

**Before the
North Carolina Utilities Commission**

Docket No. G-9, Sub 811

**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.**



August 1, 2022

1 **Q. Please state your name and your business address.**

2 A. My name is Todd Breece. My business address is 4720 Piedmont Row Drive,
3 Charlotte, North Carolina 28210.

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

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

9 **Q. Please describe your educational and professional background.**

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

18 **Q. Please describe the scope of your present responsibilities for the**
19 **Company.**

20 A. My primary responsibilities include supervision of the long and short-term
21 purchasing of supply, optimization of pipeline transportation, storage, and
22 supply assets, and administration of the Company’s Hedging Plan.

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

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

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

6 A. My testimony describes the Company's gas purchasing policies and hedging
7 activity between June 1, 2021 and May 31, 2022 ("Review Period"). This
8 testimony is in response to Commission Rule R1-17(k)(6), which provides for
9 an annual review of the Company's gas costs.

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

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

18 **Q. Please describe each of the five components.**

19 A. 1) The "price of the gas" refers to the final cost of gas delivered to the
20 Company's city gates. Most of the Company's supply purchases take place
21 at "pooling points" or at interconnects into the pipeline on which the
22 Company holds firm transportation capacity rights. In the case of "bundled"
23 city gate supply purchases, the Company may pay the gas supplier an all-

1 inclusive price that covers the cost of gas, fuel, and transportation charges.

2 The use of storage services may add additional injection, withdrawal, and
3 related fuel charges to the city gate cost of gas. To accurately assess prices at
4 a comparable transaction point, the Company evaluates purchase prices at the
5 receipt point and adds the applicable fuel and transportation costs associated
6 with delivery to our pipeline city gates.

7 2) “Security of gas supply” refers to the assurances that the supply of gas will
8 be available when required. It is imperative to maintain a high level of supply
9 security for the Company’s firm customers. Security of gas supply is less
10 important for the Company’s interruptible customers who may have access to
11 alternate fuels and whose service is subject to interruption in order to provide
12 service to the Company’s firm customers. Fixed supply reservation fees are
13 generally required, in addition to the commodity cost of gas, in order to
14 contract for and reserve firm gas supplies. In addition, the Company
15 considers the geographic source of supply, the nature of the supplier’s
16 portfolio of gas supplies, and negotiated contract terms when evaluating the
17 level of supply security. Thus, the security of gas supply is interrelated with
18 the price of gas as well as other components of the Company’s “best cost”
19 purchasing policy.

20 3) “Flexibility of gas supply” refers to the Company’s ability to adjust the
21 volume of a particular supply contract as operating and market conditions
22 change. For example, the demand of firm heat-sensitive customers will vary
23 depending on the weather conditions, whereas interruptible customers will

1 adjust their purchases depending on factors such as the price of alternate fuels
2 and the demand for their products. Thus, the Company must arrange a
3 portfolio of gas supplies and storage services that are flexible enough to meet
4 the daily and monthly “swings” in demand. Contractual “swing rights” are
5 implemented through monthly and daily elections with gas suppliers and
6 through injections into and withdrawals out of storage.

7 4) “Gas deliverability” refers to the ability to deliver the Company’s gas
8 supplies at the city gate through reliable transportation and storage capacity
9 arrangements. The interstate pipeline industry has created a complex system
10 of multiple pipeline services and storage service combinations.
11 Transportation arrangements can involve intrastate pipeline transportation,
12 interstate pipeline transportation, interstate pipeline storage arrangements,
13 interstate pipeline lateral lines, interstate pipeline pooling services, and
14 interstate pipeline balancing and peaking services. The marketplace for
15 pipeline capacity service is limited, with little to no unused capacity available
16 during periods of high demand conditions such as extreme cold or hot weather
17 conditions. Consequently, it is important that the Company secure and
18 maintain firm transportation and storage capacity rights to ensure the
19 deliverability of its gas supplies to meet the design day, seasonal, and annual
20 needs of the Company’s customers. Pipeline transportation and storage
21 capacity contracts require the payment of fixed demand charges to reserve
22 firm transportation and/or storage entitlements. The Company is active in
23 proceedings at the Federal Energy Regulatory Commission (“FERC”) not

1 only with respect to the level of pipeline charges under these contracts, but
2 also the tariff terms and conditions that apply to these pipeline services.

3 5) "Supplier relations" refers to the dependability, integrity, and flexibility of
4 a particular gas supplier. The Company contracts with gas suppliers who have
5 a reputation of honoring their contractual commitments and have proven
6 themselves as reliable suppliers. Conversely, the Company avoids suppliers
7 that have a reputation of defaulting on contract obligations or who unilaterally
8 interpret contracts to their advantage. The Company prefers to deal with
9 suppliers who are constantly looking for ways to improve service and offer
10 "win-win" solutions for meeting customer needs. The Company also prefers
11 to deal with suppliers providing natural gas produced with low levels of
12 methane emissions.

13 **Q. Please describe the arrangements under which the Company purchases**
14 **gas.**

15 A. The Company purchases gas supplies under a diverse portfolio of contractual
16 arrangements with several gas producers and marketers. In general, under the
17 Company's firm gas supply contracts, the Company may pay negotiated
18 reservation fees for the right to reserve and call upon firm supply service up
19 to the maximum daily contract quantity (elected either on a monthly or daily
20 basis), with market-based commodity prices. These market-based
21 commodity prices, which are referenced in the Company's gas supply
22 contracts, are published daily and monthly in industry trade publications.
23 These firm contracts typically range in term from one month to two years and

1 some of these contracts are for winter only (peaking or seasonal) service,
2 while others provide for annual service. Firm gas supplies are purchased for
3 reliability and security of service. The reservation fees associated with firm
4 gas supplies may vary according to the amount of flexibility built into the
5 contract, with daily swing service generally being more expensive than
6 monthly baseload service. Generally, as existing supply contracts near their
7 expiration, Piedmont sends requests for proposals (“RFPs”) to potential
8 suppliers, evaluates their responses, and contracts for firm gas supplies with
9 suppliers whose proposals best fulfill the Company’s “best cost” purchasing
10 policy.

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

19 **Q. How does the combination of the five factors described above determine**
20 **the nature of the supply and capacity contracts under the Company’s**
21 **“best cost” policy?**

22 A. Under the Company’s “best cost” policy, Piedmont secures and maintains a
23 supply portfolio that is in balance with the requirements of Piedmont’s sales

1 customers. Because the Company's firm sales customers require secure and
2 reliable gas supply, Piedmont meets their demand needs primarily with long-
3 term firm supply, transportation, storage, and peaking service contracts. The
4 temperature sensitivity of the Company's firm customers necessitates that
5 flexibility of supply and storage also be provided. As mentioned earlier, firm
6 gas supply contracts demand a premium, typically in the form of fixed
7 reservation fees. Also, firm supply contracts with flexible swing service
8 entitlements will command a higher reservation fee than baseload
9 arrangements. Because the Company's interruptible customers are more
10 price sensitive and require less supply security, Piedmont supplies these
11 customers with off-peak firm gas supply and transportation services when the
12 firm customers' demand declines and through the purchase of gas supplies in
13 the spot market.

14 In short, before entering into any agreement to purchase gas supply, pipeline
15 transportation capacity, or storage capacity, the Company carefully considers
16 the requirement for the supply and weighs the five "best cost" factors (price,
17 security, deliverability, flexibility, and supplier relations). A great deal of
18 judgment is required when weighing these factors and to help the Company
19 exercise this judgment, Piedmont keeps informed about all aspects of the
20 natural gas industry. For instance, Piedmont intervenes in all major FERC
21 proceedings involving the Company's pipeline transporters, stays in constant
22 contact with its existing and potential suppliers, monitors gas prices on a real-

1 time basis, subscribes to industry literature, follows supply and demand
2 developments, and attends industry seminars.

3 **Q. What is the greatest challenge in applying the Company’s “best cost” gas**
4 **purchasing policy?**

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

15 **Q. Please explain the Company’s position regarding the current U.S. supply**
16 **situation.**

17 A. For much of the first decade of this century, futures pricing of natural gas
18 reflected by the New York Mercantile Exchange was extremely volatile. Peak
19 pricing for futures contracts occurred in July 2008 when contracts for gas to
20 be delivered during January 2009 sold for \$14.516 per dekatherm. However,
21 due to the significant quantities of shale gas that have become available to the
22 market, the cost of gas in the production areas has declined dramatically.
23 Natural gas prices have risen significantly over the last year though due to an

1 increase in liquified natural gas (“LNG”) exports, the current storage deficit,
2 a very limited inventory of usable coal, and natural gas production being
3 relatively flat despite strong domestic demand. Drilling activity is expected
4 to increase in response to these high prices, which should lead to increased
5 production and this recent volatility should be temporary as evidenced by
6 natural gas futures prices decreasing significantly over the next three years.
7 It is the Company’s expectation that some volatility will remain in the
8 physical markets, particularly related to *force majeure* type events, interstate
9 pipeline capacity markets, and/or significant changes in supply and/or
10 demand, but that the dramatic swings previously seen in the futures market
11 are not likely to recur with the same regularity or intensity so long as shale
12 gas supplies remain abundant and regulatory policies remain favorable for gas
13 and oil exploration and development. Another factor to consider in the U.S.
14 supply situation is the exportation of LNG. Piedmont continues to evaluate
15 approvals of LNG export terminals, applications for trade with Free Trade
16 Agreement and non-Free Trade Agreement countries, and to what extent
17 exportation may impact gas prices. Nevertheless, market experts believe that
18 future LNG exports would be adequately served by shale supplies and that
19 there is a reasonable expectation of an increase in gas costs.

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

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

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

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

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

8 A. The Company purchases gas supplies on a year-round basis to fulfill its firm
9 requirements including storage injections and to minimize supply costs
10 utilized to serve firm customers. Some of these contracts escalate in volume
11 during the winter period (November through March) as the Company’s firm
12 requirements increase due to higher demand, thus sculpting year-round
13 contracts to fit seasonal needs. The Company also purchases volumes for the
14 winter period to meet its forecasted sales customers’ demand within the limits
15 of the Company’s firm transportation capacity entitlements, which increase
16 during the winter period. In addition, the Company reviews low demand
17 scenarios to measure its ability to fulfill its contractual purchase commitments
18 with suppliers. Lastly, the Company may purchase short-term city gate
19 peaking supply to fulfill additional firm obligations that exceed the
20 Company’s firm transportation capacity entitlements.

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

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

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

21 A. Yes. During the Review Period the Company added new supply
22 arrangements.

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

3 A. The Company entered into various new supply arrangements consisting of
4 daily swing supply priced at the first of the month index during November
5 through March and daily swing supply priced at the daily market index during
6 November through March.

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

10 A. The process and information used by the Company in pricing secondary
11 market sales depends upon the location of the sale, term of the sale, the type
12 of sale, and prevailing market conditions at the time of the sale. For long-
13 term delivered sales (longer than one month), in general, the Company solicits
14 bids from potential buyers, and if acceptable, evaluates and awards available
15 volumes. For short-term transactions (daily or monthly), the Company: 1)
16 monitors prices and volumes on the Intercontinental Exchange
17 (Intercontinental Exchange or “ICE” is an electronic trading platform where
18 potential buyers post bids and potential sellers post offers at various
19 locations/hubs along the interstate pipelines), 2) talks to various market
20 participants, and 3) for less liquid trading points, estimates prices based on
21 price relationships with more liquid points. The Company also evaluates the
22 amount of supply available for sale and weighs that against current market
23 conditions in formulating its sales strategy (i.e. if the Company has a large

1 amount of supply to sell on a particular day and determines that market
2 demand is low, the Company will be more aggressive in its sales strategy).
3 The Company incorporates all of these factors and then initiates its sales
4 strategy.

5 **Q. Did the Company make any changes to its gas purchasing policies or**
6 **practices during the Review Period?**

7 A. The Company did not make any changes to its “best cost” gas purchasing
8 policies or practices during the Review Period.

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

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

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

19 A. The Company’s North Carolina sales customers incurred a net economic
20 benefit of \$18,021,466.90 (see **Exhibit_(MBT-2)**) as a result of the
21 Company’s Hedging Plan during the Review Period. This net economic
22 impact includes the cost of commissions, software, subscriptions, and a data

1 feed and amounts to an average savings per sales customer of roughly \$1.90
2 per month.

3 **Q. Did the Company's Hedging Plan work as designed during the Review**
4 **Period?**

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

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

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

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

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

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

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

4 **Q. Given the current price forecast and recent volatility, do you think**
5 **continuing to hedge under the current Hedging Plan is prudent?**

6 A. Yes. Because the goal of the Hedging Plan is to provide insurance against
7 gas cost volatility if prices increase, the Company feels it is prudent to incur
8 what it deems a low-cost insurance policy and continue with the current
9 Hedging Plan. As stated previously, the average savings per sales customer
10 during the Review Period was approximately \$1.90 per month. Because the
11 current Hedging Plan only contemplates the purchase of options, the cost of
12 the Hedging Plan is relatively low. As stated above, the Company will
13 continue to closely monitor the gas supply demand picture and will propose
14 changes to its Hedging Plan if necessary.

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

17 A. During the Review Period, the Company has taken the following additional
18 steps to manage its gas costs, consistent with its “best cost” policy:

19 (1) As more fully described in Piedmont witness Patton’s testimony,
20 the Company has actively participated in proceedings before the FERC and
21 other regulatory agencies that could reasonably be expected to affect the
22 Company’s rates and services;

1 (2) The Company has utilized the flexibility available within its
2 supply and capacity contracts to purchase and dispatch gas, release capacity,
3 and initiate secondary marketing sales in the most cost-effective manner,
4 resulting in secondary market credits to customers of \$54,546,979.09,
5 compared to last year's secondary market credits of \$27,911,198.76; and

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

9 **Q. Has Piedmont taken any steps as part of its gas procurement process to**
10 **help minimize methane emissions?**

11 A. Yes. The Company has included in its gas supply requests for proposals to gas
12 suppliers a process for tie breakers, where Piedmont will award a gas supply
13 contract to the supplier that offers lower methane emissions, or to the supplier
14 that has methane emission reduction goals. The Company will continue to
15 monitor industry and supplier communications concerning emissions reduction
16 efforts and provide relevant updates to the Commission.

17 **Q. Has Piedmont paid a premium for natural gas because of suppliers'**
18 **emissions reductions or stated goals to reduce emissions?**

19 A. No. Piedmont has not paid a premium for low methane emitting gas or based
20 on suppliers' stated goals to reduce emissions.

21 **Q. Please summarize your testimony.**

22 A. The Company's "best cost" purchasing policy provides Piedmont's customers
23 with secure and reasonably priced gas supplies to meet their energy

1 requirements. This policy and the Company's practices under this policy have
2 been reviewed and found prudent on all occasions in North Carolina and in
3 the other state jurisdictions in which Piedmont operates. Although the
4 Company believes its policies and procedures are reasonable, Piedmont is
5 cognizant of the fact that the natural gas industry is constantly changing and,
6 as such, is continuously monitoring its policies and procedures to keep up
7 with these changing conditions. The Company will continue to review current
8 regulations and tariffs and explore possible changes that will better serve
9 Piedmont's customers in the future. The Company is satisfied that its existing
10 policies and procedures are prudent and that they have produced, and will
11 continue to produce, adequate amounts of secure and reasonably priced gas
12 for Piedmont's customers.

13 **Q. Does this conclude your testimony?**

14 A. Yes.