STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH

DOCKET NO. EMP-92, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application of NTE Carolinas II, LLC, for)	
a Certificate of Public Convenience and)	ORDER DENYING MOTION TO
Necessity to Construct a 500-MW Natural)	STRIKE AND MOTION IN LIMINE
Gas-Fueled Merchant Power Plant in)	
Rockingham County, North Carolina)	

BY THE PRESIDING COMMISSIONER: On July 29, 2016, NTE Carolinas II, LLC (NTE) filed an application pursuant to G.S. 62-110.1 and Commission Rule R8-63 for a certificate of public convenience and necessity (CPCN) to construct a 500-MW combined cycle natural gas-fueled merchant electric generating facility (CC facility) near Reidsville, Rockingham County, North Carolina.

On October 5, 2016, the North Carolina Waste Awareness and Reduction Network, Inc. (NC WARN) filed a motion to intervene in this proceeding. On October 7, 2016, the Commission issued an Order granting NC WARN's motion to intervene.

On October 11, 2016, NTE filed a motion requesting that the Commission reconsider its Order allowing NC WARN to intervene in this docket and, upon reconsideration, deny NC WARN's intervention.

On October 13, 2016, NC WARN filed a response to NTE's motion for reconsideration.

On October 17, 2016, the Commission issued an Order denying NTE's objection to NC WARN's intervention.

On October 19, 2016, NC WARN filed the direct testimony of William E. Powers.

On October 26, 2016, NTE filed a Motion to Strike and Motion in Limine with regard to a portion of the testimony of witness Powers. NTE requests that the Commission strike two portions of witness Powers' testimony. The first portion is from page 9, line 3 to page 11, line 10, and the sentence beginning on page 11, line 19 through page 12, line 4. In this portion of his testimony, witness Powers expresses his view that natural gas has a substantially greater greenhouse gas (GHG) emission impact than previously understood. He states that the proposed CC facility operating at design efficiency would produce approximately 820 pounds of carbon dioxide (CO₂) per megawatt hour (lb/MWh). He compares this to the 669 lb/MWh produced by grid power provided by Duke Energy

Carolinas, LLC (DEC) in 2015. Further, witness Powers states that the total GHG impact of the proposed CC facility increases substantially when methane leakage emissions associated with natural gas production and transportation are included. He states that studies show that methane is 100 times more effective at trapping heat in the atmosphere than CO₂. He also includes a table that compares the total GHG emissions of the proposed CC facility and DEC's 2015 grid power at three different levels of methane leakage. Witness Powers concludes that the GHG emission impacts of the proposed CC facility are not acceptable where there is no demonstrable need for the facility's capacity.

With regard to this portion of witness Powers' testimony, NTE contends that NC WARN's environmental concerns are broad policy-based energy and environmental issues that are irrelevant because they are beyond the scope of the public convenience and necessity standard set by G.S. 62-110.1 and Commission Rule R8-63. Citing State ex rel. Utilities Commission v. High Rock Lake Ass'n, Inc., 37 N.C. App. 138, 245 S.E.2d 787, disc. review denied, 295 N.C. 646, 248 S.E.2d 257 (1978) (High Rock), NTE submits that the Commission should not consider NC WARN's challenges to environmental policies because those concerns should be left to other regulatory agencies. In addition, NTE maintains that witness Powers' testimony regarding methane emissions is not relevant, based on the definition of relevance established in Rule 401 of the North Carolina Rules of Evidence, because regulating methane emissions is not a matter within the jurisdiction of the Commission.

Moreover, NTE asserts that NC WARN should make its arguments regarding environmental concerns to the United States Congress or the North Carolina legislature, rather than trying to change energy policy at the Commission in a CPCN proceeding. NTE cites the Commission's Order Granting Motion to Strike and Reserving Decision on Motion in Limine, Docket Nos. E-2, Sub 1095, E-7, Sub 1100, G-9, Sub 682 (Duke/Piedmont Merger) (June 28, 2016) (motion to strike allowed as to NC WARN's testimony regarding methane emissions, among other concerns); and Order Granting in Part and Denying in Part Motion to Strike, Docket No. E-7, Sub 1026 (Duke Rate Case) (July 3, 2013) (granting, in part, motion to strike as irrelevant the testimony of Greenpeace that DEC's generating facilities and improvements thereto should be cancelled). In addition, NTE opines that the policy reasons and concerns underlying the need to prevent overbuilding of power plants are different for a merchant plant than for a utility-owned plant, since a merchant plant is financed with private investor capital, and the financial risks are borne by the company's investors, not by utility ratepayers.

The second portion of witness Powers' testimony that NTE requests the Commission to strike is from page 10, line 11 to page 11, line 9. In this portion of his testimony, witness Powers expresses his view that any demonstrable need for summer or winter peak demand should be met with battery storage. He states that battery storage using renewable energy can respond more quickly than a CC facility, and that it can maximize the value of renewable energy resources.

With regard to this testimony, NTE contends that NC WARN's support of the use of battery storage in place of combustion turbine capacity is not an appropriate issue in

this CPCN proceeding, but, rather, should be directed to the legislature as a policy argument. In addition, NTE submits that the Commission addressed this issue in its Order Approving Integrated Resources Plans, Docket E-100, Sub 141 (2015 IRP Order) (June 2, 2015). In that docket, the North Carolina Sustainable Energy Association (NCSEA) advocated adding battery storage as an alternative supply-side energy resource to be considered in the integrated resource planning process. NTE notes that all parties to the docket acknowledged that "models do not currently exist today to fully evaluate the costs and benefits of energy storage," and that the Commission stated:

[T]hese technologies are not economical or viable at this time for mandatory inclusion in the utilities' IRPs. Further, as models do not currently exist for a proper evaluation of energy storage, the Commission does not see a benefit in simply asking the IOUs to take their best shot at a modeling approach at this time.

2015 IRP Order, at p. 48.

NTE submits that if there are no models currently in existence for the evaluation of energy storage and energy storage is not of sufficient viability to be included in the utilities' IRPs, then energy storage is not relevant to a determination of the need for NTE's proposed CC facility.

In addition, NTE includes a Motion in Limine requesting that the Commission prohibit NC WARN from cross-examining witnesses and presenting any evidence on the methane emission and battery storage subjects discussed in witness Powers' testimony.

On October 28, 2016, NC WARN filed a Reply to NTE's Motion to Strike and Motion in Limine. In summary, NC WARN contends that NTE's reliance on the Commission's decision in the Duke/Piedmont Merger is misplaced because the standard for Commission approval of a merger is more limited than the standard for approval of a CPCN. As an example, NC WARN cites a portion of the Commission's Order Granting Certificate of Public Convenience and Necessity with Conditions, Docket No. E-7, Sub 790, at p. 27 (March 21, 2007), in which the Commission approved a CPCN for Duke Energy Carolinas, LLC to build an 800-MW coal-fired generating plant (Cliffside CPCN). NC WARN submits that the Commission's review of the Cliffside Project included an examination of many factors, including fuel source and optional technologies. In addition, NC WARN notes that NTE relies on Duke's Integrated Resource Plans (IRPs) to demonstrate the need for its proposed facility. However, according to NC WARN such reliance is not credible without also addressing the climate impacts of the proposed facility, and that by NTE's motion to strike witness Powers' testimony NTE is effectively requesting that the Commission ignore the climate impacts of the proposed facility. Further, NC WARN maintains that witness Powers' testimony regarding battery storage provides relevant information concerning an additional method of meeting any need that may be shown by NTE's application.

Discussion and Decision

The Commission's orders must be based on competent, material and substantial evidence. Where practicable, the Commission applies the same rules of evidence used in the superior courts in civil matters. <u>See</u> G.S. 62-65(a).

Pursuant to Rule 402 of the North Carolina Rules of Evidence, only relevant evidence is admissible. Under Rule 401, "relevant evidence" is defined as

[e]vidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.

G.S. 8C-1, Rule 401.

With regard to the admissibility of NC WARN's testimony, the main question is whether the testimony has a bearing on "any fact that is of consequence to the determination of the action."

In its motion to strike, NTE relies on the <u>High Rock</u> case in support if its position that the environmental concerns raised by witness Powers in his testimony are not relevant to the Commission's inquiry under the public convenience and necessity standard, and that such environmental concerns should be left to other regulatory agencies. However, NTE's position is not supported by the holding in <u>High Rock</u>. In that case, Duke Power Company filed an application for a CPCN to build a nuclear generating plant, the Perkins Nuclear Station, in Davie County. One of the intervenors, High Rock Lake Association, Inc. (Lake Association) presented evidence that the use by the Perkins facility of cooling water from the Yadkin River upstream of High Rock Lake would adversely affect the Lake's water quality. The Commission received evidence from several witnesses regarding the potential effects of the Perkins facility on the water quality of the Yadkin River, including a witness from the North Carolina Department of Natural and Economic Resources (DENR). The Commission stated:

While the Commission recognizes that the Department of Human Resources and the Department of Natural and Economic Resources have primary jurisdiction in the establishment, review, and surveillance of the design and operation of the proposed plant as it might affect the public from radiation exposure and as it might affect the water and air resources of the State, the Utilities Commission retains the overall responsibility of determining whether Public Convenience and Necessity is to be served by construction and operation of the Perkins Nuclear Station.

Order Granting Certificate of Public Convenience and Necessity, Docket No. E-7, Sub 166 (March 4, 1977), North Carolina Utilities Commission Orders and Decisions, 76th Report (1977), at p. 135.

The Commission issued a CPCN to Duke, subject to five conditions imposing limitations on the use of water from the Yadkin River. <u>Id.</u>, at p. 137.

The Lake Association appealed the Commission's Order to the Court of Appeals. The Court affirmed the Commission's Order. Although the Court focused most of its attention on the question of the need for the Perkins facility, the Court also noted with approval that the Commission considered other factors, such as "alternate sites, fuels and cooling designs." High Rock, 37 N.C. App., at 142, 245 S.E.2d, at 791. In addition, the Court noted with approval the Commission's concern with the Lake Association's "legitimate interest in the quality of the Yadkin River," and that the Commission included conditions in its Order that addressed the Lake Association's concerns. Id.

In more recent CPCN dockets, the Commission has likewise found relevant the parties' concerns about the impact of proposed generating facilities on the environment. For example, in Docket No. E-7, Sub 790, DEC applied for a CPCN to build two 800-MW supercritical pulverized coal (SCPC) generating plants in Cleveland County (Cliffside CPCN). The Commission accepted and considered testimony from three witnesses who asserted that the Commission should require DEC to build an integrated gasification combined cycle (IGCC) plant because the IGCC technology reduces CO2 emissions by sequestering the coal plant's carbon emissions in underground storage. The Commission granted DEC a CPCN to build one 800-MW SCPC plant at Cliffside. In its Order issuing the CPCN, the Commission acknowledged the environmental benefits of IGCC, but concluded that it was an emerging technology that DEC could not rely upon to meet its immediate needs. However, the Commission stated:

Notwithstanding this conclusion, the Commission is not at all hostile to IGCC technology. In fact, the Commission views IGCC as a promising technological option for the future. G.S. 62-2(a)(5) provides for public utility regulation to "encourage and promote harmony between public utilities...and the environment," and the Commission encourages the State's electric utilities to give serious consideration to IGCC as it develops.

Order Granting Certificate of Public Convenience and Necessity with Conditions, Docket No. E-7, Sub 790, at p. 27 (March 21, 2007).

In 2016, in Docket No. E-2, Sub 1089, Duke Energy Progress, LLC (DEP) applied for a CPCN to build a 752-MW combined cycle natural gas-fired generating facility in Asheville (Asheville CPCN). At the public hearing in Asheville, numerous witnesses testified regarding their concerns about the environmental impact of emissions from natural gas drilling, transportation and electric generating facilities. The Commission granted DEP a CPCN to build the Asheville facility. However, the Commission also imposed a condition requiring DEP to investigate the feasibility of retrofitting its Roxboro coal-fired plant to reduce CO₂ and other emissions. The Commission stated:

[T]he Commission heard repeatedly the expressed desire for cleaner energy sources. To that end, the Commission is aware that the North

Carolina Department of Environmental Quality (DEQ) identified opportunities for some of the coal-burning power plants that are located in North Carolina to cost-effectively reduce their emissions through a variety of plant upgrades. These opportunities are detailed in the DEQ's proposed "Standards of Performance for Existing Electric Generating Units Under Clean Air Act Section 111(d)," which was published in the North Carolina State Register on November 16, 2015. For DEP, these proposed carbon rules for existing power plants would require upgrades to the Company's four coal-burning units at Roxboro.

On February 9, 2016, the United States Supreme Court issued a stay of the EPA Clean Power Plan rules, and the Commission understands that DEQ's proposed carbon rules for existing power plants are subsequently being held in abeyance pending full judicial review of the EPA regulations. Even so, in light of the public comments, public testimony, and filed comments by Intervenors Fireman and Rouse, the Commission will require DEP to conduct an investigation on retrofitting its Roxboro coal-burning plant pursuant to the DEQ's draft rules cited above. DEP shall include an assessment of the feasibility and cost-effectiveness of conducting the retrofits at Roxboro and shall include this report in the Company's 2016 IRP.

Order Granting Application in Part, with Conditions, and Denying Application in Part, Docket No. E-2, Sub 1089, at pp. 37-38 (March 28, 2016).

The <u>High Rock</u>, Cliffside and Ashville decisions are compelling authority supporting the principle that the public convenience and necessity standard established in G.S. 62-110.1 is broad enough to encompass environmental concerns. Before approving the Cliffside CPCN, the Commission accepted testimony and gave serious consideration to the alternative IGCC proposal because of IGCC's reduced CO₂ impact. In a similar fashion, witness Powers' testimony regarding battery storage of renewable energy is evidence regarding an emerging technology that witness Powers' believes is an alternative to NTE's proposed gas-fired facility. Similarly, in its approval of the Asheville CPCN the Commission included a condition requiring DEP to study the feasibility of upgrades at its Roxboro coal-fired plant that could reduce CO₂ emissions from that facility. Thus, NTE's position that environmental concerns are irrelevant because they are beyond the scope of the public convenience and necessity standard set by G.S. 62-110.1 is not supported by Commission precedent in CPCN dockets.

Moreover, NTE's reliance on the orders striking NC WARN's testimony in the Duke/Piedmont Merger and the Duke Rate Case is inapposite. In the Duke/Piedmont Merger, there was no application for a CPCN to build a generating plant, and there was no evidence that the merger would, in itself, result in an increase in the use of natural gas by Duke or Piedmont. Therefore, the Commission concluded that NC WARN's testimony regarding the environmental effects of methane and the potential shortage of natural gas was not relevant. Similarly, there was no application for a CPCN to build a generating plant in the Duke Rate Case. Therefore, the Commission concluded that Greenpeace's

testimony alleging imprudence in decisions about building plants long ago certificated under G.S. 62-110.1 was irrelevant.

With regard to NTE's argument concerning witness Powers' testimony on battery storage, in the 2015 IRP proceeding NCSEA proposed amendments to Commission Rule R8-60 that would require the electric utilities to include utility-scale energy storage as an alternative supply-side resource in their IRPs. DEC, DEP and Dominion North Carolina Power (DNCP) all responded that they are evaluating energy storage as a viable resource, but explained that the costs and benefits of energy storage on a utility-scale are not presently discernable and, thus, energy storage is not a viable resource for inclusion in their IRPs. As a result, the Commission declined to adopt NCSEA's proposal to mandate the inclusion of energy storage in the utilities' IRPs. However, the Presiding Commissioner is not persuaded that the 2015 IRP Order was intended by the Commission to preclude as irrelevant the evidence of an intervenor in a CPCN docket that battery storage of electricity produced by renewable resources could possibly be an alternative to fossil fuel generation.

To be clear, when considering whether to issue a CPCN for the construction of a generating plant the Commission must weigh all of the factors that have a bearing on the public convenience and necessity, including need, location, and environmental impacts. Because NC WARN's proffered evidence specific to the application in this docket may have some bearing on the issue of public convenience and necessity, the Commission will allow the evidence to be introduced and declines to grant NTE's motions. Accordingly, NTE's Motion to Strike and Motion in Limine should be, and are hereby, denied. Suffice it to say that the Commission has made no decision at this point on how it will weigh and balance the various factors to be considered in the present docket. Further, the Commission has made no decision as to the credibility of witness Powers' testimony or the weight that it should be given, just as the Commission has made no decision regarding the credibility or weight of witness Green's testimony for NTE.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the ____1st _ day of November, 2016.

NORTH CAROLINA UTILITIES COMMISSION

Paige J. Morris, Deputy Clerk

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