STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. G-9, SUB 698

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of Piedmont Natural Gas Company, Inc., for Approval of Appendix F to its North Carolina Service Regulations ORDER DENYING MOTIONS FOR RECONSIDERATION AND GRANTING IN PART MOTION FOR CLARIFICATION

BY THE COMMISSION: On December 6, 2016, Piedmont Natural Gas Company, Inc. (Piedmont) filed a petition in the above-captioned docket requesting approval of a new proposed Appendix F to its Service Regulations. In summary, proposed Appendix F included a definition of "Alternative Gas" and set forth the terms and conditions under which Piedmont will accept Alternative Gas onto its system and deliver or redeliver it to Piedmont's customers. Piedmont stated that the need for establishing such guidelines has arisen due to the potential for sourcing supplies of methane from non-traditional suppliers, including landfills, swine waste-to-energy facilities, and poultry waste-toenergy facilities.

After receiving comments, and requiring the parties to engage in collaborative discussions and file a report, on June 19, 2018, the Commission issued an Order Approving Appendix F and Establishing Pilot Program (Appendix F Order). In summary, the Appendix F Order approved a three-year pilot program to implement Appendix F, subject to the requirement that Piedmont provide the Commission additional information within 60 days.

The Commission had previously entered orders, in Docket Nos. G-9, Subs 699 and 701, approving interconnect agreements by Piedmont with C2e Renewables NC and Optima KV, LLC, respectively, for delivery of Alternative Gas to Piedmont. The Appendix F Order approved Optima KV's and C2e's participation in the Appendix F pilot program. In addition, the Appendix F Order provided that Piedmont and/or additional suppliers of Alternative Gas could apply to the Commission to participate in the Appendix F pilot program.

On July 12, 2018, in Docket No. G-9, Sub 726, Optima TH, LLC (Optima TH) filed an application requesting to participate in the pilot program created by the Appendix F Order, and on August 17, 2018, Optima TH filed for Commission approval a receipt interconnect agreement between Piedmont and Optima TH.

On July 16, 2018, North Carolina Pork Council (NCPC) filed a motion pursuant to N.C. Gen. Stat. § 62-90(a) requesting that the Commission extend the time within which

to file notice of appeal and exceptions to the Commission's Appendix F Order from Thursday, July 19, 2018, to Monday, August 20, 2018. On July 17, 2018, the Commission issued an Order granting the requested extension of time to file appeal for all parties.

On August 9, 2018, NCPC filed a Motion for Reconsideration, requesting that the Commission revise the Appendix F Order. In summary, NCPC states that the pilot program established in the Appendix F Order should be held in abeyance, and an expedited notice and comment period or hearing should be held to ascertain how best to structure a program to collect the data and information the Commission believes is needed while limiting the harm to existing projects and the emerging market. Alternatively, NCPC asks that the pilot program be open to all projects producing Alternative Gas subject to considerations normally attendant to the interconnection of such projects to Piedmont's distribution system. NCPC further states that the Commission should clarify that Piedmont and other natural gas local distribution companies (LDCs) have an obligation under the Public Utilities Act to accept Alternative Gas meeting the requirements of Appendix F, or other appropriate gas guality standard, that establishes the equivalency of the gas stream with traditional sources of gas from underground well sources. Moreover, NCPC states that Appendix F should not include a restriction on the level of nitrogen concentration in Alternative Gas because nitrogen content is a factor in heat content, and, thus, is adequately addressed by the heat content standard in Appendix F. Finally, NCPC contends that any change to the interchangeability standard in Appendix F should be open to comment so that a full record on the appropriate range and variance can be presented for the Commission's consideration.

On August 20, 2018, Piedmont filed a Compliance Filing and Motion for Clarification and/or Reconsideration (Compliance Filing). In summary, Piedmont states that it is seeking clarification and/or reconsideration on three aspects of the Commission's Appendix F Order. The first clarification and/or reconsideration concerns the Commission's statement that "[i]n the event of any damage to its system attributable to its receipt of Alternative Gas, Piedmont, not its customers, shall bear the risks of such damage." The second concerns an adjustment to the timing requirements associated with biannual reporting of Alternative Gas operations on Piedmont's system. The third concerns an adjustment to the reporting requirements for Alternative Gas delivered to Piedmont to allow Piedmont to measure and report to the Commission the daily quantities, heat content, and Wobbe value of the Alternative Gas received by Piedmont, rather than having the Alternative Gas suppliers be primarily responsible for providing that information.

On August 27, 2018, the Commission issued an order approving Optima TH's participation in the Appendix F pilot program, subject to several conditions, one being approval by the Commission of a receipt interconnect agreement between Optima TH and Piedmont.

Discussion and Conclusions

Pursuant to N.C. Gen. Stat. § 62-23, in pertinent part:

The Commission is hereby declared to be an administrative body or agency of the General Assembly created for the principal purpose of carrying out the administration and enforcement of this Chapter, and for the promulgation of rules and regulations and fixing utility rates pursuant to such administration.

As a part of its duty to regulate public utilities, the Commission adopts, and, from time to time amends, service regulations of the utilities. It is under the discretionary authority vested in the Commission by N.C.G.S. § 62-23 that the Commission adopted Appendix F to Piedmont's Service Regulations. It is under that same discretionary authority that the Commission determined to initially implement Appendix F as a three-year pilot program.

Pursuant to N.C. Gen. Stat. § 62-80:

The Commission may at any time upon notice to the public utility and to the other parties of record affected, and after opportunity to be heard as provided in the case of complaints, rescind, alter or amend any order or decision made by it. Any order rescinding, altering or amending a prior order or decision shall, when served upon the public utility affected, have the same effect as is herein provided for original orders or decisions.

The Commission's decision to rescind, alter or amend an order upon reconsideration under N.C.G.S. § 62-80 is within the Commission's discretion. <u>State ex</u> rel. Utilities Comm'n v. MCI Telecommunications Corp., 132 N.C. App. 625, 630, 514 S.E.2d 276, 280 (1999). However, the Commission cannot arbitrarily or capriciously rescind, alter or amend a prior order. Rather, there must be some change in circumstances or a misapprehension or disregard of a fact that provides a basis for the Commission to rescind, alter or amend a prior order. <u>State ex rel. Utilities Comm'n v.</u> North Carolina Gas Service, 128 N.C. App. 288, 293-294, 494 S.E.2d 621, 626, rev. denied, 348 N.C. 78, 505 S.E.2d 886 (1998).

NCPC's Motion

NCPC takes issue with the Commission's decision to implement Appendix F as a pilot program, complaining that none of the parties to the docket recommended such a pilot. The Commission appreciates the efforts of the parties in filing comments and engaging in a collaborative process to refine Piedmont's original Appendix F proposal. Through the parties' efforts, much additional information and understanding of Alternative Gas has been achieved. However, the parties to this docket, in their comments and reply comments, failed to adequately address issues of obvious concern to the Commission. In its Application, Piedmont stated that it must be, "reasonably assured that the receipt and delivery of Alternative Gas will not cause damage or disruption to its existing natural

gas distribution system or to the deliveries to or equipment of its existing customers." Application, at 3. With regard to the physical attributes of interstate pipeline gas, Piedmont stated that "Some of these interstate pipeline gas quality standards are relatively broad in scope although in actual practice the range of variations in gas quality actually received by Piedmont from these pipelines has been fairly narrow. <u>Id</u>. at 2. In its reply comments, Piedmont further stated that

Piedmont has reviewed historical gas chromatograph data from Transco that indicates that the average heat content of natural gas delivered to Piedmont has been very consistently measured at or near 1030 BTUs/SCF. Based on this data, Piedmont could have reasonably proposed that Alternative Gas delivered directly into its system match the heat content of the natural gas it has actually received from Transco.

Piedmont's Reply Comments, at 19.

The Commission's questions in Attachment A to its May 4, 2017 Order May 4, 2017 Order Requiring Collaborative Meetings, Reports and Additional Information made clear its interest in how damage to Piedmont's or its customers' equipment would be addressed, and how customers would be fairly billed if Alternative Gas proved to be less efficient than natural gas. Yet the parties' answers to the Commission's questions provided little insight into these issues. Likewise, the results of the collaborative process as presented in the Public Staff's Final Report offered little to resolve the Commission's concerns. The Commission understands that Alternative Gas is a new resource, and that there are uncertainties about its transport and use. Further, the Commission understands that the lack of a track record in transporting and using Alternative Gas likely constrained the parties from providing definitive answers to the Commission's questions. In the face of these uncertainties, and in order to allow the development of Alternative Gas projects to proceed, the Commission ordered a pilot program. Moreover, the Commission sought to provide Alternative Gas producers as much latitude as possible to support the inclusion of their projects by not specifying narrow, restrictive criteria for participation in the pilot.

As the Commission detailed in the Appendix F Order, there are some unknowns as to the effects of Alternative Gas on the quality of Piedmont's service to its customers and the physical integrity of Piedmont's pipeline. The Commission must, first and foremost, regulate Piedmont's receipt and delivery of Alternative Gas in such a manner as to protect the interests of Piedmont's customers and the safety and reliability of Piedmont's gas delivery system. After weighing all of the facts presented, in its discretion the Commission deemed it appropriate to implement Appendix F as a pilot program to facilitate the acquisition of additional information and knowledge about Alternative Gas. With all due respect to the position of NCPC, the Commission reaffirms that decision as an appropriate exercise of the Commission's discretion.

Further, NCPC characterizes the Appendix F Order as approving a "pilot program with limited participation." NCPC Motion, at 2. The Commission disagrees with NCPC's characterization. There is nothing in the Appendix F Order that indicates an intent by the

Commission to allow only "limited participation" in the pilot program. On the contrary, the Order specifies that Piedmont and/or additional Alternative Gas suppliers can apply to participate in the pilot, and sets forth the considerations that the Commission will review in allowing participation. In addition, thus far the Commission has ruled upon applications by three Alternative Gas suppliers to participate in the pilot program and has approved the participation of all three. These facts do not indicate an intent by the Commission to allow only "limited participation" in the pilot program. The point that NCPC appears to overlook is that interconnecting to Piedmont's gas pipeline and delivering Alternative Gas to Piedmont for use by Piedmont's customers is an activity regulated by the Commission because it will have impacts on Piedmont's service to its customers. As a result, the Commission cannot simply open the gate to allow any person to interconnect and deliver Alternative Gas where and when the person desires. For example, as more fully discussed below, Piedmont's Compliance Filing includes information about the potential adverse effects of Alternative Gas on Piedmont's liquefied natural gas (LNG) facilities, and Piedmont's assurance that it will monitor the locations of Alternative Gas interconnections to avoid locations that might create negative impacts on Piedmont's LNG operations. The Commission agrees with Piedmont that the location and interconnection point of an Alternative Gas facility is an important consideration in whether the facility will provide useful data about the effects of Alternative Gas on Piedmont's system. Consequently, NCPC's assertion that interconnection should be open to any Alternative Gas supplier at any location because "The law requires that access" (NCPC Motion, at 15) is not grounded in the applicable law and, further, is simply not a reasonable position.

NCPC also contends that "Alternative Gas' is functionally the same as gas from underground well sources." NCPC Motion, at 14. NCPC attempts to support this statement by bootstrapping a supplier's compliance with Appendix F into being "no different than presenting gas from underground well sources for transportation." <u>Id</u>. The Commission respectfully disagrees with this circuitous argument. There would be no need for Appendix F if Alternative Gas was the equivalent of natural gas. Moreover, as the Commission stated in its May 4, 2017 Order, and reiterated in the Appendix F Order, the LDCs' pipelines were built to transport underground natural gas purchased from numerous suppliers, with the gas delivered to and mixed together in interstate pipelines. Further, the LDCs are franchised as natural gas delivery utilities, not as producers or gatherers of gas. As a result, there is nothing in Piedmont's franchise or certificate of public convenience and necessity that anticipates, let alone obligates, Piedmont to gather, store or deliver Alternative Gas.

With regard to NCPC's assertion that Appendix F's 2% limit on the level of nitrogen in Alternative Gas is superfluous because nitrogen content is a factor in the heat content measure, the Commission disagrees. The nitrogen level in Alternative Gas has ramifications that are in addition to its effects on heat content. One of those ramifications is the possibility that an excess level of nitrogen will interfere with the liquefaction of natural gas. Piedmont stated in its response to Commission questions that the flow on the main north-south line through Duplin County is bi-directional. It further stated that the minimum summer flow on that line could be as low as 2,500 dekatherms per day. Public Staff Final Report, at 25. Piedmont also stated that one Alternative Gas facility in Duplin County has a potential output at full production of 2.3 billion cubic feet per year of Alternative Gas, which, adjusted for heat content, equates to 6,000 dekatherms per day. Piedmont Reply Comments, at 22. Based on that information, the Commission reasonably inferred that, at some points in time, a material amount of Alternative Gas could flow through that line in the direction of the Bentonville LNG plant. Piedmont is also proposing to build a new LNG plant in Robeson County.

Further, in Piedmont's August 20, 2018 Compliance Filing, Piedmont included Attachment E entitled Statement of Potential Impacts of Alternative Gas Receipts on Piedmont LNG Facilities. In summary, Attachment E provides information on five Alternative Gas components that could have a low to medium impact on Piedmont's LNG operations. Attachment E includes these statements:

Nitrogen content: Nitrogen content in excess of 1% could result in freezing that interrupts the liquefaction process.

LNG assets are critical for the Company's provision of firm natural gas service on peak days and must be carefully safeguarded. Therefore, Piedmont has and will continue to closely measure and monitor the quality of natural gas received at these facilities. Due to the critical importance and significant investment associated with these assets, Piedmont will not allow Alternative Gas facilities to be sited at locations that would result in quantities of such gas reaching its LNG sites at levels that would threaten the integrity of the liquefaction equipment. Piedmont will utilize system modeling tools to ensure the output of proposed Alternative Gas facilities does not impact its LNG operations.

If Piedmont was required to address the negative effects of an excess level of Alternative Gas nitrogen on Piedmont's LNG facilities, such necessary measures could lead to additional costs at those facilities. NCPC points out that Transco does not have a nitrogen content standard. However, as NCPC also notes, Transco has historically delivered natural gas with a 0.64% nitrogen content to Piedmont. The Commission is hopeful that Alternative Gas will provide a similarly acceptable level of nitrogen content. However, there is no historical Alternative Gas record to depend on, and the Commission will not require Piedmont's customers to bear the risk of additional LNG costs by eliminating the nitrogen standard from Appendix F. Based on Piedmont's assurance stated in Attachment E that it "will not allow Alternative Gas facilities to be sited at locations that would result in quantities of such gas reaching its LNG sites at levels that would threaten the integrity of the liquefaction equipment," the Commission is comfortable with the 2% nitrogen standard.

Finally, NCPC asserts that any revision to the interchangeability standard in Appendix F should be open to comment so that a full record on the appropriate range and variance can be presented for the Commission's consideration. NCPC states that the Commission's Appendix F Order appears to approve the initial Wobbe range of 1290 to 1370 proposed by Piedmont, without any further discussion by the parties. NCPC also notes that the collaborative process resulted in a recommendation of a Wobbe range of "+/-4% of historical values for natural gas in North Carolina," and that the collaborative group found that this range "would not require inordinate adjustments by consumers to pressure or valve settings and would assure that there was no noticeable change in service and energy output." NCPC Motion, at 18.

The Commission discussed both proposals on the interchangeability standard in its Appendix F Order. In pertinent part, the Commission stated:

Although the [Appendix F] Initial Version established a standard of two discrete Wobbe numbers of 1290 and 1370, the Commission interpreted this standard to be a range of acceptable Wobbe numbers. The Commission understands a Wobbe number range as representing a range within which any Wobbe number achieved would not require adjusting gas fired equipment. The mid-point of a Wobbe number range from 1290 to 1370 is 1330. The variance from the mid-point to 1290 and 1370 is about 3%. In effect, that is the percent tolerance that Piedmont represented to the Commission would be appropriate in the Initial Version.

Without explanation or justification, the Revised Version proposes a Wobbe number variance range of 4%. The Revised Version does not establish a Wobbe number range or reference point for the variance. Enerdyne included in its comments a white paper published by the Gas Technology Institute that referenced a "proposed acceptable variation of Wobbe Index of +/-4% from historical values and the upper limit of 1400 BTU/SCF." Enerdyne Comments, EPS Exhibit 2, p. 13. However, the Public Staff's Final Report does not explain why a 4% variation of Wobbe numbers lacking any reference point should be adopted in place of Piedmont's Wobbe number range included in the Initial Version.

The Commission concludes that a range from a minimum Wobbe number to a maximum Wobbe number should be included in Appendix F and that the range should be such that customers' burners will not require adjustment.

Appendix F Order, at 12.

In Piedmont's August 20, 2018 Compliance Filing, Piedmont proposed a slightly revised Wobbe range of 1285 to 1400. Piedmont states that this range is based on consultation with Piedmont's engineers, and that "Piedmont believes that Alternative Gas within this range should pose no threat to existing customers or to the ability of customer equipment to burn such gas." Piedmont Compliance Filing, at 4.

The Commission finds unpersuasive NCPC's assertion that the Commission has limited the discussion of the interchangeability standard. The Commission requested comments and reply comments on this and other standards proposed by Piedmont in its Initial Version of Appendix F. NCPC conducted discovery prior to filing its comments. Further, at the request of NCPC and other parties, the Commission approved a collaborative process for full discussion of all the issues. In addition, the Commission submitted 34 questions to the collaborative in an effort to gather specifics on the various components of Appendix F. From the Commission's initial order requesting comments, issued on January 12, 2017, to the Public Staff's Final Report on October 31, 2017, this process covered over nine months and produced a record that includes hundreds of pages of information. Moreover, NCPC and the other parties were afforded a reasonable and ample opportunity to express and support their positions on the standards included in Appendix F. The Commission finds NCPC's contention to the contrary lacking in merit.

As expressed in the Appendix F Order, the Commission was convinced that the Wobbe range of 1290 to 1370 recommended by Piedmont in its Initial Version of Appendix F was appropriate. The Commission remains convinced on this point. Further, the Commission concludes that there are no new facts or additional information that support accepting Piedmont's suggested minor modification to the Wobbe range approved in the Appendix F Order.

With regard to the collaborative's Wobbe proposal, the Commission declined to accept it for two reasons. First, the Commission concluded that "a range from a minimum Wobbe number to a maximum Wobbe number should be included in Appendix F." There is too much uncertainty in a range based on a percentage of the "historical values for natural gas in North Carolina," as proposed by the collaborative. Second, the Commission concluded that "the range should be such that customers' burners will not require adjustment." There is too much uncertainty in the collaborative's statement that its proposal would not require "inordinate adjustments" to the equipment of Piedmont's customers.

Based on the foregoing and the record, the Commission finds and concludes that NCPC has not demonstrated a change in circumstances or a misapprehension or disregard of a fact that provides a basis for the Commission to rescind, alter or amend its Appendix F Order under N.C.G.S. § 62-80. As a result, the Commission concludes that NCPC's motion for reconsideration should be denied.

Piedmont's Motion

Piedmont requests clarification or reconsideration of the Commission's statement that "In the event of any damage to its system attributable to its receipt of Alternative Gas, Piedmont, not its customers, shall bear the risks of such damage." Appendix F Order, at 9. To the extent that it needs any clarification, the Commission's statement means that Piedmont's customers will not be required to pay for damage to Piedmont's system caused by Alternative Gas.

Piedmont protests that its Appendix F filing did not raise the question of risk of damage to its system by receipt of Alternative Gas. The Commission disagrees. As

discussed in the Appendix F Order, in the Public Staff Final Report in this docket the following statement was attributed to Piedmont:

[i]f Piedmont's proposed Alternative Gas standards, as revised on October 26, 2017, are approved, without modification, then Piedmont will accept responsibility for adverse customer impacts resulting from Alternative Gas received by Piedmont that is in compliance with those standards.

Appendix F Order, at 9.

In addition, Piedmont made the following statement in its December 6, 2016 cover letter requesting approval of the C2e receipt interconnect agreement:

[N]o other customer will be impacted by the Agreement and Piedmont submits that the proposed Agreement is in the public interest and should be approved.

Likewise, the same statement was made by Piedmont in its January 24, 2017 cover letter requesting approval of the Optima KV receipt interconnect agreement. Nonetheless, Piedmont questions the fairness of relieving customers of paying for damage to Piedmont's system when they are receiving the general societal benefits from Alternative Gas, as discussed by the Commission in the Appendix F Order, at 4. In that regard, the Commission weighed these benefits to customers in comparison to the risks, and decided that the general benefits to be received by customers do not justify saddling them with the potential costs of repairing Piedmont's system if it is damaged by Alternative Gas. In addition, the Commission considered the ability of Piedmont to foresee and protect itself from the risk of damage, versus the lack of any such foreseeability and opportunity that customers have to protect themselves. Based on these factors, the Commission determined that it is appropriate to hold customers harmless from these risks.

Piedmont also states its concern that the Commission intends to assign the total risk of receipt of Alternative Gas to Piedmont. However, that is not the Commission's intent. The Commission spoke only to the principle of holding Piedmont's customers harmless. With respect to the division of the risk of damage to Piedmont's pipes and other equipment between Piedmont, Alternative Gas suppliers and other parties, the Commission leaves that matter to be negotiated by Piedmont and those parties. In that regard, the Commission approves the alternative language proposed by Piedmont under the heading "Indemnity/Liability" in Attachment B to Piedmont's Motion.

Based on the foregoing and the record, the Commission finds and concludes that Piedmont has not demonstrated a change in circumstances or a misapprehension or disregard of a fact that provides a basis for the Commission to rescind, alter or amend the hold harmless provisions of the Appendix F Order under N.C.G.S. § 62-80. As a result, the Commission concludes that Piedmont's motion for reconsideration should be denied. With regard to Piedmont's requests to clarify the reporting periods under Appendix F, and to allow Piedmont to have primary responsibility for measuring and reporting to the Commission the daily quantities, heat content, and Wobbe value of the Alternative Gas received by Piedmont, the Commission finds good cause to grant Piedmont's requests.

Finally, the Commission notes that it will address the remaining aspects of Piedmont's Compliance Filing in a separate order or orders.

IT IS, THEREFORE, ORDERED as follows:

- 1. That NCPC's Motion for Reconsideration is denied.
- 2. That Piedmont's Motion for Reconsideration is denied.

3. That Ordering Paragraph No. 9 of the Appendix F Order is hereby revised as follows: That Piedmont shall file a semi-annual report each January 31 and July 31 during the Appendix F pilot program's operation that includes the following information: (1) the number of suppliers of Alternative Gas; (2) the monthly volume of Alternative Gas received from each provider during the previous 6-month periods July through December and January through June, respectively (reporting period); (3) a summary of any customer complaints received during the reporting period relating to the receipt of Alternative Gas and any actions taken by Piedmont to resolve the complaints; and (4) the costs incurred by Piedmont to receive Alternative Gas during the reporting period that are not otherwise recovered under a receipt interconnect agreement.

4. That the Appendix F Order shall be, and is hereby, revised to direct that Piedmont shall be responsible for measuring and reporting to the Commission on a monthly basis the daily quantities, heat content, and Wobbe value of the Alternative Gas received by Piedmont.

ISSUED BY ORDER OF THE COMMISSION.

This the 1st day of October, 2018.

NORTH CAROLINA UTILITIES COMMISSION

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A. Shonta Dunston, Acting Deputy Clerk

Chairman Edward S. Finley, Jr., and Commissioner James G. Patterson did not participate in this decision.