

**Before the  
North Carolina Utilities Commission**

**Docket No. G-9, Sub 752**

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

**Testimony and Exhibits  
of  
Sarah E. Stabley**

**On Behalf Of  
Piedmont Natural Gas Company, Inc.**



**August 1, 2019**

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

2 A. My name is Sarah E. Stabley. My business address is 4720 Piedmont Row  
3 Drive, Charlotte, North Carolina.

4 **Q. What is your position with Piedmont Natural Gas Company (“Piedmont”  
5 or the “Company”)?**

6 A. I am Managing Director of Gas Supply Optimization & Pipeline Services in  
7 the Natural Gas Business Unit of Duke Energy Corporation (“Duke Energy”),  
8 of which Piedmont is a wholly owned subsidiary.

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

10 A. I graduated from Queens University of Charlotte in May of 2004 with a  
11 Bachelor of Arts Degree in Business Administration. I joined the Company  
12 as a Collector/Meter Reader in our field operations in December of 1998. In  
13 March 2001 I took a position in Gas Control as a Schedule Confirmation  
14 Analyst. In November 2004, I was hired as a Gas Supply Representative in  
15 the Gas Supply department. In 2008, I was promoted to Manager of Gas  
16 Supply & Wholesale Marketing. In 2013, I was promoted to Director of Gas  
17 Supply, Scheduling & Optimization. In 2018, I was promoted to my current  
18 position as Managing Director of Gas Supply Optimization & Pipeline  
19 Services.

20 **Q. Please describe the scope of your present responsibilities.**

21 A. My current major responsibilities for Piedmont include supervision of the  
22 procurement and optimization of pipeline transportation, storage, and supply

1 assets, system demand forecasting, administration of the Company's Hedging  
2 Plans, and management of broker activity for transportation.

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

5 A. Yes. I have previously testified in this Commission's Annual Review of Gas  
6 Costs for Piedmont (Docket Nos. G-9 Sub 633, G-9 Sub 653, G-9 Sub 673,  
7 G-9 Sub 690, G-9 Sub 710, and G-9 Sub 727). I have also testified in the  
8 Annual Review of Purchased Gas Adjustment and Gas Purchasing Policies  
9 for Piedmont by the Public Service Commission of South Carolina (Docket  
10 Nos. 2012-4-G, 2013-4-G, 2014-4-G, 2015-4-G, 2016-4-G, 2017-4-G, 2018-  
11 4-G, and 2019-4-G).

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

13 A. This testimony is in response to Commission Rule R1-17(k)(6), which  
14 provides for an annual review of the Company's gas costs recovered from all  
15 its customers that it served during the review period. I will also discuss the  
16 Company's hedging activity during the review period.

17 **Q. What is the period of review in this docket?**

18 A. The review period is June 1, 2018 through May 31, 2019.

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

20 A. The Company has previously utilized and continues to maintain a "best cost"  
21 gas purchasing policy. This policy consists of five main components: 1) the  
22 price of the gas, 2) the security of the gas supply, 3) the flexibility of the gas

1 supply, 4) gas deliverability, and 5) supplier relations. As all of these  
2 components are interrelated, we continue to weigh the relative importance of  
3 each of these factors when developing the overall gas supply portfolio to meet  
4 the needs of our customers.

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

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

17 2) “Security of gas supply” refers to the assurances that the supply of gas will  
18 be available when required. It is imperative to maintain a high level of supply  
19 security for the Company’s firm customers. Security of gas supply is less  
20 important for our interruptible customers whose service is subject to  
21 interruption in order to provide service to the Company’s firm customers.  
22 Fixed supply reservation fees are generally required, in addition to the

1 commodity cost of gas, in order to contract for and reserve firm gas supplies.

2 In addition, the geographic source of supply, the nature of the supplier's  
3 portfolio of gas supplies, and negotiated contract terms must be considered  
4 when evaluating the level of supply security. Thus, the security of gas supply  
5 is interrelated with the price of gas as well as other components of the  
6 Company's "best cost" purchasing policy.

7 3) "Flexibility of gas supply" refers to our ability to adjust the volume of a  
8 particular supply contract as operating and market conditions change. For  
9 example, the demand of firm heat-sensitive customers will vary depending on  
10 the weather conditions. Interruptible customers will vary their level of  
11 purchases depending on the price of alternate fuels and the demand for  
12 product in their own industry. Thus, the Company must arrange a portfolio  
13 of gas supplies and storage services flexible enough to meet the daily and  
14 monthly "swings" in demand. Contractual "swing rights" are implemented  
15 through monthly and daily elections with gas suppliers and through injections  
16 into and withdrawals out of storage.

17 4) "Gas deliverability" refers to the ability to deliver the Company's gas  
18 supplies at the city gate through reliable transportation and storage capacity  
19 arrangements. The interstate pipeline industry has created a complex system  
20 of multiple pipeline and storage service combinations. Transportation  
21 arrangements can involve *intrastate* pipeline transportation, interstate  
22 pipeline transportation, interstate pipeline storage arrangements, interstate

1 pipeline lateral lines, interstate pipeline pooling services, and interstate  
2 pipeline balancing and peaking services. The marketplace for pipeline  
3 capacity service is limited, with little to no unused capacity available during  
4 periods of high demand conditions such as extreme cold or hot weather  
5 conditions. Consequently, it is important that we secure and maintain firm  
6 transportation and storage capacity rights to ensure the deliverability of our  
7 gas supplies to meet the design day, seasonal, and annual needs of our  
8 customers. Pipeline transportation and storage capacity contracts require the  
9 payment of fixed demand charges to reserve firm transportation and/or  
10 storage entitlements. The Company is active in proceedings at the Federal  
11 Energy Regulatory Commission (“FERC”) not only with respect to the level  
12 of pipeline charges under these contracts, but also the tariff terms and  
13 conditions that apply to these pipeline services.

14 5) “Supplier relations” refers to the dependability, integrity and flexibility of  
15 a particular gas supplier. We contract with gas suppliers who have a  
16 reputation of honoring their contractual commitments and have proven  
17 themselves as reliable suppliers. Conversely, we avoid suppliers which have  
18 a reputation of defaulting on contract obligations or who unilaterally interpret  
19 contracts to their advantage. We prefer to deal with suppliers who are  
20 constantly looking for ways to improve service and offer “win-win” solutions  
21 for meeting customer needs.

1 **Q. Please describe the arrangements under which the Company purchases**  
2 **gas.**

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

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

9 **Q. How does the combination of the five factors described above determine**  
10 **the nature of the supply and capacity contracts under your “best cost”**  
11 **policy?**

12 A. Under our “best cost” policy, we secure and maintain a supply portfolio that  
13 is in balance with the requirements of our sales customers. Because our firm  
14 sales customers must have secure and reliable gas supply, we meet the need  
15 of our firm sales customers’ demand primarily with long-term firm supply,  
16 transportation, storage, and peaking service contracts. The temperature  
17 sensitivity of our firm customers necessitates that flexibility of supply and  
18 storage also be provided. As mentioned earlier, firm gas supply contracts  
19 demand a premium, typically in the form of fixed reservation fees. Firm  
20 supply contracts with flexible swing service entitlements will command a  
21 higher reservation fee than baseload arrangements. Because our interruptible  
22 customers are more price sensitive and require less supply security, we supply



1 these customers with off-peak firm gas supply and transportation services  
2 when the firm customers' demand declines and through the purchase of gas  
3 supplies in the spot market.

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

14 **Q. What is your greatest challenge in applying your "best cost" gas**  
15 **purchasing policy?**

16 A. Since most major gas supply decisions require a considerable degree of  
17 planning and must be made a year or more in advance of service, our greatest  
18 challenge is dealing with future uncertainties in a dynamic global, national,  
19 and regional energy market. Future demand for gas is affected by economic  
20 conditions, customer conservation efforts, weather patterns, and regulatory  
21 policies. In addition, the future availability and pricing of gas supplies will  
22 be affected by overall end-user demand, oil and gas exploration and

1 development, pipeline expansion and storage projects, and regulatory policies  
2 and approvals.

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

5 A. For much of the first decade of this century, futures pricing of natural gas  
6 reflected by the NYMEX was extremely volatile. Peak pricing for futures  
7 contracts occurred in July 2008 when contracts for gas to be delivered during  
8 January 2009 sold for \$14.516 per dekatherm. Due to the significant  
9 quantities of shale gas that have become available to the market, the cost of  
10 gas in the production areas has declined dramatically. It is the Company's  
11 expectation that some volatility will remain in the physical markets,  
12 particularly related to force majeure type events, interstate pipeline capacity  
13 markets, and/or significant changes in supply and/or demand, but that the  
14 dramatic swings previously seen in the futures market are not likely to recur  
15 with the same regularity or intensity so long as shale gas supplies remain  
16 abundant and regulatory policies remain favorable for gas and oil exploration.  
17 Other factors to consider in the U.S. natural gas supply – demand situation  
18 are the exportation of liquefied natural gas (“LNG”), exportation of gas to  
19 Mexico, and increased industrial demand for gas along the Gulf Coast.  
20 Nevertheless, market experts believe that future LNG exports, exports to  
21 Mexico, and higher Gulf Coast demand will be adequately served by shale

1 supplies and that while there is a reasonable expectation of an increase in gas  
2 costs, the anticipated effect is marginal.

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

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

15 The reservation fee the Company pays for each contract in its firm supply  
16 portfolio is dependent upon the pricing options chosen and the supply  
17 flexibility requirements associated with each contract. Reservation fees are  
18 generally lower for baseload supplies (purchased at a constant volume for the  
19 entire month, season or year) and higher if swing service is required.  
20 Reservation fees also vary depending on the type of swing service being  
21 provided. Examples of factors which affect the cost of swing service are: 1)  
22 the number of days of swing required; 2) the volume of swing allowed; 3)

1 commodity pricing at first of the month indices versus daily spot pricing; 4)  
2 next day versus intraday swing capabilities; and 5) location of the supply  
3 being purchased.

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

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

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

1 additional firm obligations that exceed the Company's firm transportation  
2 capacity entitlements.

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

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

21 **Q. Did the Company enter into any new supply arrangements during the**  
22 **review period?**

1 A. Yes, during the review period the Company added new supply arrangements.

2 This was done as a result of customer growth and under our “best cost” policy.

3 **Q. Please describe the process that the Company utilized and the market**  
4 **intelligence evaluated during the review period to determine the prices**  
5 **charged for secondary market sales.**

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

1 The Company incorporates all these factors and then initiates its sales  
2 strategy.

3 **Q. Did the Company make any changes in its gas purchasing policies or**  
4 **practices during the review period?**

5 A. The Company did not implement any changes in its “best cost” gas purchasing  
6 policies or practices during the review period.

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

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

14 **Q. What were the net economic results of the Hedging Plan during the**  
15 **review period?**

16 A. The Company’s North Carolina sales customers incurred a net economic cost  
17 of \$1,177,357 (see **Exhibit\_(MBT-2)**) as a result of the Company’s Hedging  
18 Plan during the review period which was an increase compared to last year.  
19 This net economic impact includes the cost of commissions and amounts to  
20 an average cost per sales customer of roughly \$0.13 per month.

21 **Q. Did the Company’s Hedging Plan work properly during the review**  
22 **period?**

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

4 **Q. Has the Company made any changes to its Hedging Plan during the**  
5 **review period?**

6 A. There were no changes made to the Hedging Plan during the review period.  
7 The Company has and will continue to closely monitor the gas supply –  
8 demand picture and make changes it deems necessary to its Hedging Plan.

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

10 A. Currently, the Gas Accounting, Finance, Risk, and Corporate Compliance  
11 areas perform ongoing activities to monitor compliance with the Hedging  
12 Plan. In addition, the Company's Gas Market Risk Committee monitors  
13 compliance with the Hedging Plan, as well as providing input on any changes  
14 contemplated to the Hedging Plan. Periodic internal audits have and will be  
15 performed to ensure that controls continue to be adequate and function as  
16 management intends.

17 **Q. Have there been any deviations from the Hedging Plan during the review**  
18 **period?**

19 A. There were no deviations from the Hedging Plan during the review period.

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



1 A. Yes, because the goal of the Hedging Plan is to provide insurance against gas  
2 cost volatility if prices fly up, the Company feels it is prudent to incur what it  
3 deems to be a low-cost insurance policy and continue with the current  
4 Hedging Plan. As stated previously, the cost per sales customer during the  
5 review period was approximately \$0.13 per month. Because the current  
6 Hedging Plan only contemplates the purchase of options, the cost of the  
7 Hedging Plan is relatively low. As stated above, the Company has and will  
8 continue to closely monitor the gas supply – demand picture and make  
9 changes it deems necessary to its Hedging Plan.

10 **Q. What are some of the other steps the Company has taken to manage its**  
11 **gas costs consistent with its “best cost” policy during the review period?**

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

14 (1) The Company has, as more fully described in Ms. Raney’s  
15 testimony, actively participated in proceedings before the FERC and other  
16 regulatory agencies that could reasonably be expected to affect the  
17 Company’s rates and services;

18 (2) The Company has utilized the flexibility available within its  
19 supply, transportation, and storage contracts to purchase and dispatch gas,  
20 release transportation and storage capacity, and initiate secondary marketing  
21 sales in a cost-effective manner, resulting in secondary market credits to

1 customers of \$24,057,394.48, compared to last year's secondary market  
2 credits of \$32,829,312.51;

3 (3) The Company has actively promoted more efficient peak day use  
4 of natural gas and load growth from "year-round" markets to improve the  
5 Company's load factor, which in turn, reduces the average cost charged per  
6 dekatherm when the total cost of pipeline and storage capacity is spread over  
7 higher non-peak usage.

8 **Q. Please summarize your testimony.**

9 A. The Company's "best cost" purchasing policy provides customers with secure  
10 and reasonably priced gas supplies. This policy and the Company's practice  
11 under this policy have been reviewed and found prudent on all occasions in  
12 North Carolina and in the other state jurisdictions in which we operate.  
13 Although we believe our policies and procedures are reasonable, we are  
14 cognizant of the fact that the natural gas industry is rapidly changing, and we  
15 are continuously monitoring our policies and procedures to keep up with, and  
16 anticipate, these changing conditions. We have and will continue to work to  
17 review current regulations and tariffs and explore possible changes that will  
18 better serve our natural gas customers in the future. We are satisfied that our  
19 existing policies and procedures are prudent and that they have produced and  
20 will continue to produce adequate amounts of secure and reasonably priced  
21 gas for our customers.  
22

1 | **Q. Does this conclude your testimony?**

2 | A. Yes.