

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION
DOCKET NO. E-7, SUB 1134**

In the Matter of:)
Application of Duke Energy Carolinas,)
LLC for Approval to Construct a 402 MW) **NCSEA’S POST-HEARING**
Natural Gas-Fired Combustion Turbine) **BRIEF**
Electric Generating Facility in Lincoln)
County)

NCSEA’S POST-HEARING BRIEF

Pursuant to the Commission’s September 28, 2017 *Order Granting Extension of Time to File Briefs and Proposed Orders* in the above-captioned docket, the North Carolina Sustainable Energy Association (“NCSEA”), an intervenor in the proceeding, submits this post-hearing brief. On June 12, 2017, Duke Energy Carolinas, LLC (“DEC” or “Company”) filed *Duke Energy Carolinas, LLC’s Application for Certificate of Public Convenience and Necessity* (“Application”) in the above-captioned docket seeking a certificate of public convenience and necessity (“CPCN”) to construct a 402 MW simple-cycle advanced combustion turbine (“CT”) at its Lincoln County facility (“Lincoln County CT”). The Lincoln County CT would not be a typical natural gas generating unit, nor would it have a traditional construction schedule. Rather, the Lincoln County CT would be a first of its kind unit manufactured by Siemens and would require four years of commissioning and testing. *Application*, pp. 2-3. Furthermore, there would not actually be a single CT; rather Siemens would install three testbed units of 369 MW, 382 MW, and 402 MW respectively over the course of the four year commissioning and testing process. *Id.*, pp. 3-4. Siemens would begin operation of the Lincoln County CT in 2020, but DEC would not take “care, custody and control” until 2024. *Id.*, pp. 2-3.

I. STANDARD FOR GRANTING A CPCN

North Carolina law dictates that “no public utility or other person shall begin the construction of any steam, water, or other facility for the generation of electricity to be directly or indirectly used for the furnishing of public utility service, even though the facility be for furnishing the service already being rendered, without first obtaining from the Commission a certificate that public convenience and necessity requires, or will require, such construction.” N.C. Gen. Stat. § 62-110.1(a). “[P]ublic convenience and necessity is based on an ‘element of public need for the proposed service.’” State ex rel. Utilities Com. v. High Rock Lake Asso., 37 N.C. App. 138, 140, 245 S.E.2d 787, 790, cert. denied, 295 N.C. 646, 248 S.E.2d 257 (1978) (internal citations omitted). Thus, the ultimate question before the Commission in this proceeding is whether the new generation is needed or necessary, and issues related to price are more appropriately examined in a cost recovery proceeding. As set forth in detail below, NCSEA does not believe that DEC has shown that the Lincoln County CT is needed or necessary at this time.

II. DEC’S NEED IN 2020

NCSEA does not believe that DEC has met its burden to show that public convenience and necessity requires, or will require, that the Lincoln County CT begin operations in 2020. Subject to the discussion set forth below, NCSEA does not dispute that DEC’s 2016 integrated resource plan (“IRP”) shows a need for capacity in 2024. However, in its application, DEC states that the Lincoln County CT would begin providing capacity in 2020, *Application*, p. 4, but would not begin providing firm capacity until 2024. *Transcript of Hearing Held August 30, 2017, Vol. 2*, p. 74, Docket No. E-7, Sub 1134 (September 7, 2017) (“*Transcript, Vol. 2*”) (“In the 2016 IRP we showed a capacity need

in that time frame; however, this project for the 2024 -- 2020 through 2024 time frame, it's not considered firm capacity so we cannot count it as firm capacity in our IRP[.]"). While "Siemens will work with [DEC's] system operations and dispatch to try to operate the unit in a way that suits what the dispatch would normally require[.]" there is no guarantee that DEC would be able to call upon the Lincoln County CT to deliver firm capacity between 2020 and 2024. *Id.*, p. 75. Furthermore, there will be periods of down time when the Lincoln County CT will not provide any capacity because Siemens will be installing various versions of the CT. *Id.*

III. DEC'S NEED IN 2024

While DEC's 2016 IRP shows a need for capacity in 2024, the showing of need is tenuous because it is predicated on DEC's transition from a 14.5% reserve margin to a 17% reserve margin. As was noted by Public Staff Witness Hinton,

A change in the Company's reserve margin would also affect the need for the Lincoln CT Project. The Company stated in its 2016 IRP that its shift to a winter planning utility, along with the rise of solar generation, and increased volatility of winter peak loads supports an increase in the Company's reserve margin from 14.5% to 17.0%. In the Commission's June 27, 2017 Order Accepting the IRP, it concluded 'that the reserve margins included in the utilities' IRP are reasonable at this time for planning purposes' but also concluded that 'the move to a 17% reserve margin [was] not supported by the evidence[.]' As a result, the Commission ordered the Company, Public Staff, and other intervenors in the IRP to investigate the concerns with the Company's reserve margin study. If it is determined that the appropriate reserve margin for planning should be 16.0% instead of the 17.0% used in the Company's 2016 IRP, then the need for the Lincoln CT Project may well be shifted out several years beyond 2024.

Transcript of Hearing Held August 30, 2017, Vol. 3, pp. 163-164, Docket No. E-7, Sub 1134 (September 7, 2017). Absent the change to a 17% reserve margin, which the Commission has held was not supported by the evidence, DEC would not have a

demonstrated need for the capacity provided by the Lincoln County CT in 2024, much less in 2020.

IV. DEC'S NEED AND DEC'S PROPOSAL

While the *Application* seeks a CPCN to construct a 402 MW generating facility, DEC's 2016 IRP identifies a need of 468 MW in 2024. DEC has acknowledged that this would necessitate that the Lincoln County CT be paired with an additional 66 MW CT, as was discussed at the hearing:

Q Okay. I'd like to switch gears and just ask a couple of questions about the size of the project. DEC's 2016 IRP identifies 468 MW of need in the winter of 2024 to 2025; is that correct?

A (Kalemba) That's correct.

Q And the Company is seeking an application for a 402 MW facility, correct?

A That's correct.

Q And the balance of the need, which would be 66 MW, Mr. Kalemba, your -- your Exhibit 1B says there would be a second combustion turbine much smaller to meet that need; is that correct?

A That's correct.

Transcript, Vol. 2, pp. 75-76. While DEC has argued that the 402 MW Lincoln County CT is a "good deal" for ratepayers, it has not shown that the combination of the 402 MW Lincoln County CT and an undesignated 66 MW CT is a cost-effective solution to meeting the capacity need identified in its 2016 IRP. To that end, DEC noted that its 2016 IRP did not select the combination of a 402 MW CT and a 66 MW CT in order to meet the 468 MW of identified need in 2024:

Q -- if different modeling, you know, CT modules or size resources were -- were allowed to be selected by the model, for example, if the model could select a number of 66 MW units, is it possible that it would have just selected one for that year and then the additional need would have been pushed out?

A It's possible; however, we don't have that option to put in these --or we didn't --we didn't have that option to put in those smaller CTs that's not

a standard size CT. Had we put a 66 MW, given the availability to select a 66 MW CT, if one existed, it may have picked that. I do not know. It would have pushed the need out one year and we would have shown an additional need in CT had it selected that, but I can't say that would -- would have been the most economic choice. And -- and certainly I believe, given the discounts that we have for the 402 MW Siemens CT and -- and all the benefits associated with that, I think the model or -- or analysis would show -- would select that instead.

Transcript, Vol. 2, pp. 84-85.

VI. INDEPENDENT POWER PRODUCERS, COST RECOVERY, AND EQUITY

When it was signed into law, S.L. 2017-192 made numerous changes to North Carolina's energy landscape. One of those changes was to amend N.C. Gen. Stat. § 62-156 by adding that "A future capacity need shall only be avoided in a year where the utility's most recent biennial integrated resource plan filed with the Commission pursuant to G.S. 62-110.1(c) has identified a projected capacity need to serve system load and the identified need can be met by the type of small power producer resource based upon its availability and reliability of power[.]" In essence, this new language means that an independent power producer will not receive a capacity payment in any given year unless the utility's IRP shows a need for capacity in that year. In the present proceeding, DEC is proposing to provide its customers with capacity from 2020 to 2024, years in which their IRP does not show a need for capacity.

While cost recovery for the Lincoln County CT is not at issue in this proceeding, the question of whether the proposal is a "good deal" for ratepayers has arisen. As a matter of equity, DEC should not be able to recover costs for unneeded capacity if an independent power producer would not be able to receive a capacity payment. DEC has stated that it "will not seek to recover the capital costs of the CT in rates until after assuming care,

custody and control in 2024[.]” *Transcript, Vol. 2*, p. 45. Should the Commission grant a CPCN for the Lincoln County CT, NCSEA believes that equity requires that DEC should not be able to recover its capital costs if a similarly-situated independent power producer would not be able to receive capacity payments.

V. **CONCLUSION**

In deciding whether to grant a CPCN for a new generating facility, the Commission must decide whether the generation is needed or necessary. For the reasons set forth above, NCSEA does not believe that DEC has shown that the Lincoln County CT is needed in 2020. While DEC’s 2016 IRP identifies a need in 2024, that need is tenuous and it would be premature for the Commission to grant a CPCN at this time.

Respectfully submitted, this the 9th day of October, 2017.

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CERTIFICATE OF SERVICE

I hereby certify that all persons on the docket service list have been served true and accurate copies of the foregoing Comments by hand delivery, first class mail deposited in the U.S. mail, postage pre-paid, or by email transmission with the party's consent.

This the 9th day of October, 2017.

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