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Docket No. G-9, Sub 831

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.



1	Q.	Please state your name and your business address.			
2	A.	My name is Todd Breece. My business address is 4720 Piedmont Row			
3		Drive, 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			
6		of Piedmont Natural Gas Company, Inc. ("Piedmont" or the "Company"),			
7		a 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			
13		Engineer and in June 2007 I was promoted to Senior Engineer. In November			
14		2007 I took a position in the Company as a Gas Supply Representative. In			
15		May 2011 I was promoted to Senior Gas Supply Representative, and I was			
16		subsequently promoted to Senior Gas Trader in January 2018. In October			
17		2018, I assumed my current position as Manager of Natural Gas Trading &			
18		Optimization.			
19	Q.	Please describe the scope of your present responsibilities for the			
20		Company.			
21	A.	My primary responsibilities include supervision of the long and short-term			
22		purchasing of supply, optimization of pipeline transportation, storage, and			
23		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			
4		Public 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			
7		hedging activity between June 1, 2022 and May 31, 2023 ("Review			
8		Period"). This testimony is in response to Commission Rule R1-17(k)(6),			
9		which provides for 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.			
12		This policy consists of five main components: 1) the price of the gas, 2) the			
13		security of the gas supply, 3) the flexibility of the gas supply, 4) gas			
14		deliverability, and 5) supplier relations. Because all of these components			
15		are interrelated, the Company continues to weigh the relative importance of			
16		each of these factors when developing the overall gas supply portfolio to			
17		meet the needs of its customers.			
18	Q.	Did the Company make any changes to its gas purchasing policies or			
19		practices during the Review Period.			
20	A.	The Company did not make any changes to its "best cost" gas purchasing			
21		policies or practices during the Review Period.			

Q. Please describe each of the five components that comprise the "best cost" gas purchasing policy.

- A. 1) The "price of the gas" refers to the final cost of gas delivered to the Company's city gates. Most of the Company's supply purchases take place at pooling points or at pipeline interconnects 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. To accurately assess prices at a comparable transaction point, the Company evaluates gas purchase prices at the receipt point and adds the applicable fuel and transportation costs associated with delivery to its 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 the Company's 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 Company considers the geographic source of supply, the nature of the supplier's portfolio of gas supplies, and negotiated contract terms 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 the Company's ability to adjust the volume of a particular supply contract as operating and market conditions change. For example, the demand of firm heat-sensitive customers will vary depending on the weather conditions, whereas 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 services 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 the Company secure and maintain firm transportation and storage capacity rights to ensure the deliverability of its gas supplies to meet the design day, seasonal, and annual needs of the Company's 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 particular gas supplier. The Company contracts with gas suppliers who have a reputation of honoring their contractual commitments and have proven themselves as reliable suppliers. Conversely, the Company avoids suppliers that have a reputation of defaulting on contract obligations or who unilaterally interpret contracts to their advantage. The Company prefers to deal with suppliers who are constantly looking for ways to improve service and offer "win-win" solutions for meeting customer needs. The Company also prefers to deal with suppliers providing natural gas produced with low levels of methane emissions.

Q.	Please describ	e the sup	oply ar	rangements	under	which	the	Compan
	purchases gas.							

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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, which are referenced in the Company's gas supply contracts, are published daily and monthly in industry trade publications. These firm gas supply contracts typically range in term from one month to two years and some of these contracts are for winter only (peaking or seasonal) service, while others provide for 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, as existing supply contracts near their expiration, Piedmont solicits requests for proposals ("RFPs") to potential suppliers, evaluates their responses, and contracts for firm gas supplies 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. Since these contracts provide less

supply security, 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 the Company's "best cost" policy?
- A. Under the Company's "best cost" policy, Piedmont secures and maintains a supply portfolio that is in balance with the requirements of Piedmont's sales customers. Because the Company's firm sales customers require secure and reliable gas supply, Piedmont meets their demand needs primarily with long-term firm supply, transportation, storage, and peaking service contracts. The temperature sensitivity of the Company's 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 the Company's interruptible customers are more price sensitive and require less supply security, Piedmont supplies 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.

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In short, before entering into any agreement to purchase gas supply, pipeline transportation capacity, or storage capacity, the Company carefully considers the requirement for the supply and weighs 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 the Company exercise this judgment, Piedmont stays informed of all aspects of the natural gas industry. For instance, Piedmont intervenes in all major FERC proceedings involving the Company's pipeline transporters, stays in constant contact with its existing and potential suppliers, monitors gas prices on a real-time basis, subscribes to industry literature, follows supply and demand developments, and attends industry seminars.

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

Because most major gas supply decisions require a considerable degree of planning and must be made a year or more in advance of service, the 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, public health crises, such as the COVID-19 pandemic, and political conflicts, such as the ongoing Russia – Ukraine war. 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. Please explain the Company's position regarding the current U.S. supply situation.

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For much of the first decade of this century, futures pricing of natural gas A. reflected by the New York Mercantile Exchange 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. More recently, natural gas prices increased significantly in 2022 due to an increase in liquified natural gas ("LNG") exports, a substantial storage deficit, an extremely limited inventory of usable coal, and natural gas production being relatively flat despite strong domestic demand. However, in 2023, natural gas prices have decreased significantly due to increased production, relatively high natural gas storage inventories due to a mild winter, and decreased pricing for LNG exports. 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 and development. 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 LNG exportation may impact gas prices. Nevertheless, market experts believe that future LNG exports will be adequately served by shale supplies and that there is a reasonable expectation of an increase in gas costs.

- 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 factor into the evaluation.
- A. There are various pricing options available to the Company 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. For example, reservation fees are generally lower for baseload supplies (purchased at a constant volume for the entire month, season, or year) and are normally

higher if swing service is required. Reservation fees also vary depending on the type of swing service being provided. Examples of factors that 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 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?

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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 daily market index during November through March.
 - 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 or "ICE", an electronic trading platform where potential buyers post bids and potential sellers post offers at various locations/hubs along 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 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 \$4,662,806.88 (see Exhibit_(LLM-2)) as a result of the Company's Hedging Plan during the Review Period. This net economic impact includes the cost of commissions, software, subscriptions, and a data feed and amounts to an average cost per sales customer of roughly \$0.48 per month.

1	Q.	Did the Company's Hedging Plan work as designed during the Review			
2		Period?			
3	A.	Yes. The Hedging Plan accomplished its goal of providing an insurance			
4		policy to reduce gas cost volatility for customers in the event of a spike in			
5		gas prices.			
6	Q.	Has the Company made any changes to its Hedging Plan during the			
7		Review Period?			
8	A.	There were no changes made to the Hedging Plan during the Review Period.			
9		The Company continues to closely monitor the gas supply demand picture			
10		and, when appropriate, will propose changes to its Hedging Plan.			
11	Q.	Please describe how compliance with the Hedging Plan is monitored.			
12	A.	Currently, the Company's Gas Accounting, Finance, Risk, and Corporate			
13		Compliance departments perform ongoing activities to monitor compliance			
14		with the Hedging Plan. In addition, the Company's Gas Market Risk			
15		Committee monitors compliance with the Hedging Plan and considers and			
16		approves any changes to the Hedging Plan. Periodic internal audits will			
17		continue to be performed to ensure that controls are adequate and function			
18		as management intends.			
19	Q.	Have there been any deviations from the Hedging Plan during the			
20		Review Period?			
21	A.	There were no deviations from the Hedging Plan during the Review Period.			

Q.	Given the current price forecast and recent volatility, 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 increase, the Company feels it is prudent to incur what it deems a low-cost insurance policy and continue with the current Hedging Plan. As stated previously, the average cost per sales customer during the Review Period was approximately \$0.48 per month. Because the current Hedging Plan only contemplates the purchase of options, the cost of the Hedging Plan is relatively low. Furthermore, the Company continues to closely monitor the gas supply-demand picture and when appropriate will propose changes to the Hedging Plan.
- 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 Review Period, 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 Piedmont witness Jeffrey 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 \$137,567,859.68, compared to last year's secondary market credits of \$54,546,979.09. This substantial increase in secondary marketing credits is due to supply basis pricing increasing dramatically over the last year causing the Company's pipeline capacity to become much more valuable; and

- (3) The Company has actively promoted more efficient peak day use of natural gas and load growth from "year-round" markets to improve the Company's load factor and reduce average unit costs.
- Q. With recent U.S. gas supply conditions and increased Transco constraints, please discuss any/all changes/strategies for Piedmont's gas planning activities to protect its customers against gas price volatility and availability.
- A. Piedmont utilizes its firm transportation capacity to procure the lowest cost available daily supply for its customers. Piedmont takes advantage of location basis differentials to purchase its natural gas supplies on a best cost Citygate delivered basis. This means that we explore all available options to obtain gas at Piedmont's Citygate delivery points at the lowest cost possible consistent with its best cost gas purchasing policy. Piedmont also continues to utilize its RFP bid process to secure supplies from competitive bidders on a best cost basis. Piedmont also continues to utilize its Hedging Plan as well as storage, which acts as a physical hedge, to stabilize the cost of gas, particularly in periods of peak demand. Piedmont manages its storage effectively by typically injecting when prices are low and

withdrawing when prices are high. Piedmont also effectively optimizes unused assets through capacity releases, off system sales, and Asset Management Arrangements to help reduce its customers' costs. In this case, the combined impact of the Company's hedging plan and its secondary market activities alone resulted in a credit of \$132.9MM to its customers.

Q. Are you familiar with any additional mechanisms that could mitigate the impact of volatile natural gas markets on Piedmont's customers?

- A. No. The commodity market for natural gas is unregulated. We utilize competitive bidding processes to ensure we are purchasing gas at market prices and we also structure our contracts to meet the demands of our customers year-round, seasonally, and during peak day conditions so we are not "over purchasing" supply or capacity. We also engage in financial hedging transactions to protect against price spikes and use seasonal and peak day physical storage for the same purpose. Finally, we actively engage in secondary market transactions to recover value for customers by allowing for the optimization of customer paid for capacity and supply when not necessary to serve Piedmont's customers. I am unaware of any additional methods by which we could reasonably hope to mitigate the risks of volatile natural gas markets.
- Q. Has Piedmont taken any steps as part of its gas procurement process to help minimize methane emissions?
- A. Yes. The Company has included in its gas supply RFPs to gas suppliers a process for tie breakers, where Piedmont will award a gas supply contract to the

supplier that offers lower methane emissions, or to the supplier that has methane emission reduction goals. The Company will continue to monitor industry and supplier communications concerning emissions reduction efforts and provide relevant updates to the Commission.

- Q. Has Piedmont paid a premium for natural gas because of suppliers' emissions reductions or stated goals to reduce emissions?
- A. No. Piedmont has not paid a premium for low methane emitting gas or based on suppliers' stated goals to reduce emissions.
- Q. Please summarize your testimony.

A.

The Company's "best cost" purchasing policy provides Piedmont's customers with secure and reasonably priced gas supplies to meet their energy requirements. This "best cost" 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 Piedmont operates. Although the Company believes its policies and procedures are reasonable, Piedmont is cognizant of the fact that the natural gas industry is constantly changing and, as such, is continuously evaluating its policies and procedures to keep up with these changing conditions. The Company continues to review current regulations and tariffs and explore possible changes that will better serve Piedmont's customers in the future. The Company is satisfied that its 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 Piedmont's customers.

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1	Q.	Does this conclude your testimony?	
2	A.	Yes.	