservation fees for the right to reserve and call upon firm supply service up to the maximum daily contract quantity (elected either on a monthly or daily basis), with market-based commodity prices. These market-based commodity prices, to which the Company's gas supply contracts refer, are published daily and monthly in industry trade publications. These firm contracts typically range in term from one month to two years. Some of these contracts are for winter only (peaking or seasonal) service or 365-day (annual) service. Firm gas supplies are purchased for reliability and security of service. The reservation fees associated with firm gas supplies may vary according to the amount of flexibility built into the contract, with daily swing service generally being more expensive than monthly baseload service. Generally, prior to or when existing supply contracts expire, requests for proposals ("RFPs") may be sent to potential suppliers, their responses are evaluated, and firm gas supplies are then contracted with suppliers whose proposals best fulfill the Company's "best cost" purchasing policy.

The Company also purchases gas supplies in the spot market under contract terms of one month or less. These contracts provide less supply security and, as a result, the Company relies on these contracts primarily for interruptible or spot markets during off-peak periods when secondary supplies are more abundant, and for supplemental system balancing requirements. Because of the nature of spot contracts, these supplies do not command reservation fees and are priced at a market rate, generally by reference to an industry index or at negotiated fixed prices.

Q. How does the combination of the five factors described above determine the nature of the supply and capacity contracts under your "best cost" policy?

A. Under our "best cost" policy, we secure and maintain a supply portfolio that is in balance with the requirements of our sales customers. Because our firm sales customers must have secure and reliable gas supply, we meet the need of our firm sales customers' demand primarily with long-term firm supply, transportation, storage, and peaking service contracts. The temperature sensitivity of our firm customers necessitates that flexibility of supply and storage also be provided. As mentioned earlier, firm gas supply contracts demand a premium, typically in the form of fixed reservation fees. Also, firm supply contracts with flexible swing service entitlements will command a higher reservation fee than baseload arrangements. Because our interruptible customers are more price sensitive and require less supply security, we supply these customers with off-peak firm gas supply and transportation services when the firm customers' demand declines and through the purchase of gas supplies in the spot market.

In short, before entering into any agreement to purchase gas supply, pipeline transportation capacity, or storage capacity, we carefully consider the requirement for the supply and weigh the five "best cost" factors (price, security, deliverability, flexibility, and supplier relations). A great deal of judgment is required when weighing these factors and to help us exercise this judgment, we keep informed about all aspects of the natural gas industry. We intervene in all major FERC proceedings involving our pipeline transporters, stay in constant contact with our existing and potential suppliers, monitor gas prices on a real-time basis, subscribe to industry literature, follow supply and demand developments, and attend industry seminars.

Q. What is Piedmont's greatest challenge in applying its "best cost" gas purchasing policy?

A. Since most major gas supply decisions require a considerable degree of planning and must be made a year or more in advance of service, our greatest challenge is dealing with future uncertainties in a dynamic global, national, and regional energy market. Future demand for gas is affected by economic conditions, customer conservation efforts, weather patterns, regulatory policies, and public health crises, such as the ongoing COVID-19 pandemic. In addition, the future availability and pricing of gas supplies will be affected by overall end-user demand, oil and gas exploration and development, pipeline expansion and storage projects, and regulatory policies and approvals.

Q. What impact did the extreme cold weather event in Texas during February 2021 have on the Company?

A. Beginning on February 12, 2021, extreme winter weather spread across much of the central United States, disrupting energy systems particularly in Texas. Natural gas spot prices skyrocketed to record highs as demand increased and supply declined due to freeze-offs of production wells and the implementation of widespread force majeure. Natural gas spot prices began to normalize by February 22, 2021 as warmer weather reduced demand and alleviated supply constraints. The Company utilized storage to minimize the amount of incremental daily supply being purchased to the extent operationally feasible to mitigate the impact of the short-term gas price fly up.

Q. Please explain the Company's position regarding the current U.S. supply situation.

A. For much of the first decade of this century, futures pricing of natural gas reflected by the NYMEX was extremely volatile. Peak pricing for futures contracts occurred in July 2008 when contracts for gas to be delivered during January 2009 sold for $14.516 per dekatherm. However, due to the significant quantities of shale gas that have become available to the market, the cost of gas in the production areas has declined dramatically. It is the Company's expectation that some volatility will remain in the physical markets, particularly related to *force majeure* type events, interstate pipeline capacity markets, and/or significant changes in supply and/or demand, but that the dramatic swings previously seen in the futures market are not likely to recur with the same regularity or intensity so long as shale gas supplies remain abundant and regulatory policies remain favorable for gas and oil exploration, development, and transportation from production areas to the Company's market area. Another factor to consider in the U.S. supply situation is the exportation of LNG. Piedmont continues to evaluate approvals of LNG export terminals and to what extent exportation may impact gas prices. Nevertheless, market experts believe that future LNG exports would be adequately served by shale supplies and that while there is a reasonable expectation of an increase in gas costs, the anticipated effect is marginal.

Q. Please explain the factors that the Company evaluates in determining the pricing basis for its gas supply contracts. Please discuss the various pricing alternatives available, such as fixed prices, monthly market indexing and daily spot market pricing and describe how supplier reservation charges and discounts or premiums from market prices enter into the evaluation.

A. The Company has various pricing options available to it when developing its gas supply portfolio. These options include monthly market indexing, daily spot pricing, and fixed pricing. Pricing for gas contracted for a term of one month or longer generally refers to a monthly or daily index as published by industry trade publications. Prices for daily spot deals may refer to a daily index or be a negotiated fixed price.

The reservation fee the Company pays for each contract in its firm supply portfolio is dependent upon the pricing options chosen and the supply flexibility requirements associated with each contract. Reservation fees are generally lower for baseload supplies (purchased at a constant volume for the entire month, season or year) and higher if swing service is required. Reservation fees also vary depending on the type of swing service being provided. Examples of factors which affect the cost of swing service are: 1) the number of days of swing required; 2) the volume of swing allowed; 3) commodity pricing at first of the month indices versus daily spot pricing; 4) next day versus intraday swing capabilities; and 5) location of the supply being purchased.

The Company considers its anticipated load and swing requirements under various demand scenarios, contemplates the factors listed above and makes a "best cost" purchasing decision.

Q. Please describe how the Company determines the daily contract quantity of gas supplies that should be acquired through long-term contracts for the whole year, the full winter season and periods less than a full winter season.

A. The Company purchases gas supplies on a year-round basis to fulfill its firm requirements including storage injections and to minimize supply costs utilized to serve firm customers. Some of these contracts will escalate in volume during the winter period (November through March) as the

Company's firm requirements increase due to higher demand, thus sculpting year-round contracts to fit seasonal needs. The Company also purchases volumes for the winter period to meet its forecasted sales customers' demand within the limits of the Company's firm transportation capacity entitlements, which increase during the winter period. In addition, the Company reviews low demand scenarios to measure its ability to fulfill its contractual purchase commitments with suppliers. Lastly, the Company may purchase short-term city gate peaking supply to fulfill additional firm obligations that exceed the Company's firm transportation capacity entitlements.

Q. What process does the Company employ in selecting its firm gas suppliers?

A. The Company identifies the volume and type of supply that it needs to fulfill its customer demand requirements, and in general, solicits RFPs from a list of suppliers that the Company continuously updates as potential suppliers enter and leave the marketplace. The RFPs may be for firm baseload or swing supply. RFPs for swing supply may be further categorized into pricing based on first of the month indices or daily market indices. Swing supplies priced at first of the month indices command the highest reservation fees because the supplier assumes the risk associated with market volatility during the delivery period. Lower reservation fees are associated with swing contracts referencing a daily market index because both buyer and seller assume the risk of daily market volatility. After forecasting the ultimate cost delivered to the city gate for each point of supply (incorporating the forecasted cost at the supply point plus pipeline fuel plus pipeline transportation fees), and evaluating the cost of reservation fees associated with each type of supply and its corresponding bid, the Company makes a "best cost" decision on which type of supply and supplier is best suited to fulfill its needs.

Q. Did the Company enter into any new supply arrangements during the Review Period?

A. Yes, during the Review Period the Company added new supply arrangements.

Q. Please describe the new supply arrangements the Company entered into during the Review Period.

A. The Company entered into various new supply arrangements consisting of daily swing supply priced at the first of the month index during November through March, daily swing supply priced at the daily market index during November through March, and daily swing supply priced at the daily market index during December through February.

Q. Please describe the process the Company utilized, and the market intelligence evaluated during the Review Period to determine the prices charged for secondary market sales.

A. The process and information used by the Company in pricing secondary market sales depends upon the location of the sale, term of the sale, the type of sale, and prevailing market conditions at the time of the sale. For long-term delivered sales (longer than one month), in general, the Company solicits bids from potential buyers, and if acceptable, evaluates and awards available volumes. For short-term transactions (daily or monthly), the Company: 1) monitors prices and volumes on the Intercontinental Exchange (Intercontinental Exchange or "ICE" is an electronic trading platform where potential buyers post bids and potential sellers post offers at various locations/hubs along the interstate pipelines), 2) talks to various market participants, and 3) for less liquid trading points, estimates prices based on price relationships with more liquid points. The Company also evaluates the amount of supply available for sale and weighs that against current market conditions in formulating its sales strategy (i.e., if the Company has a large amount of supply to sell on a particular day and determines that market demand is low, the Company will be more aggressive in its sales strategy). The Company incorporates all of these factors and then initiates its sales strategy.

Q. Did the Company make any changes in its gas purchasing policies or practices during the Review Period?

A. The Company did not implement any changes in its "best cost" gas purchasing policies or practices during the Review Period.

Q. Did the Company take any other action to reduce price volatility for its customers?

A. Yes. The Company continues to utilize the Company's Hedging Plan as well as storage which acts as a physical hedge to stabilize the cost of gas. The Company's Equal Payment Plan, in addition to the adjustment of the Purchased Gas Adjustment benchmark price and deferred gas cost accounting, also provide a smoothing effect on natural gas prices charged to customers.

Q. What were the net economic results of the Hedging Plan during the Review Period?

A. The Company's North Carolina sales customers incurred a net economic cost of $927,345.88 (see Exhibit_(MBT-2)) as a result of the Company's Hedging Plan during the Review Period, which was a decrease compared to the last Review Period. This net economic impact includes the cost of commissions and amounts to an average cost per sales customer of roughly $0.10 per month.

Q. Did the Company's Hedging Plan work properly during the Review Period?

A. Yes. The Hedging Plan accomplished its goal of providing an insurance policy to reduce gas cost volatility for customers in the event of a gas price fly up.

Q. Has the Company made any changes to its Hedging Plan during the Review Period?

A. There were no changes made to the Hedging Plan during the Review Period. The Company has and will continue to closely monitor the gas supply – demand picture and when appropriate will propose changes it deems necessary to its Hedging Plan.

Q. Please describe how compliance with the Hedging Plan is monitored.

A. Currently, the Gas Accounting, Finance, Risk, and Corporate Compliance areas of the Company perform ongoing activities to monitor compliance with the Hedging Plan. In addition, the Company's Gas Market Risk Committee monitors compliance with the Hedging Plan, as well as considers and approves any changes to the Hedging Plan. Periodic internal audits have and will be performed to ensure that controls continue to be adequate and function as management intends.

Q. Have there been any deviations from the Hedging Plan during the Review Period?

A. There were no deviations from the Hedging Plan during the Review Period.

Q. Given the current low gas price forecast and low gas cost volatility environment, do you think continuing to hedge under the current Hedging Plan is prudent?

A. Yes. Because the goal of the Hedging Plan is to provide insurance against gas cost volatility if prices fly up, the Company feels it is prudent to incur what it deems is a low-cost insurance policy and continue with the current Hedging Plan. As stated previously, the cost per sales customer during the Review Period was approximately $0.10 per month. Because the current Hedging Plan only contemplates the purchase of options, the cost of the Hedging Plan is relatively low. As stated above, the Company has and will continue to closely monitor the gas supply demand picture and will propose changes to its Hedging Plan if necessary.

Q. What are some of the other steps the Company has taken to manage its gas costs consistent with its "best cost" policy during the Review Period?

A. During the past year, the Company has taken the following additional steps to manage its gas costs, consistent with its "best cost" policy:

(1) As more fully described in Mr. Patton's testimony, the Company has actively participated in proceedings before the FERC and other regulatory agencies that could reasonably be expected to affect the Company's rates and services;

(2) The Company has utilized the flexibility available within its supply and capacity contracts to purchase and dispatch gas, release capacity, and initiate secondary marketing sales in the most cost-effective manner, resulting in secondary market credits to customers of $27,911,198.76, compared to last year's secondary market credits of $25,414,407.44; and

(3) The Company has actively promoted more efficient peak day use of natural gas and load growth from "year-round" markets in order to improve the Company's load factor and reduce average unit costs.

Q. Please summarize your testimony.

A. The Company's "best cost" purchasing policy provides our customers with secure and reasonably priced gas supplies to meet their energy requirements. This policy and the Company's practices under this policy have been reviewed and found prudent on all occasions in North Carolina and in the other state jurisdictions in which we operate. Although we believe our policies and procedures are reasonable, we are cognizant of the fact that the natural gas industry is constantly changing, and we continuously monitor our policies and procedures to keep up with, and anticipate, these changing conditions. We are satisfied that our existing policies and procedures are prudent and that they have produced and will continue to produce adequate amounts of secure and reasonably priced gas for our customers.

Q. Does this conclude your testimony?

A. Yes.