# Feb 10 2020

## BEFORE THE NORTH CAROLINA UTILITIES COMMISSION DOCKET NO. EMP-105, SUB 0

In the Matter of: ) Application of Friesian Holdings, LLC for a ) Certificate of Public Convenience and ) Necessity )

# NCSEA'S POST-HEARING BRIEF

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Pursuant to the *Notice of Due Date for Proposed Orders and/or Briefs* issued by the North Carolina Utilities Commission ("Commission") on January 10, 2020, the North Carolina Sustainable Energy Association ("NCSEA") hereby files the following posthearing brief.

The application of Friesian Holdings, LLC ("Friesian") for a certificate of public convenience and necessity ("CPCN") to construct a merchant generating facility has led the Commission to examine many issues that have not been raised previously in similar CPCN proceedings for merchant generating facilities. As set forth below, Friesian has complied with the requirements of Rule R8-63, demonstrated that the facility is consistent with the public convenience, and demonstrated necessity for the project. Accordingly, the Commission should issue an order granting Friesian a CPCN.

### I. THE PUBLIC INTEREST

As an initial matter, NCSEA acknowledges that ultimately some of the costs for the network upgrades associated with Friesian's generation facility will be borne by Duke Energy Progress, LLC's ("DEP") ratepayers. Despite this, NCSEA believes that Friesian's generation facility is in the public interest.

The only party to this proceeding that is opposing Friesian's application is the Public Staff – North Carolina Utilities Commission ("Public Staff"). One of the duties of the Public Staff is to "Intervene on behalf of the using and consuming public in all certificate applications filed pursuant to the provisions of G.S. 62-110.1, and provide assistance to the Commission in making the analysis and plans required pursuant to the provisions of G.S. 62-110.1 and 62-155[.]"<sup>1</sup>

In this docket, the Public Staff is representing the interests of the using and consuming public. In that role, the Public Staff has objected to certain costs being paid by their client, the using and consuming public.

- [Q] It's not that the upgrades aren't needed; it's that you all think they cost too much and those costs shouldn't be borne by ratepayers; isn't that fair?
- A That is one component of it, yes.<sup>2</sup>

However, this docket has made clear that the interests of the using and consuming

public may be different from the public interest.

- Q. So would you agree that in this proceeding we have an instance where the interest of the Using and Consuming Public who the Public Staff is charged to represent and the interest of the general public in terms of clean energy, carbon reductions, and other things may diverge?
- A. Yes, they may diverge.<sup>3</sup>

As set forth below, NCSEA believes that Friesian has met the requirements of N.C.

Gen. Stat. § 62-110.1 and Rule R8-63, and that, while ratepayers may ultimately bear some

of the costs of interconnecting Friesian, granting the application is in the public interest of

the State.

<sup>&</sup>lt;sup>1</sup> N.C. Gen. Stat. § 62-15(d)(5).

<sup>&</sup>lt;sup>2</sup> Tr. Vol. 3, p. 183.

<sup>&</sup>lt;sup>3</sup> Tr. Vol. 4, p. 40.

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### **II. PUBLIC CONVENIENCE**

N.C. Gen. Stat. § 62-2(a)(7) sets forth that:

Upon investigation, it has been determined that the rates, services and operations of public utilities as defined herein, are affected with the public interest and that the availability of an adequate and reliable supply of electric power and natural gas to the people, economy and government of North Carolina is a matter of public policy. It is hereby declared to be the policy of the State of North Carolina:

(7) To seek to adjust the rate of growth of regulated energy supply facilities serving the State to the policy requirements of statewide development[.] (emphasis added).

Accordingly, any decision in the present docket must be made after a consideration of other

relevant policy directives applicable to new electricity generation facilities.

### A. EMISSIONS REDUCTION GOALS

The State of North Carolina, Duke Energy, and North Carolina Electric Membership Corporation ("NCEMC") have all adopted various goals for reducing their carbon or greenhouse gas emissions. As exemplified during the recent docket on the Green Source Advantage implementation, many of the state's colleges, universities, and largest employers have similarly adopted goals to reduce their own carbon or greenhouse gas emissions through the utilization of renewable energy sources.<sup>4</sup> Given the policy set forth in N.C. Gen. Stat. § 62-2(7), the Commission should take the emissions reduction goals of the State of North Carolina into account when determining whether Friesian complies with

<sup>&</sup>lt;sup>4</sup> See, Comments of Wal-Mart Stores East, LP and Sam's East, Inc., Docket Nos. E-2, Sub 1170 & E-7, Sub 1169 (February 23, 2018); Initial Comments of The University of North Carolina at Chapel Hill, Docket Nos. E-2, Sub 1170 & E-7, Sub 1169 (February 23, 2018); Business Comments on GSA Proposal – New Belgium, SAS, Sierra Nevada, Unilever, VF Corp., Docket Nos. E-2, Sub 1170 & E-7, Sub 1169 (February 23, 2018); Joint Comments of Apple Inc. and Google LLC, Docket Nos. E-2, Sub 1170 & E-7, Sub 1169 (February 23, 2018); University Comments on GSA Proposal – Davidson College, Duke University, and Wake Forest University – Attachment B to NCSEA's Initial Comments, Docket Nos. E-2, Sub 1170 & E-7, Sub 1169 (February 23, 2018).

the public convenience. In addition, the Commission should also be mindful of the emissions reduction goals of both Duke and NCEMC.

Governor Cooper has been unequivocal about the need for North Carolina to reduce its greenhouse gas emissions and related state goals include expanding clean energy generation in the state as outlined by Governor Cooper's Executive Order 80 ("Executive Order 80") and related documents including the North Carolina Clean Energy Plan ("Clean Energy Plan").<sup>5</sup> The Clean Energy Plan outlines its underlying goals in its executive summary including, prominently, the need to reduce greenhouse gas emissions:

- Reduce electric power sector greenhouse gas emissions by 70% below 2005 levels by 2030 and attain carbon neutrality by 2050.
- Foster long-term energy affordability and price stability for North Carolina's residents and businesses by modernizing regulatory and planning processes.
- Accelerate clean energy innovation, development, and deployment to create economic opportunities for both rural and urban areas of the state.<sup>6</sup>

The Clean Energy Plan further acknowledges that the current "plan" outlined by

Duke Energy in its integrated resource plans will not get the State to the 70% greenhouse

gas emission goals as outlined:

Based on the current projections, natural gas will become NC's dominant source of electricity production as certain coal plants retire, contributing to most of the State's remaining GHG emissions (estimated to be 43 MMT by 2030 or 47% below 2005 levels). The current "business as usual" approach will not achieve the goal to reduce power sector GHG emissions 70% below 2005 unless the additional generation need is met by clean energy sources.<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> Exhibits, Vol. 3, Public Staff - Friesian Panel Cross-Examination Exhibit No. 7 ("Clean Energy Plan"). The Public Staff claims that the Clean Energy Plan is unapproved ("Are you talking about the DEQ unapproved Clean Energy Plan?"). Tr. Vol. 4, p. 33. However, the Clean Energy Plan is the result of an Executive Order, and no subsequent approval is required by any agency or body. Accordingly, the Public Staff's allegation that the Clean Energy Plan is "unapproved" is not supported by any evidence.

<sup>&</sup>lt;sup>6</sup> Clean Energy Plan, p. 12.

<sup>&</sup>lt;sup>7</sup> *Id.* at 25.

In addition to the goals of the State of North Carolina, Duke Energy Corporation ("Duke Energy"), the parent corporation of DEP, has adopted its own emissions reduction goals. Duke Energy's goal is to reduce its CO<sub>2</sub> emissions by 50% by 2030 (from 2005 levels) and achieving net-zero CO<sub>2</sub> emissions for electricity generation by 2050.<sup>8</sup> DEP has also noted that achieving their 2030 CO<sub>2</sub> will require at least 3,000 MW of additional solar generation in the DEP and Duke Energy Carolinas, LLC service territories. DEP goes on to state that "Substantial Network Upgrades will undoubtedly be needed to accommodate the addition of a substantial amount of new grid resources."<sup>9</sup>

Finally, NCEMC believes in "Creating a low-carbon emissions environment through sustainability and continued investment in low- and zero-emissions resources."<sup>10</sup> While not setting forth specific emissions reduction goals in the same manner as the Clean Energy Plan and Duke Energy's goals, the Commission should not ignore NCEMC's emissions reduction goals.

The Public Staff takes the position that any non-ratepayer benefits are speculative and unquantifiable.

- [Q] I know you've used the word speculative, but is it your position that there are no benefits that you can identify with respect to the Friesian upgrades?
- A I can't quantify the benefits, is what I'm stating.<sup>11</sup>

However, this position is contradicted by the evidence in the record. While not specific to the Friesian upgrades, Friesian Witness Wilson had quantified the benefits of meeting the various emissions goals. Specifically, Witness Wilson testified that a 51% reduction in CO<sub>2</sub>

<sup>&</sup>lt;sup>8</sup> Exhibits Vol. 4, Applicant Cross Exhibit 5, DEP Letter Regarding Friesian CPCN Application, p. 2.
<sup>9</sup> Id

<sup>&</sup>lt;sup>10</sup> Exhibits Vol. 3, Wilson Rebuttal Exhibit A, Attachment, p. 1.

<sup>&</sup>lt;sup>11</sup> Tr. Vol. 3, p. 189.

emissions could lead to health benefits of nearly \$445 million.<sup>12</sup> Accordingly, the Commission should take into account the non-ratepayer benefits associated with complying with the Clean Energy Plan as well as the goals of Duke and NCEMC.

### CONSTRAINED INFRASTRUCTURE B.

As a part of the interconnection study process, "Duke Energy has identified areas where modification and upgrade of the system would be required if generator projects in the queue were to be interconnected."<sup>13</sup> These areas are identified in Figure 1 as constrained areas.

## Figure 1: DEP Constrained Areas<sup>14</sup>





<sup>&</sup>lt;sup>12</sup> Tr. Vol. 2, p. 109.

<sup>&</sup>lt;sup>13</sup> Exhibits Vol. 3, Public Staff - Friesian Panel Cross-Examination Exhibit No. 3, Appendix B, p. 3. <sup>14</sup> *Id.* at 7.

The Public Staff claims that "the system is fine[.]"<sup>15</sup> NCSEA fundamentally disagrees with the Public Staff and believes that it is untenable for roughly half of DEP's service area to be constrained. Friesian should not be penalized for poor transmission planning practices, especially given that the Public Staff concedes that Friesian has a right to access the grid.

- Q. . . . Are there lower costs available options available to interconnect Friesian?
- A. Well, the lower cost alternative is that Friesian does not interconnect because the system is fine and ratepayers don't have to pick up the tab.
- Q. But Friesian has a right to have access to the grid, correct?
- A. Yes, Friesian has a right to have access to the grid.<sup>16</sup>

Friesian is the proverbial straw that broke the camel's back due to inaction on grid planning, and all of the parties to the proceeding except for the Public Staff believe that the upgrades necessary to interconnect Friesian will facilitate extensive solar development in the constrained area. DEP's interconnection queue shows that there is 3,898 MW of proposed solar generation in the constrained area.<sup>17</sup> According to DEP, 1,561 MW of the planned solar is directly interdependent on the Friesian upgrades.<sup>18</sup> Even if not all of the 1,561 MW of interdependent proposed solar generation is constructed, DEP estimates that at least 1,000 MW of new solar generation could be added to the grid if the Friesian upgrades are constructed.<sup>19</sup> Despite this agreement, and the fact that they have performed no analysis to support their belief, the Public Staff believes that it speculative that any

<sup>18</sup> Id. at 31.

<sup>&</sup>lt;sup>15</sup> Tr. Vol. 4, p. 26.

<sup>&</sup>lt;sup>16</sup> *Id.* at 26-27.

<sup>&</sup>lt;sup>17</sup> Tr. Vol. 2, p. 29.

<sup>&</sup>lt;sup>19</sup> See, id. at 171, Tr. Vol. 3, pp. 60-61.

additional solar development will occur in southeastern North Carolina if the Friesian

upgrades are constructed.

- Q Okay. And have you performed any type of independent analysis of the additional generation facilities that will be able to be constructed as a result of the Friesian upgrades, assuming that the Friesian upgrades are, in fact, constructed?
- A The speculative projects behind [Friesian] and what may or may not interconnect?
- Q Correct.
- A No.
- Q So you have not performed any type of analysis to consider the amount of additional solar or the addition of the natural gas plant that we're referring to as Q399?
- A Well, also, we have to talk about Q398. I believe it's already been discussed extensively in the record of the interdependencies of those particular projects and the speculative nature of what projects can or could come online.<sup>20</sup>

The Public Staff's position that it is speculative that additional solar will be

constructed in southeastern North Carolina if the Friesian upgrades are built is contradicted by logic and the evidence presented in this proceeding. While it is unlikely that all 3,898 MW of queued generation will come to fruition, the history of solar development in North Carolina makes clear that it is beyond speculation that DEP's estimate of at least 1,000 MW of solar generation is reasonable and likely. Furthermore, Friesian Witness Bednar gave extensive testimony about why southeastern North Carolina is ideal for solar development further substantiating bountiful future solar estimates.<sup>21</sup>

### C. DELAYING THE NETWORK UPGRADES WOULD BE INEFFECTIVE

NCSEA does not dispute that the costs for the upgrades necessary to interconnect Friesian have risen significantly since the project was first proposed. However, the evidence in the record makes two things clear: first, the increase in costs is not attributable

<sup>&</sup>lt;sup>20</sup> Tr. Vol. 3, pp. 209-210.

<sup>&</sup>lt;sup>21</sup> See, Tr. Vol. 2, pp. 29-35.

to deadlines imposed by Friesian, and second, that delaying the network upgrades would be ineffective at curtailing costs.

The Public Staff has indicated their belief that delaying the construction of the Friesian upgrades would reduce the cost.<sup>22</sup> However, this belief does not appear to even be based on conversations with DEP.

- [Q] In those discussions primarily with Mr. Freeman, was there any discussion that some of the increases could be avoided if the project were delayed, delivered on a more extended schedule? Did that -- was that something that Mr. Freeman was saying well we could avoided this much if we pushed it out another year?
- A No, we did not go to that --
- Q It didn't get that granular? The discussion didn't get that granular?
- A No, sir. It was a little more high level.<sup>23</sup>

In fact, the evidence presented in the case demonstrates that a delay in constructing the

Friesian upgrades, or any upgrades necessary to address the constraint in DEP's service

territory, would actually increase costs.

- Q And let me also ask you, because Mr. Dodge was implying that deferral means a benefit, do you have an opinion as to whether the cost of these upgrades will increase over time if they are not carried out on the schedule that's currently contemplated for Friesian?
- A I do. We regularly track cost of interconnections across our portfolio, and we've seen historical increases of 5 to 10 percent regularly, conservatively, and in recent years have seen interconnection transmission high voltage work growing and inflating at well in excess of 10 percent a year. And I would -- I believe that if we defer it, that the costs will only go up and could go up dramatically.
- Q And so that could actually result in a significant increase in cost to ratepayers if these upgrades prove to be needed at a future time?
- A I believe so.<sup>24</sup>

<sup>&</sup>lt;sup>22</sup> See, e.g., Tr. Vol. 3, p. 137 ("In addition, due to technological changes, there also may be other alternatives identified that help to avoid or defer costly transmission upgrades."). <sup>23</sup> Tr. Vol. 4, p. 63

<sup>&</sup>lt;sup>23</sup> Tr. Vol. 4, p. 63.

<sup>&</sup>lt;sup>24</sup> Tr. Vol. 3, pp. 29-30. *See also, id.* at 41-42 ("But in the meantime, from 2017 to today, my sources within the EPC community are that it's not unusual for high voltage and transmission costs to have risen 30 to 40 percent broadly, nationwide, based upon tariffs, based upon shortages of general construction capacity, et cetera, and I think that at that point in time, you know, we have to have some faith because there's no mechanism for us to dig into the cost structure that Duke has when they're making those estimates to us.").

Despite the Public Staff's speculative assertions that the cost of interconnecting new generation in DEP's constrained area will decrease in the future, the evidence in the proceeding demonstrates that costs have historically risen at rates greater than inflation, and that the trend is expected to continue. Therefore, the Commission should do everything in its power to ensure that the Friesian upgrades are constructed in a timely manner, rather than delaying the upgrades.

### III. NECESSITY

The Commission was clear when it adopted Rule R8-63 that it intended to utilize a flexible standard for the showing of need for a merchant generating facility. When adopting Rule R8-63, the Commission opined that:

It is the Commission's intent to facilitate, and not to frustrate, merchant plant development. Given the present statutory framework, the Commission is not in a position to abandon any showing of need or to create a presumption of need. However, the Commission believes that a flexible standard for the showing of need is appropriate. The Commission adopts the first sentence of the Public Staff's recommendation but will not adopt the second sentence. The Commission agrees with Duke that the reference to "contracts or preliminary agreements" in the second sentence brings to mind the old Empire requirement and might raise doubts as to whether the Commission has truly abandoned that requirement. The Commission has abandoned the contract requirement of Empire as inappropriate in today's environment.<sup>25</sup>

In explaining the contract requirement of *Empire* that it was abandoning, the Commission

stated:

In its 1992 decision regarding Empire Power Company in Docket No. SP-91, the Commission dismissed a certificate application for a merchant plant, station that as a minimum filing requirement "an IPP proposing to sell its electricity to a North Carolina utility must first obtain and allege as part of its certificate application either a contract or a written commitment from the utility."<sup>26</sup>

<sup>&</sup>lt;sup>25</sup> Order Adopting Rule, p. 7, Docket No. E-100, Sub 85 (May 21, 2001).

<sup>&</sup>lt;sup>26</sup> *Id.* at 6.

In the instant case, Friesian, an independent power producer ("IPP"), is proposing to sell its electricity to NCEMC. Under the *Empire* requirement, Friesian would be required to obtain either a contract or a written commitment from NCEMC. Friesian has done precisely this.<sup>27</sup> Because Friesian has demonstrated a need under the stricter, and now-abandoned, *Empire* requirement by executing a power purchase agreement with NCEMC, they have also demonstrated a need under the requirements of Rule R8-63.

### A. NCEMC'S NEED FOR LOW CARBON RESOURCES

The Public Staff appears to ignore the Commission's *Order Adopting Rule* by maintaining "that the Applicant did not meet the burden of proof in demonstrating NCEMC's needs."<sup>28</sup> As discussed above, NCSEA maintains that Friesian demonstrated a need for its facility under both the now-abandoned *Empire* standard and under the current Rule R8-63 standard. Despite the fact that the Public Staff's position<sup>29</sup> is contravened by Commission precedent, it is worth examining their objection further.

N.C. Gen. Stat. § 62-2(5) sets forth that "It is hereby declared to be the policy of the State of North Carolina: . . . to encourage and promote harmony between public utilities, their users and the environment[.]" NCEMC has stated that it "developed and began to pursue strategic business objectives under an initiative it christened '*A Brighter Energy* 

<sup>&</sup>lt;sup>27</sup> See, Exhibits Vol. 3, NCEMC's Initial Comments, p. 1 (July 18, 2019).

<sup>&</sup>lt;sup>28</sup> Tr. Vol. 4, p. 17.

<sup>&</sup>lt;sup>29</sup> NCSEA notes that the Public Staff's position on whether Friesian has demonstrated a need for its generation facility is inconsistent. On redirect, the Public Staff testifies:

Q. . . . [H]as Friesian, do you believe, established a need in this case, demonstrated a need?

A. Partially. Well, I say partially because you have to take all of these multiple needs into consideration. When you waive the components of the need versus a necessity and the upgrade cost in this particular project then no.

Tr. Vol. 4, p. 57. This exchange appears to contradict previous statements by the Public Staff and seems to indicate that the Public Staff believes that Friesian has not demonstrated that its generating facility meets the public necessity but has demonstrated a need for the generation.

*Future*' ('BEF'), which entails supplying power that is not only affordable, reliable, and safe, but also increasingly low carbon[.]<sup>30</sup> However, the Public Staff takes the position that NCEMC's desire to incorporate low carbon generation into their portfolio "is not a need in itself.<sup>31</sup> This is contrasted by the Public Staff's deference to Duke's carbon emission goals. In discussing a future Duke-developed natural gas plant, the Public Staff testified:

the other component of this is looking at when Duke will present the 2020 net carbon plan. I don't know how the new net carbon plan is going to impact or potentially adjust the Q399 project.<sup>32</sup>

It appears that the Public Staff is willing to be deferential to Duke's desire to offset or replace fossil generation with carbon-free resources but is not willing to give the same deference to NCEMC.

NCEMC's BEF advances the goals of N.C. Gen. Stat. § 62-2(5). NCEMC's desire to transition to a low-carbon generation portfolio should be commended, not opposed.

### B. DEP'S NEED IS IRRELEVANT

The Public Staff, in part, objects to Friesian on the grounds that it does not satisfy the needs for new generation shown in DEP's integrated resource plan ("IRP").<sup>33</sup> However, DEP's IRP is irrelevant to this proceeding because Friesian's output is being sold to NCEMC. As conceded by the Public Staff, NCEMC is the off-taker of Friesian's electricity, and NCEMC is not required to file an IRP with the Commission.

- Q For the utility. And the off-taker of Friesian's electricity is NCEMC, correct?
- A That is correct.
- Q And we've established they do not file an IRP?

<sup>&</sup>lt;sup>30</sup> Exhibits Vol. 3, NCEMC's Initial Comments, p. 2 (July 18, 2019).

<sup>&</sup>lt;sup>31</sup> Tr. Vol. 4, p. 17.

<sup>&</sup>lt;sup>32</sup> *Id.* at 120.

<sup>&</sup>lt;sup>33</sup> Tr. Vol. 3, pp. 117-119.

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## A That is correct.<sup>34</sup>

While Friesian's project is located within DEP's balancing area, that does not mean that the need for the Friesian facility must be shown in DEP's IRP. Instead, the Commission should look to the need of NCEMC, the off-taker of the electricity. As set forth above, Friesian has demonstrated NCEMC's need for the generation, even under previous, stricter requirements.

### IV. CONCLUSION

The Public Staff has raised numerous objections to the Friesian project. NCSEA understands why the Public Staff is raising these objections, given that their client is the using and consuming public. However, this CPCN proceeding is not the proper venue for those objections. Friesian has followed all of the requirements of Rule R8-63 and N.C. Gen. Stat. § 62-110.1, and their project is in the public interest and the best interests of the State of North Carolina. The Public Staff's objections regarding the rules for merchant generating facilities should be raised in a rulemaking docket akin to E-100, Sub 85, and objections regarding cost recovery are properly raised with the Federal Energy Regulatory Commission. For the reasons set forth above, NCSEA respectfully requests that the Commission grant Friesian's application for a CPCN.

<sup>&</sup>lt;sup>34</sup> Tr. Vol. 4, pp. 28-29. *See also, id.* at 16 ("[Q] Does the -- do NCEMCs file an IRP with the Commission? A (Metz) No, they do not.").

Respectfully submitted, this the 10th day of February, 2020.

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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 Post-Hearing Brief 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 10th day of February, 2020.

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