STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. EMP-105, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of Friesian Holdings, LLC for a Certificate of Convenience and Necessity to Construct a 70-MW Solar Facility in Scotland County, North Carolina	))))	ORDER GRANTING CERTIFICATE

HEARD: Wednesday, December 18, 2019, at 10:00 a.m., in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

Thursday, December 19, 2019, at 1:30 p.m., in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE: Chair Charlotte A. Mitchell, Presiding; and Commissioners TaNola D. Brown-Bland, Lyons Gray, Daniel G. Clodfelter, Kimberly W. Duffley, and Jeffrey A. Hughes

APPEARANCES:

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For the Using and Consuming Public:

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BY THE COMMISSION: On May 15, 2019, Friesian Holdings, LLC (Friesian) filed an application pursuant to G.S. 62-110.1 and Commission Rule R8-63 for a certificate of public convenience and necessity (CPCN or certificate) authorizing the construction of a 70-MWAC solar photovoltaic electric generation facility to be located on Leisure Road near Academy Road, Laurinburg, Scotland County, North Carolina (Facility). Until recently, Birdseye Renewable Energy, LLC (Birdseye) was the parent of Friesian and it remains under contract to develop the Facility. On May 15, 2019, Friesian pre-filed the direct testimony of Brian C. Bednar, the chief executive of Birdseye.

Previous to Friesian's current application, on September 9, 2016, in Docket No. SP-8467, Sub 0, Friesian filed an application pursuant to G.S. 62-110.1 and Commission Rule R8-64 for a CPCN authorizing the construction of a 75-MWAC solar photovoltaic electric generation facility to be located on Leisure Road near Academy Road, Laurinburg, Scotland County, North Carolina.

On September 16, 2016, in Docket No. SP-8467, Sub 0, the Commission issued an Order requiring publication of notice.

On October 10, 2016, in Docket No. SP-8467, Sub 0, Friesian filed an affidavit of publication from The Laurinburg Exchange stating that publication of notice was completed on October 8, 2016. The Commission thereafter reported that no complaints about the application had been made to the Commission.

On November 1, 2016, in Docket No. SP-8467, Sub 0, the Clearing Coordinator of the Office of Policy and Planning of the Department of Administration filed comments with the Commission concerning the original application. The Clearing Coordinator stated that because of the nature of the comments, no further review is needed by the Commission to determine compliance with the North Carolina Environmental Policy Act.

On November 7, 2016, in Docket No. SP-8467, Sub 0, the Commission issued the CPCN to Friesian for the 75-MWAC facility.

Thereafter, on August 2, 2018, in Docket No. SP-8467, Sub 0, Friesian filed a motion to amend its CPCN in order to change the layout of the site due to an amendment to the City of Laurinburg's ordinance that prohibits the construction of new solar arrays within one mile of an existing or previously permitted solar array within the City's corporate limits or extraterritorial jurisdiction. Friesian stated that because the planned location of the facility is within the extraterritorial limits of the City of Laurinburg, and within one mile of an existing solar facility, the amended ordinance prohibits Laurinburg from issuing the required zoning permit to Friesian. In order to comply with Laurinburg's amended ordinance, Friesian proposed shifting the footprint of the facility slightly to the west, and adding two new parcels of land to the facility site.

On September 7, 2018, in Docket No. SP-8467, Sub 0, the Public Staff filed a response to Friesian's motion to amend its CPCN. The Public Staff stated that publication of notice of the amendment was not required, recommended resubmission of the application to the State Clearinghouse, and requested that Friesian file a revised site plan.

On September 11, 2018, in Docket No. SP-8467, Sub 0, the Commission issued an Amended Order requiring publication of notice, filing of revised site plan, and further review by the State Clearinghouse.

On November 29, 2018, in in Docket No. SP-8467, Sub 0, the Clearing Coordinator of the Office of Policy and Planning of the Department of Administration filed comments with the Commission concerning the amended application. The Clearing Coordinator stated that because of the nature of the comments, no further review is needed by the Commission to determine compliance with the North Carolina Environmental Policy Act.

On May 15, 2019, in Docket No. SP-8467, Sub 0 and in Docket No. EMP-105, Sub 0, Friesian filed a statement requesting that it be allowed to withdraw the CPCN amendment application in Docket No. SP-8467, Sub 0. Friesian also requested that the Commission consider the new application for a CPCN filed in Docket No. EMP-105, Sub 0 as a merchant plant application pursuant to Commission Rule R8-63.

On June 14, 2019, in Docket No. SP-8467, Sub 0, the Commission allowed Friesian's request to withdraw its motion to amend its CPCN, and canceled the CPCN and closed Docket No. SP-8467, Sub 0.

On May 15, 2019, in Docket No. EMP-105, Sub 0, Friesian filed an application pursuant to G.S. 62-110.1 and Commission Rule R8-63 for a CPCN to construct the 70-MWAC Facility.

On May 31, 2019, the Public Staff filed a Notice of Completeness stating that the Public Staff had reviewed the Application as required by Commission Rule R8-63(d) and that the Public Staff considers the Application to be complete. In addition, the Public Staff requested that the Commission issue a procedural order setting the Application for hearing, requiring public notice pursuant to G.S. 62-82, and addressing other procedural matters.

On June 13, 2019, the Commission issued an Order that, among other things, scheduled hearings in this proceeding, established a procedural schedule for the filing of petitions to intervene and of testimony, and directed Friesian to publish notice of the public hearing once a week for four consecutive weeks, beginning at least 30 days prior to July 26, 2019.

On June 21, 2019, the North Carolina Electric Membership Corporation (NCEMC) filed a petition to intervene in the docket, which was granted pursuant to Commission Order on July 2, 2019.

On July 18, 2019, NCEMC filed Initial Comments.

On July 23, 2019, Duke Energy Progress, LLC (DEP) filed a petition to intervene, which was granted pursuant to Commission Order dated August 2, 2019.

On July 29, 2019, the North Carolina Sustainable Energy Association (NCSEA) filed a petition to intervene, which was granted by the Commission on August 20, 2019.

On August 1, 2019, the Public Staff filed a Motion for the Establishment of Due Dates for Pre-Hearing Briefs and Suspension of Evidentiary Hearing. The Public Staff stated that it has identified the following issues that are legal in nature that should be addressed in pre-hearing briefs:

1. The appropriate standard of review for the Commission to apply in determining the public convenience and necessity for a certificate to construct a merchant generating facility pursuant to N.C. Gen. Stat. § 62-110.1 and Commission Rule R8-63;

2. Whether the Commission has authority under state and federal law to consider as part of its review of the CPCN application the costs associated with transmission network upgrades and interconnection facilities necessary to accommodate the [Federal Energy Regulatory Commission ("FERC")]-jurisdictional interconnection of the merchant generating facility, and the resulting impact of those network costs on retail rates in North Carolina; and

3. Whether the allocation of costs associated with interconnecting the Facility and any resulting additional capacity made available that is then utilized by State-jurisdictional interconnection projects is consistent with the Commission's guidance in its June 14, 2019 *Order Approving Revised Interconnection Standard and Requiring Reports and Testimony* in which the Commission directed the utilities as follows: "to the greatest extent possible, to continue to seek to recover from Interconnection Customers all expenses … associated with supporting the generator interconnection process under the NC Interconnections Standard.

Also in the motion, the Public Staff requested that the Commission suspend the evidentiary hearing and allow Friesian and the other parties to file pre-hearing briefs and reply briefs.

On August 5, 2019, the North Carolina Clean Energy Business Alliance (NCCEBA) filed a petition to intervene, which was granted by the Commission on August 16, 2019.

On August 5, 2019, the Commission issued an Order that suspended the procedural schedule previously established in this proceeding and allowed the filing of pre-hearing briefs and reply briefs.

On August 6, 2019, the Commission issued an Order cancelling the public hearing because the Commission had not received any written complaints regarding the Application.

On August 26, 2019, Friesian, DEP, the Public Staff, and NCCEBA filed briefs.

On September 9, 2019, Friesian, DEP, the Public Staff, NCCEBA, and NCSEA filed reply briefs.

On October 3, 2019, the Commission issued an Order scheduling oral arguments for the purposes of receiving arguments from the parties addressing the issues noted in the Commission's August 5, 2019 Order, and, additionally, the questions of whether and, if so, how the July 14, 2017 decision of the U.S. Court of Appeals for the D.C. Circuit in *Orangeburg v. FERC,* 862 F.3d 1071 (2017), applies to the issues noted in the Commission's August 5, 2019 Order.

On October 21, 2019, oral argument before the Commission was conducted.

On October 25, 2019, the Commission issued an *Interlocutory Order on Legal Issues, Scheduling Hearing, Allowing the Filing of Testimony, and Establishing Discovery Guidelines* (the "Interlocutory Order"). In the Interlocutory Order, the Commission stated that the Commission may consider the costs for future Network Upgrades that are required to accommodate a proposed electric generating facility when considering a CPCN pursuant to G.S. 62-110.1 and Commission Rule R8-63. The Commission further stated that the Commission's final order on the merits of the CPCN Application will include the Commission's full discussion and findings of fact and ultimate decision to either issue or deny the CPCN. The Commission also scheduled a hearing for the purpose of receiving expert witness testimony for December 18, 2019.

On November 26, 2019, Friesian filed supplemental direct testimony and exhibits of Brian C. Bednar, Charles Askey, and Rachel Wilson.

On December 4, 2019, Helen Livingston filed a statement of position.

On December 6, 2019, the Public Staff filed the testimony of Evan D. Lawrence and Dustin R. Metz, engineers in the Electric Division of the Public Staff.

On December 6, 2019, Stephen De May, Duke's North Carolina President, filed North Carolina President Letter Regarding Friesian CPCN Application (Duke President Letter), and Duke's attorney filed DEP Letter Regarding Friesian CPCN Application (Duke Attorney Letter).

On December 12, 2019, Friesian filed rebuttal testimony and an exhibit of Brian C. Bednar, rebuttal testimony of Charles Askey, and rebuttal testimony and an exhibit of Rachel Wilson.

On December 13, 2019, the Solar Energy Industries Association filed a statement of position.

On December 16, 2019, the Town of Maxton, North Carolina filed a statement of position.

On December 16, 2019, the Robeson County Board of Commissioners filed a statement of position.

On December 18 and 19, 2019, the Commission held the expert witness hearing as scheduled for the purposes of receiving the expert testimony of the parties.

On December 20, 2019, the Public Staff filed a late-filed exhibit.

On January 8, 2020, DEP filed a late-filed exhibit.

On February 10, 2020, Friesian filed a post-hearing brief and proposed order.

On February 10, 2020, NCSEA filed a _____.

On February 10, 2020, the Public Staff filed a _____.

Based on the testimony presented at the hearing and the entire record of the proceeding, including matters of which judicial notice has been taken, the Commission makes the following:

FINDINGS OF FACT

1. Friesian is organized under the laws of the State of North Carolina with its principal place of business in Charlotte, North Carolina.

2. Friesian plans to construct a 70-MWAC solar photovoltaic electric generation facility to be located on Leisure Road near Academy Road, Laurinburg, Scotland County, North Carolina.

3. In compliance with G.S. 62-110.1(a) and Commission Rule R8-63, Friesian properly filed with the Commission an application for a CPCN authorizing the construction and operation of the 70-MWAC Facility.

4. Friesian will lease approximately 543.71 acres of the parent parcels (that total 965.89 acres) that are currently being used for agricultural purposes for the proposed Facility. The area not included in the leased area will continue to be used for agricultural purposes.

5. The Facility is a 70-MW PV array, and the source of its power is solar energy.

6. In accordance with Commission Rule R8-63(b)(2), Friesian's application lists the federal, state, and local permits and approvals required for the Facility and the status of those permits and approvals.

7. Construction of the Facility is anticipated to begin in the summer of 2023, with commercial operation expected to begin in December 2023, and with an expected service life of 35 or more years.

8. The anticipated construction cost of the Friesian generating facility is approximately $100 million.

9. Pursuant to DEP's Large Generator Interconnection Procedures (LGIP), DEP and Friesian executed a Standard Large Generator Interconnection Agreement on June 6, 2019 (LGIA).

10. The Interconnection Facilities necessary to interconnect the Friesian Facility to the DEP grid will consist of a new 230 kV breaker station connected to the Bennettsville SS – Laurinburg 230 kV transmission line. DEP will tap the Bennettsville SS – Laurinburg 230 kV line and construct a short tap to New Breaker Station adjacent to DEP's right-of-way (Interconnection Facilities).

11. In connection with the Friesian generating facility, associated upgrades to DEP's transmission system (Network Upgrades) will be constructed. The cost of the Network Upgrades is approximately $223 million. Under DEP's Open Access Transmission Tariff (OATT), Friesian would eventually be reimbursed by DEP for the cost of the Network Upgrades and DEP

would be entitled to recover approximately 60% of the costs, or approximately $135 million, from North Carolina retail ratepayers.

12. No further review is needed by the Commission to determine compliance with the North Carolina Environmental Policy Act.

13. Friesian has made a sufficient showing of need for the proposed Facility.

14. Friesian has secured financing for all aspects of the Facility.

15. Friesian has made a sufficient showing of the public convenience of the proposed Facility, including the public benefits of the associated Network Upgrades.

16. It is reasonable, appropriate, and serves the public interest to grant the requested CPCN to Friesian.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-2

These findings of fact are essentially informational, procedural, or jurisdictional in nature, pertain to the identity of the applicant, and are not in dispute. They are supported by the application and the exhibits thereto and the pre-filed testimony of Friesian witness Bednar.

Friesian's verified application states that Friesian plans to construct a 70-MWAC solar photovoltaic electric generation facility to be located on Leisure Road near Academy Road, Laurinburg, Scotland County, North Carolina.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NO. 3-8

These findings are supported by the application, the Notice of Completeness filed by the Public Staff on May 31, 2019, the testimony of Friesian witness Bednar, and the testimony of Public Staff witnesses Lawrence and Metz.

G.S. 62-110.1 and Commission Rule R8-83 provide that no person may begin construction of a facility for the generation of electricity to be directly or indirectly used for furnishing public utility service without first obtaining from the Commission a certificate that the public convenience and necessity requires or will require such construction.

Public Staff notified the Commission on May 31, 2019 that it had reviewed the application as required by Commission Rule R8-63(d) and that the Public Staff considers the application to be complete. Public Staff witnesses Lawrence and Metz testified that Friesian has fully complied with the Commission's filing requirements.

Friesian's application demonstrates, and Friesian witness Bednar testified, that Friesian's application provides the following information:

- Detailed information about Friesian.
- Balance sheet and income statement of Birdseye, the parent company of Friesian.
- Information about the generating facilities in the Southeastern Electric Reliability Council region which Birdseye, Friesian's parent company, has the ability to control through leases or contracts.
- Detailed information about the 70-MWAC solar electric generating facility. Construction of the Facility is anticipated to begin in the summer of 2023, the expected commercial operation date is in December 2023, the expected service life of the Facility is thirty-five or more years, and the anticipated construction cost of the generating facility is approximately $100 million.
- A color map of the Facility.
- Description of all major equipment of the Facility. Friesian is a 70-MW PV array, and the source of its power is solar energy. The Facility will consist of a single-axis tracking, ground mounted solar photovoltaic system, and it will be comprised of approximately 290,000 PV solar modules affixed to ground mounted racks supported on driven piles that will utilize thirty (30) 2500 Kw inverters, generator step-up ("GSU") transformers, racking, posts, wiring, utility poles, communication poles, security camera, collector station, and accessories.
- E911 address for the Facility. Scotland County has assigned the following E911 street address to the Facility: the address for the main entrance is 8960 Leisure Road, Laurinburg, North Carolina 28352, and the secondary address is 10061 Leisure Road, Laurinburg, North Carolina 28352.
- Land use. The parcels for the project are currently being used for agricultural purposes. Friesian will lease 543.71 acres of the parent parcels (that total 965.89 acres) that are currently being used for agricultural purposes. The area not included in the leased area will continue to be used for agricultural purposes.
- Local land use permit. On June 5, 2018, the Scotland County Board of Commissioners voted unanimously to approve Friesian's Conditional Use Permit application and issued the Conditional Use Permit on that date.
- List of all needed federal, state, and local permits. In addition to the Conditional Use Permit granted by the Scotland County Board of Commissioners, the following permits have been obtained or are required permits for the Facility: a building permit and an electrical permit are required from Scotland County; a driveway permit is required from the North Carolina Department of Transportation; approval of an erosion and sedimentation control plan is required from the NC Department of Environmental Quality ("NCDEQ"); a Phase I Environmental Site Assessment was conducted for the project on January 11, 2019; a Limited NEPA Assessment was performed on May 30, 2018; and on May 23, 2018, the US Army Corps of Engineers ("USACE") verified the wetland delineation for the entire site.

- The Facility's interconnection to DEP's FERC-jurisdictional transmission grid. DEP studied the potential impacts on the Facility's proposed interconnection to the DEP transmission system pursuant to DEP's Large Generator Interconnection Procedures (LGIP), which are included as Attachment J to DEP's FERC-jurisdictional OATT. The DEP LGIP establishes the detailed process by which DEP studies a proposed project's interconnection with its FERC-jurisdictional transmission system, with the study costs paid for by the interconnection customer. The LGIP produces cost estimates for a proposed generating interconnection including which party – either the interconnecting utility (the "Transmission Provider," in this case DEP) or the developer (the "Interconnection Customer," in this case Friesian) – is responsible for such costs. Pursuant to the LGIP, DEP and Friesian executed a Standard Large Generator Interconnection Agreement on June 6, 2019 (LGIA). A form of the LGIA is also provided in the LGIP which, as noted above, is part of DEP's FERC-jurisdictional OATT. Pursuant to the LGIA, the interconnection facilities necessary to interconnect the Facility to the DEP grid will consist of a new 230 kV breaker station connected to the Bennettsville SS – Laurinburg 230 kV transmission line. DEP will tap the Bennettsville SS – Laurinburg 230 kV line and construct a short tap to New Breaker Station adjacent to DEP's right-of-way.
- Need for the Facility. Friesian will sell the full output of energy, capacity, and RECs from the Facility to NCEMC pursuant to a PPA that was executed on May 31, 2019. Under North Carolina's REPS, by 2018 and thereafter, electric membership corporations and municipalities are required to meet a minimum of ten percent (10%) of their retail sales through renewable energy resources or energy efficiency measures. The REPS includes solar electric as an eligible renewable energy resource. The Facility will provide a significant amount of RECs for use by NCEMC for compliance with the REPS requirement, and will further NCEMC's goal of creating a low-carbon emissions environment through sustainability and continued investment in low- and zero-emissions resources.
- Public Convenience of the Facility. The Friesian Facility will bring a variety of benefits to Scotland County and the surrounding community. Friesian anticipates that the County will realize property and real estate tax revenues. The site's landowners will receive revenue in the form of lease payments each year for the life of the Facility, and this revenue will assist them in maintaining agricultural operations on their land. In addition to these financial benefits, the Friesian Facility will create community benefits. Friesian will enhance the County's reputation as an attractive and friendly environment for advanced manufacturing, technology, and related jobs. Local contractors and businesses, such as installation, fencing, landscaping, and machine rental companies, will receive sales opportunities from the Facility construction and operations. During the approximately year-long construction process, the Facility will offer full-time construction jobs. Increased economic activity in the area is also expected to increase revenue for local hotels, restaurants, service stores, and other vendors.

An examination of the application, the exhibits attached thereto, and the testimony of Friesian witness Bednar and Public Staff witnesses Lawrence and Metz confirms that Friesian has complied with all filing requirements of the statute and the Commission's merchant plant rule.

Based on the foregoing, the Commission finds and concludes that Friesian has filed a complete and sufficient application for a CPCN in accordance with the requirements of G.S. 62-110.1 and Commission Rule R8-63.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 9

This finding is supported by the application, the testimony of Friesian witness Bednar, and the testimony of Public Staff witnesses Lawrence and Metz.

Friesian witness Bednar testified that DEP studied the potential impacts on the Facility's proposed interconnection to the DEP transmission system pursuant to DEP's LGIP, which are included as Attachment J to DEP's FERC-jurisdictional OATT. The DEP LGIP establishes the detailed process by which DEP studies a proposed project's interconnection with its FERC-jurisdictional transmission system, with the study costs paid for by the interconnection customer. The LGIP produces cost estimates for a proposed generating interconnection including which party – either the interconnecting utility (the "Transmission Provider," in this case DEP) or the developer (the "Interconnection Customer," in this case Friesian) – is responsible for such costs. Pursuant to the LGIP, DEP and Friesian executed a Standard LGIA on June 6, 2019. A form of the LGIA is also provided in the LGIP which, as noted above, is part of DEP's FERC-jurisdictional OATT. Pursuant to the LGIA, the interconnection facilities necessary to interconnect the Facility to the DEP grid will consist of a new 230 kV breaker station connected to the Bennettsville SS – Laurinburg 230 kV transmission line. DEP will tap the Bennettsville SS – Laurinburg 230 kV line and construct a short tap to New Breaker Station adjacent to DEP's right-of-way.

Public Staff witnesses Lawrence and Metz testified that under the LGIA, Friesian is required to pay for the cost of the Interconnection Facilities assigned to Friesian under the terms of the LGIA.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 10

This finding is supported by the application, the testimony of Friesian witnesses Bednar and Askey, and the testimony of Public Staff witnesses Lawrence and Metz.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 11

This finding is supported by the testimony of Friesian witnesses Bednar and Wilson and the testimony of Public Staff witnesses Lawrence and Metz.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 12

Friesian had filed an amended site plan with its motion to amend its CPCN on August 2, 2018 in Docket No. SP-8467, Sub 0. In that docket on November 29, 2018, the Clearing Coordinator of the Office of Policy and Planning of the Department of Administration filed comments with the Commission concerning the amended application. The Clearing Coordinator stated that because of the nature of the comments, no further review is needed by the Commission to determine compliance with the North Carolina Environmental Policy Act. On May 15, 2019, in this docket (Docket No. EMP-105, Sub 0), Friesian filed an application pursuant to G.S. 62-110.1 and Commission Rule R8-63 for a CPCN to construct the 70-MWAC Facility. The application includes the same site plan that had been previously reviewed by State Clearinghouse. In regard to that site plan, the Clearing Coordinator had stated that no further review is needed by the Commission to determine compliance with the North Carolina Environmental Policy Act. The Public Staff agrees that no further review by the State Clearinghouse is needed in this docket since the site plan filed with the application in this docket is the same site plan that the Clearinghouse had determined was in compliance with the North Carolina Environmental Policy Act in Docket No. SP-8467, Sub 0.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NO. 13

This finding is supported by the application, the exhibits attached thereto, the testimony of Friesian witnesses Bednar and Askey, the Initial Comments filed by NCEMC, statements in the Public Staff reply brief, and the testimony of Public Staff witnesses Lawrence and Metz.

Section 62-110.1 of the North Carolina General Statutes provides 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 . . . without first obtaining from the Commission a certificate that public convenience and necessity requires, or will require, such construction." The General Assembly used the term "public convenience and necessity" to define the standard to be applied by the Commission to proposed facilities, and it is based on an "element of need for the proposed service."

The Commission takes notice that there is ample support for Friesian's application, that no customer complaints have been filed in the docket, and that only the Public Staff has suggested that there might not be a need for the Facility.

The Commission considered evidence about the need for the Facility from the Friesian witnesses and NCEMC comments, and also considered the Public Staff's general concerns about whether Friesian has shown a need for the Facility. After considering the evidence submitted by the parties and NCEMC's comments, the Commission finds and concludes that Friesian has demonstrated a need for the Facility and that its showing of need is in excess of the showing required by G.S. 62-110.1 and Commission precedent and practice.

The Commission finds that testimony from Friesian witness Bednar and statements in the Public Staff's reply brief demonstrate that Friesian established the need for the Facility with the PPA entered into by Friesian and NCEMC. Friesian witness Bednar testified, and NCEMC provided information in its comments, that Friesian and NCEMC entered into a PPA for Friesian to sell the full output of energy, capacity, and RECs from the Facility to NCEMC. Under North Carolina's REPS, by 2018 and thereafter, electric membership corporations and municipalities are required to meet a minimum of ten percent of their retail sales through renewable energy resources or energy efficiency measures. The REPS includes solar electric as an eligible renewable energy resource. The Facility will provide a significant amount of RECs for use by NCEMC so that it can achieve REPS compliance. The Facility will further NCEMC's goal of creating a low-carbon emissions environment through sustainability and continued investment in low- and zero-emissions resources. NCEMC emphasized the need for the Facility in its Initial Comments:

> As a [generation and transmission] cooperative, NCEMC continuously strives to supply power to its members that is affordable, reliable, and safe. Beginning a decade ago, NCEMC also began assisting its members with their compliance obligations under the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard ("REPS"). This assistance frequently took the form of purchasing renewable energy certificates from utility-scale solar facilities. More recently, NCEMC developed and began to pursue strategic business objectives under an initiative it christened "*A Brighter Future*" ("BEF"), which entails supplying power that is not only affordable, reliable, and safe, but also increasingly low carbon . . . . Once constructed, the [Friesian] Project – specifically, the parties' execution of the Project PPA – will simultaneously advance NCEMC's pursuit of BEF and further its ability to achieve REPS compliance. For the foregoing reasons, NCEMC supports issuance of a CPCN for the Project.

The Commission notes that the Public Staff's attorney initially informed the Commission in the Public Staff's Reply Brief that "the Public Staff does not take issue with the need for the generating capacity demonstrated by Friesian and that the facility will not necessarily result in over-building of generation capacity." After the Public Staff's attorney filed that legal opinion, Public Staff witnesses then provided contradictory statements about whether the need for the Facility had been established. On cross-examination, the Public Staff acknowledged that the Public Staff is not saying that there is not a need for the Friesian Facility, but only that Friesian might not have submitted evidence of need. However, the Commission notes the Public Staff witnesses never stated that Friesian had *not* established a need for the Facility.

The Commission further finds that Friesian has demonstrated a need for the Facility under Commission rules and precedent. The Commission is of the opinion that the Public Staff's suggestion that the PPA between Friesian and NCEMC might not be sufficient to demonstrate the need for the Facility would frustrate, rather than facilitate, merchant plant development in direct contradiction of the Commission's *Order Adopting Rule* issued in Docket No. E-100, Sub 85 and discussed herein. In that Order, the Commission stated: "It is the Commission's intent to facilitate, and not to frustrate merchant plant development."

The Commission notes that the merchant plant rule (Rule R8-63) was specifically adopted to eliminate the requirement that an executed PPA is needed in order for a merchant pant to demonstrate need. The Commission adopted Rule R8-63 in the wake of its April 23, 1992 decision regarding Empire Power Company's (Empire Power) merchant plant application, which was affirmed by the North Carolina Court of Appeals. In that docket, the Commission dismissed Empire Power's CPCN application for a 600-MW combustion turbine electric generating facility in Rockingham County because Empire Power did not have a contract or agreement with the utility and therefore did not have a buyer of its power. The Commission stated 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."

Having rethought the wisdom of that requirement, the Commission initiated a rule-making proceeding for merchant plants in Docket No. E-100, Sub 85. In the merchant plant rule-making proceeding, the Public Staff proposed that Rule R8-63(b)(1) should require the following with respect to a showing of need: "A description of the need for the facility in the state and/or region, with supporting documentation. This documentation shall include as appropriate, either (i) contracts or preliminary agreements for the output of the facility, or (ii) information that there is a need for the applicant's power in its intended market." In the Commission's February 7, 2001 Order, the Commission recognized that the environment in which the Empire Power decision was made had changed in many crucial ways. The Commission stated that "Empire is not a decision whose reasoning the Commission would follow per se today because the reasoning behind it does not reflect the situation of the industry today." The Commission expressly declined to adopt the Public Staff's recommendation that a contract is needed to show the need for a proposed merchant plant, and stated:

> It is the Commission's intent to facilitate, and not to frustrate, merchant plant development. Given the present 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 the requirement. The Commission has abandoned the contract requirement as inappropriate in today's environment.

Since the Empire Power case, the Commission has never taken the position in any other merchant plant docket that an executed PPA is not sufficient to demonstrate the need for the merchant plant.

Further, the Commission recognizes that the Public Staff has consistently found that an executed PPA is sufficient to establish the need for a merchant plant facility. In response to Commission questions, Public Staff witness Lawrence stated that prior to this proceeding the Public Staff had never suggested that an executed PPA was not sufficient to demonstrate the need for the generating facility. He further stated that the Public Staff and the Commission have always considered the existence of a PPA sufficient to satisfy the need prong of the public convenience and necessity for merchant plant applications.

Additionally, the Commission notes that in the recent NTE Carolinas II, LLC (NTE) merchant plant application for a 500-MW natural gas-fired generating facility in Rockingham County filed on July 29, 2016 in Docket No. EMP-92, Sub 0, the Public Staff found that NTE had established the need for the facility even though NTE did not have a PPA and there were only wholesale customers who might be interested in purchasing the facility's output. The Public Staff filed testimony in the NTE docket on October 18, 2016, and testified that there was a need for the NTE merchant plant even though there was not a PPA. The Public Staff did not address whether construction of the facility was in the public convenience, and the Public Staff recommended approval of the application.

The Commission concludes that Friesian has met the more stringent test for a showing of need – an executed agreement for the sale of its output – that the Commission specifically found was not necessary to satisfy the requirements of the rule. Therefore, based on the evidence, the Commission concludes that Friesian has made a sufficient showing of need for its proposed 70-MWAC electric generation facility in Scotland County.

EVIDENCE FOR FINDING OF FACT NO. 14

This finding is supported by the testimony of Friesian witness Bednar and Public Witness Metz.

Friesian witness Bednar testified to the viability of the Friesian Facility and the financing for all aspects of the project. Friesian witness Bednar testified that financing for all aspects of the project has been obtained after a conducting a robust process to identify the financing provider who could offer Friesian the most attractive economics while ensuring best-in-class execution and the highest level of transaction certainty, Birdseye selected Kayne Solutions Fund, LP (Kayne). To date, Kayne has provided $11 million in payments to Duke on behalf of Friesian under the LGIA, including a $1.5 million payment on May 31, 2019, a $1.5 million payment on July 26, 2019, a $7 million payment on December 2, 2019, and a $1 million dollar payment on January 6, 2020. Kayne will continue funding all subsequent security postings and related interconnection payments to Duke per Appendix B of the Friesian LGIA. In addition to providing access to the initial capital funding needs under the LGIA, Kayne will be providing 100% construction financing for the Facility following issuance of the Facility's notice to proceed, which is estimated to occur in the fourth quarter of 2022 to align with completion of the Network Upgrades in December 2023. This construction financing commitment will ensure the full $100 million in construction capital is available to Friesian leading up to commercial operation in December 2023 when the permanent capital structure will be put in place.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 15

This finding is supported by the application, the exhibits attached thereto, the testimony of Friesian witnesses Bednar, Askey, and Wilson, statements in the Duke President Letter and the Duke Attorney Letter, and the testimony of Public Staff witnesses Lawrence and Metz.

The Commission initially notes that there has been no suggestion by the Public Staff or any other party that the *Friesian generation facility* does not serve the public convenience. Instead, the Public Staff's opposition to the CPCN Application is solely due to the cost of the FERC-jurisdictional Network Upgrades. For the reasons discussed below, the Commission believes that construction of the Friesian Facility and the Network Upgrades will result in numerous and significant public benefits that far exceed the cost of the Network Upgrades.

In *State of North Carolina ex rel. Utilities Commission v. Casey,* our Supreme Court stated that the public convenience standard is a "relative or elastic theory rather than an abstract or absolute rule" and that "[n]o set rule can be used a yardstick and applied to all cases alike." The Supreme Court instructed that the facts in each case must be separately considered, and from those facts it must be determined whether the public convenience has been met. In addition, the Court of Appeals has instructed that the "public convenience and necessity" standard should be read "*in pari materia* with N.C.G.S. § 62-2, which contains ten [now twelve] specific policies . . . ." That is, whether the public convenience is served is a function of whether the state energy policies established by the General Assembly are advanced.

The Commission agrees with Duke that this case involves a "unique and complex set of circumstances" in which substantial Network Upgrade costs will be borne by ratepayers, but substantial benefits will flow to them as well. The Commission finds that the important public benefits include: (1) addressing the highly problematic, disruptive, and destabilizing congestion in DEP's transmission system in the southeastern portion of the state in a timely and cost-effective manner; (2) allowing for the interconnection of a substantial amount of renewable resources and non-renewable resources, including DEP's proposed 1235-MW Combined Cycle Plant (Q399) that is interdependent on the Friesian project; (3) enabling the state to achieve greenhouse gas emissions reductions (and associated health benefits) in compliance with Duke's climate strategy and the Governor's Clean Energy Plan; (4) providing long-term cost savings to the ratepayers; and (5) minimizing challenges with Duke's transition to queue reform.

Initially, the Commission notes that Duke has spelled out many of those important benefits to the Commission. In letters filed with the Commission, North Carolina President, Stephen DeMay, and Duke's regulatory attorney explained the benefits of the Network Upgrades. Mr. DeMay stated:

> On behalf of Duke Energy Progress, LLC ("DEP" or the "Company" and together with Duke Energy Carolinas, LLC, the "Duke Utilities"), I would like to take this opportunity to summarize certain benefits that would result from the Network

> Upgrades that will be constructed at this time should the North Carolina Utilities Commission ("Commission") elect to grant a certificate of public convenience and necessity to Friesian Holdings, LLC ("Friesian") for its proposed 70-MW AC solar photovoltaic facility in Scotland County, North Carolina.
>
> The decision facing the Commission in this proceeding presents a unique and complex set of circumstances, and the Company appreciates the unchartered nature of this decision and the significance of the costs at issue. Such decision, however, is properly viewed as the product of substantial success, as it arises due to the enormous amount of effort invested to achieve nation-leading amounts of interconnected solar resources in North Carolina. This success has now and will likely in the future introduce complex policy questions that require substantial regulatory and policy engagement. In this particular case and during this pivotal time of transition in North Carolina's energy policy, the Company believes that the Commission should consider the benefits of the Network Upgrades in rendering its decision in this proceeding. Such benefits, which are summarized in more detail in a separate letter being filed in parallel by counsel for DEP, include the following: (1) allowing for the interconnection of a substantial amount of renewable resources in the southeast portion of DEP's service territory, (2) avoiding queue paralysis and substantial delays in interconnection of certain projects, (3) and minimizing certain short-term challenges associated with the Duke Utilities' queue reform plans. . . .
>
> Construction of the Network Upgrades in question at this time will result in benefits that will, in turn, smooth the road on the journey in the future.

Duke's regulatory attorney provided further explanation of the importance of the Friesian Network Upgrades. While Duke's attorney acknowledged that the cost of the Friesian Network Upgrades is significant, he requested that the Commission consider the multiple benefits that will arise from the project. He listed a number of important benefits, including:

> 1. Interconnection of Additional Renewable Generating Resources. The comprehensive planning process for the Duke Utilities 2018 IRP and 2019 IRP Updates demonstrates that a combination of renewable resources, demand-side management and energy efficiency programs, and additional base load, intermediate and peaking generation are required over the next fifteen years to reliably meet customer demand. Additionally, in mid-September 2019, Duke Energy Corporation announced its new, enterprise-wide climate strategy, including updating its CO_2 reduction goals to at least 50% by 2013 (from 2005 levels) and achieving net-zero for electricity generation by 2050. The recently released North Carolina Clean Energy Plan from the North Carolina Department of Environmental Quality establishes a goal of 70% greenhouse gas emissions ("GHG") reductions by 2030 and carbon neutrality by 2050. Regardless of the precise GHG emissions target, substantial new renewable resources will be needed. For instance, the base case from the 2019 IRP Update – which achieves a 51% CO_2 reduction by

2030 – requires 3,000+ MW of additional solar resources over current amounts. Substantial Network Upgrades will undoubtedly be needed to accommodate the addition of a substantial amount of new grid resources. While the Company's analysis to date has not attempted to identify what specific Network Upgrades will be needed, the Friesian Network Upgrades are representative of the types of Network Upgrades that may be required in the future to achieve CO_2 reduction targets. The additional solar resources accommodated by the Friesian Network Upgrades will move the Duke Utilities close to the various targets.

2. Avoidance of Interconnection Queue Paralysis. If the Friesian CPCN is not granted, the need for the Friesian Network Upgrades will not go away. Under the current serial process, Duke will be required to assign the Friesian Network Upgrades to the next project in the interconnection queue, and it is highly unlikely that any single project will be able to absorb the cost of the Friesian Network Upgrades. Therefore, the most likely outcome would be a cascading series of withdrawals resulting in complete queue paralysis of the interconnection queue in this portion of DEP's service territory.
3. Timing Issues. If the Friesian Network Upgrades are not constructed at this time, there will be further delay in the interconnection of any additional generating facilities (including non-renewable resources) in this area of DEP.
4. Queue Reform Transition. If the Friesian Network Upgrades are not constructed at this time, the transition to a cluster study process will be much more complex and the transition process may be delayed.

Duke's attorney also stated that he believes that the Commission should, in this case and given the unique circumstances, consider the broader benefits associated with the Friesian Network Upgrades.

Friesian witnesses Bednar and Askey testified that the Network Upgrades are required in order for any new generation resources to be constructed in southeastern North Carolina. Friesian Witness Askey stated that Duke Energy's 2018 Integrated Resource Plan (IRP) and 2019 IRP Update indicate that additional generation is required to support load growth and resource portfolio improvements in southeastern North Carolina. DEP's 2019 IRP Update calls for load growth of 0.9% per year overall. Friesian witness Bednar stated that whether that new generation comes from renewable energy or other generation resources in eastern North Carolina, it cannot occur without the Network Upgrades or other major improvements to DEP's transmission system.

DEP has completed an assessment for interconnection requests received through September 30, 2017, and determined that there are 108 interconnection requests totaling 1,561 MW that are interdependent on the Network Upgrades assigned to Friesian. In addition to the projects specifically identified to date by DEP as interdependent on the Friesian upgrades, DEP stated that there are likely many additional later-queued projects that are also technically interdependent on the Friesian Upgrades. Consistent with DEP's analysis, Birdseye witness Bednar stated that Birdseye's analysis of the current DEP queue shows that 3,898 MW of proposed solar resources are in the constrained area, and the Timmons Group's analysis of DEP's

transmission system in southeastern North Carolina finds that the system is currently at full capacity. According to DEP, it is undoubtedly the case that the Network Upgrades will alleviate the interdependency of at least 1,561 MW of additional solar resources and provide a path forward for such projects to interconnect in a safe and reliable manner. Therefore, Duke has confirmed that the Network Upgrades will at least partially facilitate the interconnection of about 1,561 MW of additional solar generation and other generation resources.

Friesian Witnesses Bednar and Askey state that in addition to the 1,561 MW of renewable resources that are interdependent upon the Friesian Network Upgrades, DEP has two planned 1235-MW natural gas projects (Q398 and Q399) which will add significantly to most, if not all, of the line loadings absent any other upgrades. While DEP has determined that its first Combined Cycle Plant (Q398) is not dependent upon the Friesian Network Upgrades, Q398 would require substantial Network Upgrades of its own. However, DEP's second Combined Cycle Plant (Q399) is interdependent upon Friesian's Upgrades. Although the Commission makes no finding and expresses no opinion as to whether Duke Energy's Q399 natural gas project will qualify for a CPCN, it notes that (i) if the Facility and the Network Upgrades are not constructed now, Q399 cannot be added to the system without the construction of virtually identical Network Upgrades to the Friesian Upgrades, and (ii) the Upgrades for Q399 will be paid for entirely by the DEP ratepayers.

Friesian witnesses Bednar and Askey testified that even if Friesian had not submitted its CPCN Application, the Network Upgrades are required for DEP's transmission system. The Duke Attorney Letter explains that the "addition of transmission capacity is 'lumpy,' meaning that the next increment of transmission capacity added typically exceeds the amount needed to accommodate the particular generating facility." Here, the transmission improvements needed for the Facility are "lumpy" and will benefit DEP's transmission system over a large geographic area of the state, and the need to improve DEP's transmission system will not go away if the Facility is not constructed.

There is no dispute from any of the witnesses that any new generation (additional renewable generation, Duke's Q398 and Q399 natural gas plants, and other generation resources) will not be able to be connected to DEP's transmission system in southeastern North Carolina without triggering substantial and costly Network Upgrades. There is also no dispute that it is not possible to add any additional generation in southeastern North Carolina without construction of substantial Network Upgrades to DEP's transmission system. Friesian witnesses Bednar and Askey testified that the Network Upgrades are needed to address substantial congestion in DEP's transmission system in the southeastern portion of the state. The congestion in DEP's transmission system in the southeastern portion of the State prevents any new generation resources – both renewable resources and non-renewable resources -- from being added to the system without triggering substantial Network Upgrades (in excess of $200 million). The Public Staff acknowledges that there are 108 projects behind Friesian in the interconnection queue that have been identified by DEP as directly interdependent on the Friesian Network Upgrades to interconnect.

Public Staff witnesses Lawrence and Metz presented information that as early as 2018, DEP had advised the Commission that substantial Network Upgrades are necessary in order to interconnect any new generation to DEP's electric grid in the general area where Friesian is proposed to be constructed. DEP Witness Gary Freeman testified on November 18, 2018 in Docket No. E-100, Sub 101:

> DEP has determined that significant transmission network upgrades will be need to interconnect additional generation in the southeastern North Carolina area of DEP East. These upgrades have been triggered by the cumulative amount of generation located in southeastern North Carolina, where the need for the increased generation to flow northwest toward the large load centers, such as Wake County, has caused several transmission line segments to now reach their power flow limits. This congested area in DEP East has over 100 in-service or under construction solar generating facilities totaling 1,347 MW. This includes 16 transmission-connected projects totaling 898 MW and 99 distribution-connected solar projects totaling 449 MW. Notably, there are over 3,500 MW of additional generating facilities in the queue that are seeking to interconnect in this congested area.

Mr. Freeman identified transmission upgrades on five specific transmission lines that are needed to support the interconnection of additional generating resources, including the re-conductoring of over 63 miles of transmission lines to increase capacity. Mr. Freeman indicated in 2018 that these upgrades would cost in excess of $200 million.

Even if the Friesian Facility is not constructed, Duke has stated that the need for Upgrades to DEP's transmission "will not go away." Duke has verified that substantial Network Upgrades are required in the southeastern portion of the state and that "the Friesian Network Upgrades are representative of the types of Network Upgrades that may be required." The Public Staff agrees that "without the Friesian upgrades, future generation resources seeking to interconnect in this part of the DEP system will be assigned substantial upgrade costs." In fact, as noted by Duke, if Friesian's CPCN Application is denied and the Network Upgrades are not constructed, the most likely outcome will be a "cascading series of withdrawals resulting in complete paralysis of the interconnection queue in the [southeastern] portion of DEP's service territory."

Friesian Witness Bednar testified why the southeastern part of the state is essential to the state's energy future. The region has the state's best insolation rates and ample low-cost, flat land in large tracts that is currently used for farming and that can easily be converted into efficient solar farms. These factors combine to make solar in the southeastern part of North Carolina far more cost-competitive than in any other part of the state. The Public Staff's claim that the benefits of the Network Upgrades are speculative ignores the high likelihood that significant new solar capacity will be built in southeastern North Carolina if the current congestion is eliminated. This is precisely where cost-competitive solar energy projects have been built and will continue to be built if enabled by the Network Upgrades.

The Commission finds persuasive Friesian witness Bednar's testimony that construction of the Network Upgrades will enable necessary improvements to DEP's transmission system in a timely and cost-effective manner. The Friesian project is the most efficient way for upgrades to DEP's transmission system to be accomplished, as the Network Upgrades will be completed by the end of 2023. Without the Friesian project, it is unlikely that the improvements to DEP's transmission system could be completed before 2027, at the earliest.

Additionally, the Commission notes testimony from Friesian witness Bednar and testimony from the Public Staff witnesses on cross-examination that smaller utilities that receive transmission service from Duke, like municipal and cooperative entities, that are located in the constrained area are unable to connect any solar generators without construction of the Friesian Network Upgrades.

Friesian witnesses Bednar and Wilson testified that the Friesian Upgrades are necessary to achieve Duke Energy's and the Governor's targets for carbon reduction. Governor Cooper signed Executive Order 80 on October 29, 2019 that states that North Carolina will strive to reduce state-wide greenhouse gas emissions to 40% below 2005 levels by 2025. Executive Order 80 further requires NCDEQ to develop a North Carolina Clean Energy Plan (Clean Energy Plan) that "fosters and encourages the utilization of clean energy resources." The Governor's Clean Energy Plan establishes a goal of 70% greenhouse gas emissions reductions by 2030 and carbon neutrality by 2050. Also, in mid-September 2019, Duke Energy Corporation announced its new, enterprise-wide climate strategy, including updating its CO_2 reduction goals to at least 50% by 2013 (from 2005 levels) and achieving net-zero for electricity generation by 2050. Achieving the Governor's and Duke's carbon reductions goals will also further the state's policies of promoting harmony between Duke and the environment and promoting the public health and safety.

The Governor's 70% and Duke Energy's 50% targets for carbon reduction will require significant acceleration of solar integration. Both the Governor and Duke consider lower carbon generation to be important and beneficial for the citizens of North Carolina, shareholders of Duke Energy, and the future of the state. The Network Upgrades will provide Duke with access to the optimal region for solar in North Carolina starting in 2024. Without the Network Upgrades, solar investment is not likely to occur in the region before 2027, at the earliest, given the lead time required to study, plan, fund, and construct the Network Upgrades needed to connect any new generation.

According to information provided by Duke, a 51% CO_2 reduction by 2030 will require 3,000+ MW of new solar resources over current amounts. Duke states that an additional 13% of CO_2 reduction to 64% by 2030 will require an additional 2,769 MW of solar for a total incremental increase of 5,769 MW by 2030. Synapse's study calls for an even greater amount -- 10,300 MW -- by 2030.

Friesian witnesses Bednar and Askey stated that the Network Upgrades required for the Friesian project are needed now; but if Friesian is not constructed, they will continue to be triggered over and over by all generation resources in the region (according to DEP, resulting in a "cascading series of withdrawals"). Without Friesian, there will be no progress to prepare the transmission system for the upcoming transition to meet Duke Energy's and the Governor's clean emission reduction goal.

Friesian witness Wilson provided uncontroverted testimony that the least expensive long-term resource plan for North Carolina ratepayers is one that adds increasing amounts of solar and storage resources over the next 15 years. According to Ms. Wilson, ratepayers will realize billions of dollars in savings under this resource portfolio relative to Duke Energy's proposed natural gas-dominated Integrated Resource Plans, even when the likely long-term transmission investment costs necessary to incorporate increased penetrations of solar are included. Thus, to the extent that the Network Upgrades facilitate the addition of new solar and storage resources, they will result in significant net cost savings to ratepayers.

Friesian witness Wilson testified about her study entitled *North Carolina's Clean Energy Future: An Alternative to Duke's Integrated Resource Plan,* which is scenario-based analysis of an alternative clean energy future compared to the more traditional fossil-fueled resource portfolio contained in the Duke Energy 2018 IRPs. Friesian witness Wilson considered the Clean Energy scenario in which renewable resources were offered to an optimized electric sector model for selection of the most cost-effective future resource build to meet capacity and energy need, the results of which show that renewable energy additions, in lieu of gas capacity, is the more economic choice for ratepayers. The Clean Energy scenario adds substantial amounts of solar and battery storage resources, both standalone and paired solar-plus-storage, through the duration of the study period for the combined Duke Energy service territory in North and South Carolina. By 2033, there are 14 gigawatts of solar capacity and almost 6 GW of battery capacity in the Duke Energy service territory.

Friesian witness Wilson states that the Clean Energy scenario provides many benefits to North Carolina. Ratepayers save an average of $584 million each year. This represents a savings of almost $8 billion in terms of the net present value of revenue requirements over the duration of the 15-year analysis period. Carbon dioxide emissions are 59 percent less in 2030 under the Clean Energy scenario than in the Duke IRP scenario. Health benefits range from $195 to $440 million in 2025 due to avoided emissions of sulfur dioxide, oxides of nitrogen, and particulate matter. The Network Upgrades would support the addition of other solar projects that are behind Friesian in the interconnection queue, as well as other solar and solar + storage facilities that may be developed in southeastern North Carolina. Without the Network Upgrades, Duke's ability to add new solar resources will be limited which will deprive ratepayers of cost savings, lower CO2 emissions, and human health benefits demonstrated in the Clean Energy scenario.

Friesian witness Wilson concludes that a clean energy future that relies on a substantial buildout of renewable solar and battery storage resources is in the public interest for North Carolina ratepayers. This type of generating resource portfolio is not only least-cost, saving ratepayer money, but also has benefits in the form of reduced air emissions and improved public health. The public benefits of constructing the Friesian Upgrades and thereby allowing the Friesian project and other solar project development in southeastern North Carolina to move forward exceed the $223 million cost of the Upgrades by a wide margin.

Finally, the Commission considers the Public Staff recommendation that construction of the Network Upgrades be deferred until comprehensive system planning has been conducted. The Commission agrees with Friesian witness Bednar that the Public Staff's recommendation is ill-advised for several reasons. First, given the certainty that significant amounts of new generation will be needed in eastern North Carolina in the coming decade and the importance of the Network Upgrades to the development of such additional generation (as discussed in the Duke President Letter and the Duke Attorney Letter), it is inevitable that the Network Upgrades will be required, and very likely that they will be paid for by ratepayers. Delaying the inevitable improvement to DEP's transmission system will accomplish nothing except to delay DEP's ability to add new generation and to increase the cost of Network Upgrades to ratepayers. In particular, the timing of the IRP and the Integrated Systems Operations Planning (ISOP) create risk of delays in bringing new generation online, will result in additional costs for restudy, and will increase the costs for the Network Upgrades if they constructed at a later date. The transmission system planning to support Governor Cooper's Clean Energy Plan may not begin until 2021. Similarly, the ISOP will not be approved until the 2021 IRP process and will not go into effect until the start of 2022. As Duke describes in the Duke Attorney Letter, it is evident to Duke and Friesian that the "need for the Friesian Network Upgrades will not go away" and "if the Friesian Network Upgrades are not constructed at this time, there will be a further substantial delay in the interconnection of any additional generating facilities in this area of DEP".

Based on the evidence, while the Commission recognizes the substantial cost of the Friesian Network Upgrades, the Commission concludes that Friesian has made a sufficient showing that the Friesian Facility, along with the associated Network Upgrades, are in the public convenience. Specifically, the Commission is of the opinion that the substantial public benefits of the Network Upgrades outweigh their cost.

IT IS THEREFORE, ORDERED as follows:

1. That a certificate of public convenience and necessity shall be, and is hereby, issued to Friesian Holdings, LLC, for the construction of a 70-MWAC solar photovoltaic electric generation facility to be located on Leisure Road near Academy Road, Laurinburg, Scotland County, North Carolina.

2. That Appendix A hereto shall constitute the certificate of public convenience and necessity issued for the Facility.

ISSUED BY ORDER OF THE COMMISSION.

This the ___ day of _____, 2020.

NORTH CAROLINA UTILITIES COMMISSION

_____

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. EMP-105, SUB 0

Friesian Holdings, LLC
1125 East Morehead Street, Suite 202
Charlotte, North Carolina 28204

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
PURSUANT TO G.S. 62-110.1

for construction of a 70-MWAC solar photovoltaic electric generation facility located on Leisure Road near Academy Road, Laurinburg, Scotland County, North Carolina

ISSUED BY ORDER OF THE COMMISSION

This the ___ day of _____, 2020.

NORTH CAROLINA UTILITIES COMMISSION

_____