

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. EMP-93, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application of Wilkinson Solar LLC for a)	ORDER ISSUING CERTIFICATE
Certificate of Public Convenience and)	OF PUBLIC CONVENIENCE AND
Necessity to Construct a 74-MW Solar)	NECESSITY
Facility in Beaufort County, North Carolina)	

HEARD ON: Wednesday, May 17, 2017, at 7:00 p.m., at the Beaufort County Courthouse, District Courtroom, 112 W. Second Street, Washington, North Carolina; and

Monday, May 22, 2017, at 2:00 p.m., and Tuesday, May 23, 2017, at 9:30 a.m., in Commission Hearing Room 2115, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina

BEFORE: Commissioner ToNola D. Brown-Bland, Presiding; Commissioners James G. Patterson and Lyons Gray

APPEARANCES:

For Wilkinson Solar, LLC:

Henry C. Campen, Jr., and E. Merrick Parrott, Parker Poe Adams & Bernstein, LLP, 301 Fayetteville Street, Suite 1400, Raleigh, North Carolina 27601

For Mr. David Butcher:

Brady W. Allen, and Dwight Allen, The Allen Law Offices, PLLC, 1514 Glenwood Ave. Suite 200, Raleigh, NC 27608

For the Using and Consuming Public:

Dianna Downey, Staff Attorney, Public Staff – North Carolina Utilities Commission, 4326 Mail Service Center, Raleigh, NC 27699

BY THE COMMISSION: On March 13, 2017, Wilkinson Solar LLC (Applicant or Wilkinson) filed an application pursuant to G.S. 62-110.1 and Commission Rule R8-63 for a certificate of public convenience and necessity (CPCN) to construct a 74-MW_{AC} solar photovoltaic (PV) electric generating facility in Beaufort County, North Carolina, to be

operated as a merchant plant. On the same date, the Applicant pre-filed the direct testimony of April Montgomery and Meghan Schultz in support of the application.

On March 24, 2017, the Public Staff filed a Notice of Completeness, stating that it has reviewed the application as required by Commission Rule R8-63(d) and that it 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 March 27, 2017, the Commission issued an order setting the application for hearing, requiring the Applicant to provide appropriate public notice, establishing deadlines for the filing of petitions to intervene, intervenor testimony, and rebuttal testimony, and requiring the parties to comply with certain discovery deadlines.

Subsequently, on or after April 26, 2017, more than 60 consumer statements of position were filed in this docket.

Also on April 26, 2017, as supplemented on May 4, 2017, Alan Meijer filed a petition to intervene, not for himself but on behalf of the Terra Ceia Christian School Society, and David Butcher filed a petition to intervene, pro se. On May 15, 2017, the Commission issued an Order granting Mr. Butcher's petition. On May 17, 2017, the day of the scheduled public witness hearing, the Commission issued an Order denying Mr. Meijer's petition because, although the Commission's General Counsel had advised Mr. Meijer that only a licensed attorney could represent the Terra Ceia Christian School (the School), neither Mr. Meijer nor the School had caused an attorney authorized to practice law in this State to enter an appearance on behalf of the School, a corporate entity.¹ On May 19, 2017, after the public witness hearing, counsel for Mr. Butcher filed a notice of appearance on his behalf with the Commission.

On May 2, 2017, the State Environmental Review Clearinghouse of the North Carolina Department of Administration filed comments with the Commission concerning the application, stating that, because of the nature of the comments, no further review action is needed by the Commission to determine compliance with the North Carolina Environmental Policy Act.

On May 4, 2017, the Public Staff filed the direct testimony of Evan D. Lawrence, an engineer in the Electric Division of the Public Staff.

On May 5, 2017, the Applicant filed an Affidavit of Publication prepared by an employee of the Washington Daily News, stating that the Applicant had caused publication of public notice as required by the Commission's March 27, 2017 Order.

¹ While withholding its ultimate ruling on Mr. Meijer's petition to intervene, the Commission noted in its May 15, 2017 Order on Motion Regarding Hearing Procedure that Mr. Meijer was not an attorney and would not be allowed to represent the School.

On May 9, 2017, the State Environmental Review Clearinghouse filed additional comments, again stating that, because of the nature of the comments, no further review action is needed by the Commission to determine compliance with the North Carolina Environmental Policy Act.

On May 12, 2017, the Applicant filed the supplemental testimony of April Montgomery and Paul Thienpont.

On May 17, 2017, the Commission conducted a public hearing at the Beaufort County Courthouse in Washington, North Carolina, as provided in the Commission's March 27, 2017 Order, for the purpose of receiving public witness testimony. Sixteen public witnesses testified at the hearing: Stacy Jones, Rita Lee, Alan Meijer, Myra Beasley, Jennifer Skvarla, Josh Allen, Jeanne van Staaldunin, William van Staaldunin, Brian Bowen, Eddie Ewell, Catherine Meijer, Patricia Dorn, Vern Parsons, Macon Respass, Daren Hubers, and Kenneth Leys. The concerns expressed by the public witnesses primarily related to (1) the proximity of the proposed facility to the School and the potential for harm to students and the School's property that might result from the proximity to the facility, and (2) the potential harm to the future existence of the School, including the concerns that the aesthetics of the adjoining solar PV facility, a perceived incompatibility of use of the site for solar PV facility adjacent to the School, and a perceived impact on public health could negatively impact future enrollment at the School.

On May 22, 2017, the Commission resumed the hearing, as scheduled, for the purpose of receiving the expert testimony of the parties. At the hearing, just prior to the receiving of evidence, Mr. Charles Lollar noted his appearance and represented that he was appearing as counsel on behalf of the School. He moved that the Commission reconsider the School's motion to intervene. The Applicant objected to the motion and both the Applicant and Mr. Lollar, on behalf of the School, were heard on the motion. The School's motion for reconsideration was denied, but Mr. Lollar was permitted to remain at counsel table where he could and did consult with intervenor Butcher's counsel; the School's objection to denial of the motion for reconsideration was noted for the record.

On May 26, 2017, and June 20, 2017, the Applicant filed late-filed exhibits, as requested by the Commission, comprised of a revised organizational chart for the Applicant reflecting an updated upstream ownership structure, a site layout annotated to include the names of the record owners of parcels within and adjacent to the proposed facility, and confidential copies of the most recent audited balance sheet and income statement of Invenergy Wind LLC (renamed on May 24, 2017, to Invenergy Renewables LLC).

Proposed orders and briefs were filed by the Applicant and Mr. Butcher on June 22, 2017.

On August 3, 2017, noting the Presiding Commissioner's comments at the close of the hearing encouraging all parties, persons, and entities with an interest in this matter to meet and discuss the possibility of resolving this matter amicably, the Commission issued an Order Requiring Additional Post-Hearing Filings, directing the parties to submit

appropriate additional filings addressing the status of negotiations and providing a forecast of the likelihood of a compromise.

On August 30, 2017, the Applicant, Mr. Butcher, and the School made a Joint Post-Hearing Filing as required by the Commission's Order stating that, after extensive, good faith negotiations, the Applicant, Mr. Butcher, and the School had reached an agreement whereby Mr. Butcher, the School, Harlene Van Staaldin, and Stuart Ricks agreed to withdraw any and all objections and complaints against the facility proposed by the Applicant in this docket. A confidential term sheet summarizing the agreed-upon terms was attached to the joint filing. Also on August 30, 2017, the Applicant filed on behalf of Mr. Butcher, Harlene Van Staaldin, Gertrude Respass, Stuart Ricks, and William Van Staaldin (on behalf of the School as President of its Board of Directors) the referenced notices of withdrawal of all objections or complaints regarding the proposed facility.

On September 11, 2017, the Applicant filed a letter confirming execution of the ancillary agreements necessary to consummate the provisions of the previously filed confidential term sheet regarding the settlement in this proceeding.

On September 22, 2017, Advanced Energy Corporation filed a letter responding to others' comments and opining that the expected capacity factor for the proposed facility is within the range expected of a modern, large-scale system built in North Carolina.

On October 9, 2017, the Applicant filed an amended site layout reflecting that, although not modifying the original project boundary, it is no longer requesting to place solar panels on the property adjoining the School and that it is moving the substation and potential future battery storage facility to the southwestern portion of the project footprint.

Based upon the foregoing, including the testimony presented at the hearing and the entire record in this proceeding, the Commission makes the following:

FINDINGS OF FACT

1. The Applicant is organized under the laws of the State of Delaware with its principal place of business in Chicago, Illinois, and it is authorized to do business in North Carolina. The Applicant is a subsidiary of Invenergy Renewables LLC, which is an affiliate of Invenergy LLC (Invenergy).

2. In compliance with G.S. 62-110.1 and Commission Rule R8-63, the Applicant properly filed with the Commission an application for a CPCN authorizing the construction and operation of a solar photovoltaic (PV) electric generating facility with a generating capacity up to 74-MW_{AC} to be located in Beaufort County, North Carolina.

3. The application states that the proposed facility will be located on approximately 600 acres on the south side of Terra Ceia Road, between Vreugdenhil Road and Christian School Road, and the north side of Terra Ceia Road, east of Christian School Road, in the Terra Ceia community in Beaufort County, North Carolina.

4. The facility will consist of solar PV panels affixed to ground mounted racks supported on driven piles, inverters, and a substation. The facility may also include a battery system, which would be interconnected to the substation. The facility will be interconnected to the electric transmission system owned and operated by Virginia Electric and Power Company d/b/a Dominion Energy.

5. Construction of the facility is anticipated to begin on January 1, 2018, with commercial operation scheduled to begin as early as December 31, 2018. The facility has an expected useful life of at least 25 years.

6. The Applicant is financially fit and operationally able to undertake the construction and operation of the facility as a merchant plant, financed by private companies rather than ratepayers. If assets become stranded, the facility owner will face the financial consequences, not captive North Carolina retail electric customers. Under the proposed ownership structure, the construction costs of the facility will not qualify for inclusion in, and will not be considered in a future determination of the rate base of a public utility pursuant to G.S. 62-133. Thus, construction of the proposed facility creates no financial risk to North Carolina retail electric customers.

7. The granting of the CPCN in this proceeding should be subject to the following conditions:

a. That the Applicant construct and operate the facility in strict accordance with applicable laws and regulations, including any local zoning and environmental permitting requirements;

b. That the Applicant or any successor certificate holder will not assert that issuance of the CPCN in any way constitutes authority to exercise a power of eminent domain, and it will abstain from attempting to exercise such power; and

c. That the CPCN shall be subject to Commission Rule R8-63(e) and all orders, rules and regulations as are now or may hereafter be lawfully made by the Commission.

8. The Applicant demonstrated that the proposed facility, as amended, is consistent with the public convenience based on the public benefits of solar-powered electric generation and the investment in the local economy. Mr. Butcher and the School have withdrawn their objections to the proposed facility, and the required regulatory permits and approvals, and the conditions imposed by the Commission for the construction of the facility, are sufficient to ensure that the remaining concerns expressed by the public witnesses are appropriately addressed. In addition, the Applicant committed to decommission the facility and to construct and operate the facility in compliance with state and federal laws.

9. The Applicant demonstrated the need for the proposed facility based on the public benefits of solar-powered electric generation and state and federal law and

programs promoting the development of renewable energy resources and merchant power plants. In addition, the Applicant demonstrated that Dominion Energy and the PJM Interconnection show a need for the electric output from the facility over the next 15 years, based upon projected load growth and requirements for procurement of renewable energy in Dominion Energy's North Carolina service territory and in the PJM region.

10. The Applicant is in discussions with potential buyers for the electric output of the facility and the renewable energy credits (RECs) earned by the facility. The facility's electric output can be used by Dominion Energy and/or by retail electric providers within the PJM Interconnection to meet growing demand for electricity. The RECs earned by the facility can be used by North Carolina electric power suppliers to meet the requirements of the North Carolina Renewable Energy Portfolio Standard (REPS), or sold to electric providers in the PJM Interconnection region to meet the requirements of other states' renewable energy portfolio standard requirements or goals.

11. It is reasonable, appropriate, and serves the public interest to grant the requested CPCN to the Applicant, as conditioned herein.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 1-5

These findings of fact are essentially informational, procedural, and jurisdictional in nature, and are not in dispute. The evidence supporting these findings is found in the application, as amended, and in the testimony of the Applicant's witnesses Montgomery and Schultz, and the Public Staff's witness Lawrence. A copy of the Certificate of Authority issued by the Secretary of State of North Carolina, establishing the authority of Wilkinson to do business in this State, was filed in this docket on April 7, 2017, as a supplemental exhibit to the application.

According to the application, and as witness Montgomery testified, the facility will be located on approximately 600 acres in Beaufort County, North Carolina, in the Terra Ceia community. The facility will be located on the south side of Terra Ceia Road, between Vreugdenhil Road and Christian School Road, and on the north side of Terra Ceia Road, east of Christian School Road. A map of the proposed Project Area is included as an exhibit with the application, and an annotated map was filed on May 26, 2017, as a late-filed exhibit as requested by the Commission. An amended site map was filed by the Applicant on October 9, 2017, indicating that, without modifying the original project boundary, it no longer intends to place solar panels on the property adjoining the School and that it is moving the substation and potential future battery storage facility to the southwestern portion of the project footprint, on the south side of Terra Ceia Road.

As described in the application, a three-breaker ring bus interconnection substation will be located within the boundaries of the property under the Applicant's control, and a short generator tie line will be used to connect the facility to Dominion Energy's transmission line adjacent to the site. The facility will generate RECs that can be used to meet the requirements of the REPS or renewable energy goals or mandates of other states within the PJM Interconnection. Witness Montgomery's testimony included

reference to a PJM Renewable Integration Study, which she cites to show that as of March 31, 2014, every jurisdiction in the PJM footprint, except Kentucky and Tennessee, has requirements or goals for production of electricity from facilities fueled by renewable or alternative resources.

Witness Montgomery also testified that the facility may incorporate a “large-scale advanced battery system.” She stated that the battery system would complement the electric output of the facility by regulating frequency, balancing variations in solar production, energy shifting, digital peaking, and/or transmission and distribution deferral. According to witness Montgomery, the battery system would consist of lithium-ion battery racks housed in a custom building or prefabricated shipping containers, and would prolong the maximum discharge period of the facility, but not increase its maximum discharge capability. Finally, with regard to the facility components, witness Montgomery testified that the facility will include a substation that will be constructed adjacent to Dominion Energy’s 115-kV transmission line that runs through the site. Witness Montgomery made reference to addendum 6 to the application, stating that the facility will be interconnected to that transmission line between Dominion Energy’s Pantego and Five Points substations.

Witness Montgomery further testified that construction of the facility is expected to occur throughout 2018, with a projected commercial operation date as early as December 31, 2018. The expected service life of the facility is at least 25 years. Witness Montgomery also testified that the nameplate generating capacity of the facility will be up to 74-MW_{AC}, the anticipated annual gross output of the facility is 209,850.997 MWh, and the anticipated net output is 175,376.816 MWh per year.

Witness Lawrence testified as to the Applicant’s description of the facility as contained in the application. Based upon his review, witness Lawrence testified that the Applicant complied with the Commission’s filing requirements. Therefore, he notes, that on March 24, 2017, the Public Staff notified the Commission that the Public Staff considered the application to be complete and requested that the Commission issue a procedural order setting this matter for hearing. Further, witness Lawrence recommended that the application for the CPCN be approved subject to conditions discussed further below.

An examination of the application, as amended, and the testimony and exhibits of the Applicant’s witnesses confirms that the Applicant has complied with the filing requirements associated with applying for a certificate to construct a merchant plant in North Carolina. No party asserted that the application for CPCN failed to include information required by the Commission’s rules, nor that the filing was deficient in any manner. Therefore, the Commission finds that the Applicant has demonstrated that it is properly organized and authorized to do business in this state, and that the application was properly filed as required by G.S. 62-110.1 and the relevant Commission rules.

EVIDENCE AND CONCLUSIONS SUPPORTING FINDING OF FACT NO. 6

The evidence supporting this finding of fact is found in the application, as amended, and in the testimony of the Applicant's witnesses Montgomery and Schultz, and the Public Staff's witness Lawrence.

The Applicant is a subsidiary of Invenergy Renewables LLC, which is an affiliate of Invenergy LLC (Invenergy). The Applicant was organized to facilitate development of the facility. Financial statements of Invenergy Clean Power LLC, the original upstream owner of the Applicant, were provided as exhibits to the application. Witness Schultz testified that, after a corporate reorganization, the Applicant became a second tier subsidiary of Invenergy Renewables LLC, and on May 26, 2017, the Applicant filed an updated organizational chart reflecting the reorganization. The Applicant also filed financial statements for Invenergy Renewables LLC under seal, as a late-filed exhibit on June 20, 2017. Witness Schultz testified in detail as to Invenergy Renewables LLC's capability to arrange adequate assurances, guarantees, financing, and insurance for the Applicant's development, construction, and operation of the facility. As stated in the Application, the Invenergy-affiliated companies develop, own, and operate large-scale wind energy, solar energy, advanced energy storage, and natural gas-fueled electric generation assets in North America, Latin America, Japan, and Europe.

Witnesses Schultz and Montgomery testified to the Applicant's financial and operational ability to construct and operate the proposed facility and to the Applicant's ability to market the electrical output of the facility. Witness Schultz testified that Invenergy Renewables LLC will arrange the financing of the facility, which will include a construction loan plus equity provided by Invenergy. Witness Montgomery further testified to the financial structure of this project, which will involve a combination of third-party debt and equity to finance construction of the facility and the addition of a tax-equity partner once the facility is operational.

Witness Schultz further testified that Invenergy, the parent entity, structures and arranges project financings through a dedicated in-house staff of finance professionals. Witnesses Montgomery and Schultz testified that Invenergy has raised more than \$23 billion of financing since 2001 and has worked with more than 60 financial institutions worldwide. Witness Montgomery also testified to the Invenergy companies' experience in raising financing for energy projects in the U.S. and abroad, stating that Invenergy is an experienced operator of renewable and thermal energy facilities through its wholly owned subsidiary, Invenergy Services. Invenergy Services currently operates more than 6,700 MW of thermal and renewable energy generation projects in North America. Invenergy was recognized in 2011 and 2017 for its strong operations and maintenance capabilities with the American Wind Energy Association award for Operational Excellence. Witness Schultz further testified that Invenergy has been awarded multiple awards related to its financing capabilities, including Power, Finance & Risk magazine's 2012 and 2013 Project Finance Borrower of the Year for the breadth, diversity, and volume of deals brought to market and successfully financed by Invenergy. Finally, the

Commission notes that the Applicant filed in this docket additional supportive and detailed financial information under seal as confidential trade secret information.

No party disputed the Applicant's testimony with regard to its financial fitness and operational ability to undertake construction and operation of the facility as a merchant plant.

Witness Montgomery also testified that a significant benefit of this project is that it will be privately financed and constructed and will not affect ratepayers. Further, she testified that any risk of default is on private financiers and not North Carolina retail electric customers. Public Staff witness Lawrence agreed with the Applicant's witness on these two points.

The absence of an impact on North Carolina ratepayers and the financial and operational abilities of an applicant for CPCN are factors that the Commission has traditionally relied upon in determining whether to issue a CPCN for a merchant power plant. For example, in its Order Granting Certificate with Conditions, issued on January 19, 2017, in Docket No. EMP-92, Sub 0, the Commission relied on similar evidence that there would be "no financial risk to North Carolina retail electric customers" and evidence of the applicant's financial and operational abilities to successfully construct and operate the facility and market the electrical output of the facility to buyers. See Order Granting Certificate with Conditions, Docket No. EMP-92, Sub 0, January 19, 2017, at 17-18.

Based on the foregoing and the entire record herein, the Commission finds that the Applicant and its affiliated corporate entities have significant experience in the financing, construction, and operational control of renewable energy facilities, and that this sufficiently demonstrates that the Applicant is financially fit and operationally able to undertake the construction and operation of the facility as a merchant plant and to market the electrical output to potential buyers. The Commission further finds that as a merchant plant the facility will be financed by private companies rather than ratepayers, and, thus, if assets become stranded, the owner will face the financial consequences, not captive North Carolina retail electric customers. As such, under the proposed ownership structure, the construction costs of the facility will not qualify for inclusion in, and will not be considered in a future determination of, the rate base of a public utility pursuant to G.S. 62-133, and construction of the facility creates no financial risk to North Carolina retail electric customers. The Commission concludes that this evidence supports issuance of the CPCN.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 7 AND 8

The evidence supporting these findings of fact is found in the application, as amended, and the testimony and exhibits of the Applicant's witnesses Montgomery and Thienpont, the Public Staff's witness Lawrence, Mr. Butcher, and the witnesses testifying at the public hearing.

The Applicant's evidence in support of its argument that the construction and operation of the facility is consistent with the public convenience is found in the application, as amended, and the supporting testimony and exhibits of witnesses Montgomery and

Thienpont. In addition to the facility's contribution to meeting energy needs in the state and region and achieving state and federal requirements and goals, as discussed below, witness Montgomery testified that the facility represents an investment of tens of millions of dollars in the Beaufort County community, realizing annual property tax revenue to the County of approximately \$55,000. Applicant Montgomery Hearing Exhibit 1 provides that the "project will supply over 70 [MW] of emissions-free electricity, enough to power over 16,000 homes." In addition, the "project will create over 250 jobs during the construction process, as well as numerous opportunities for local vendors, from restaurants and hotels to contractors and inspectors."

As required by Commission Rule R8-63(b)(2)(v), Exhibit 2 of the application contains a list of all needed federal, state, and local approvals related to the facility and site. Witness Montgomery testified that the facility may need a wetlands permit from the Army Corps of Engineers, although that determination has not yet been made. She further testified that the Applicant provided the results of a Solar Glare Hazard Analysis Tool to the Department of Defense, and on April 20, 2017, the Applicant received a letter from Camp Lejeune that states "no installation member of the North Carolina Commanders Council has raised any concerns over the project as proposed."

With regard to State approvals, witness Montgomery testified that the facility will require a) a stormwater management permit from North Carolina Department of Environmental Quality (NCDEQ); b) an erosion and sedimentation and control plan and stormwater general permit coverage for construction-related activities, which would also be filed with or issued by NCDEQ; and c) driveway permits from North Carolina Department of Transportation. With regard to the local approvals, witness Montgomery testified that the facility has obtained or will be required to obtain the following permits from Beaufort County: a solar development permit, a building permit, and an electrical permit. By its application and the testimony of its witnesses, the Applicant committed to construct and operate the facility in compliance with all applicable permits and regulations.

Mr. Butcher and several of the public witnesses expressed concerns about the proposed facility that relate to the appropriateness of use of the site for a solar PV facility because the surrounding land uses are residential, agricultural, and educational. The public witnesses also expressed concerns about the environmental impacts of the proposed facility, such as water runoff to and flooding of nearby properties and leachate of chemicals from the solar panels to the ground or surface waters. Still other concerns of the public witnesses centered on public health and safety issues; for example, concern that the battery component of the facility might explode or ignite, and concerns and questions about the proximity of the School to an electric generating facility, which, some public witnesses feared could endanger the health of the students and staff of the School.

Public Staff witness Lawrence testified that the public witnesses' concerns related to the siting of the proposed facility and environmental impacts are more appropriately addressed through the local permitting process and the environmental permitting process. Witness Lawrence noted that the Commission discussed local authority over the siting of

facilities in its Order issued on April 24, 2008, in Docket No. SP-231, Sub 0, stating, “such decisions are, in most instances, best to the local community through the exercise of its zoning authority rather than made by the Commission.” Further, witness Lawrence stated that the Public Staff does not have particular expertise in the area of the impacts of electric generation on the environment. Therefore, he testified that those issues should be left to the purview of environmental regulators who have expertise in this area and who are responsible for issuing specific environmental permits for electric generating facilities. Accordingly, witness Lawrence recommended that the Commission require compliance with applicable laws and regulations, including any environmental permitting requirements, as a condition to issuance of the permit. Witness Lawrence also testified that during discovery, the Applicant indicated that it has obtained legal control over all of the Project Area except for one parcel, and, therefore, the Public Staff recommended that the Commission additionally condition the granting of the CPCN in this matter on obtaining all necessary documents representing legal control over all of the Project Area. Finally, the Public Staff recommended that the application be approved subject to two further conditions: 1) that the Applicant will not assert that issuance of the CPCN in any way constitutes authority to exercise a power of eminent domain and that the Applicant will abstain from attempting to exercise such power; and 2) that the CPCN should be subject to Commission Rule R8-63(e) and all orders, rules, and regulations as are now or may hereafter be lawfully made by the Commission.

The post-hearing filings in this proceeding demonstrate that the Applicant, Mr. Butcher and the School came together to discuss and resolve many, if not all, of the concerns about the proposed facility expressed in this proceeding, particularly with regard to the impact on the School and its students and faculty. As a result, Mr. Butcher and the School’s objections have been withdrawn. The amended site map filed by the Applicant on October 9, 2017, indicates that, without modifying the original project boundary, the Applicant no longer intends to place solar panels on the property adjoining the School and that it is moving the substation and potential future battery storage facility to the southwestern portion of the project footprint, on the south side of Terra Ceia Road. The Commission has carefully considered the remaining concerns raised by the public witnesses who appeared at the public hearing and by the consumer statements of position filed in this docket.

With regard to concerns about hazardous substances, witness Thienpont testified that solar panel technologies have been in use for more than 50 years, and that they pose no health or safety risk. Further, he testified that the modern silicon-based panels pass the Environmental Protection Agency’s toxic leaching characteristic procedure test, which classifies the panels as non-hazardous waste and shows that the panels do not pose a threat to health, ground water, or well water. With regard to the potential incorporation of a battery at the facility site, witness Thienpont testified that the battery storage components will be contained within a structure that isolates the batteries from the external environment and will include safety and monitoring equipment.

As to concerns about flooding and electrocution, witness Thienpont testified that the facility would be designed around historic flood levels to ensure protection of any

equipment, and that the facility would be safely designed and properly grounded consistent with the National Electric Safety Code. The Applicant's witnesses further testified that the Applicant would be required to obtain permits that mandate measures to mitigate or eliminate water runoff and soil erosion, and that the facility would be constructed and operated in compliance with these permits and other regulations for protection of the environment.

With regard to concerns about flying debris, witness Thienpont testified that the Applicant will obtain a building permit from Beaufort County and that the permit review process incorporates wind load testing. The county permit review will require that the facility be designed to withstand the wind loads associated with the North Carolina Wind Zone Map, and the engineering of the site will assess the pile sizing, spacing, and embedment depth to ensure that the system can structurally withstand the wind loads associated with the design criteria wind speeds. Thus, in response to specific questions from the Commission at the hearing, witness Thienpont answered that assurances that the facility would be sufficient to withstand wind speeds applicable to the area "would be handled throughout the building permit process."

Finally, witness Thienpont addressed the concerns that glare from the facility would create a hazard. He testified that the Applicant has conducted three glare studies using a tool developed by Sandia National Laboratories that evaluates the potential for glare at various viewpoints, including flight paths, observation points, and surfaces, based upon the project design and equipment used at the actual site through a simulation of every hour of the day for all seasons based on the sun angle in a clear sky. These studies, about which witness Thienpont testified and a summary of results was introduced at the hearing as Applicant Thienpont Hearing Exhibit 1, have yielded no potential for any hazard due to glare for flight paths and observation points from the school, the church, nearby residences, and along the roads bordering the site. Further, he testified that the panels will utilize lightly textured glass with an anti-reflective coating designed to minimize glare and maximize the amount of sunlight incident on the solar cells.

With regard to concerns about the reduction in farmland, witness Montgomery noted that the 600 acres proposed to be used for the Applicant's facility accounts for only about 0.4% of Beaufort County farmland. Further, and in response to concerns regarding the decommissioning of the facility and the long-term effects of the presence of a solar PV facility, she and witness Thienpont testified that at the end of the facility's useful life, the facility will be decommissioned as is required by the Beaufort County ordinance regulating solar PV facilities and the contracts for lease of the facility site, and the land can be returned to agricultural production. In response to other concerns, including aesthetics, witness Montgomery and public witness Jones testified that the Applicant has proposed a larger buffer between the facility and the adjoining residences to mitigate the concern related to negative impact on property values.

The Commission finds that the Applicant has adequately responded to the concerns raised by the public witnesses in this proceeding and further agrees with the Applicant and the Public Staff that these issues are better addressed by agencies with

expertise and regulatory authority in the areas of environmental and natural resource protection, and public health and safety, and through the local zoning process.

The Commission agrees with the Applicant and the Public Staff that it is appropriate to issue the CPCN subject to the Public Staff's recommended conditions, modified as proposed and agreed to by the Applicant. The Commission concludes that these conditions are appropriate as the Applicant's ongoing duty to comply with the conditions related to protection of the environment and public health and safety sufficiently address the concerns expressed by the public witnesses. These conditions ensure that the facility is operated in a manner that protects the environment and natural resources, and mitigates or eliminates potential harm to the public health and safety – at least to the extent that federal, state, and local policymakers have determined is appropriate. Additionally, the imposed agreed-upon conditions are consistent with past considerations and determinations of the Commission when granting applications for CPCNs, particularly in the context of merchant generating plants.

Therefore, based upon the foregoing and the entire record herein, the Commission finds that the granting of the requested CPCN should be subject to the conditions detailed in this order and that these conditions are sufficient to ensure that the environmental and public health and safety concerns expressed by Mr. Butcher and the public witnesses are appropriately addressed.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT NOS. 9 AND 10

The evidence supporting these findings of fact is found in the application, as amended, and the testimony of the Applicant's witness Montgomery and the Public Staff's witness Lawrence. Mr. Butcher, as noted earlier, withdrew any objections previously raised regarding the need for the proposed facility.

The application and witness Montgomery's testimony support the required showing of need for the facility. First, she testified that the facility can provide RECs to North Carolina utilities that can be used to comply with the requirements of the REPS, estimating that the facility is expected to earn approximately 175,377 RECs annually. Second, she testified that the facility will generate RECs that can be used to comply with renewable energy requirements in other states within the PJM, stating that every state in the PJM region, with the exception of Kentucky and Tennessee, have such requirements or goals. Third, she testified that the facility will help meet increases in peak energy requirements forecasted in DNCP's most recent Integrated Resource Plan. Fourth, she testified that the facility will contribute to meeting increases in peak load growth forecasted for PJM.

Public Staff witness Lawrence testified that based upon his review of the application, the Applicant has shown a need for the proposed facility. In addressing the need, witness Lawrence first noted that the Applicant anticipates the facility to earn 175,377 RECs annually, contributing to electric power suppliers' compliance with the REPS. He further notes that the Applicant demonstrated, based on Dominion Energy's

IRP, that Dominion Energy estimates its energy requirements will grow approximately 1.5% annually through the 15-year planning period, and that wholesale and retail energy sales will grow at an annual rate of 0.6% and 1.7%, respectively. Based upon this showing, and his review of the Applicant's other evidence, witness Lawrence recommended that the Commission approve the application.

Based upon the foregoing and the entire record herein, the Commission finds that the Applicant demonstrated the need for the proposed facility sufficient to meet the requirements of G.S. 62-110.1 and Commission Rule R8-63 based on projected load growth and generation asset retirements in North Carolina and in the region, the state and federal policy promoting enhanced competition in the wholesale electric power generation market, and the requirements for procurement of renewable energy in North Carolina and the PJM region. Therefore, the Commission concludes that this evidence supports issuance of the requested CPCN.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT NO. 11

The evidence for this finding is found in the application, as amended, and the testimony of the Applicant's witnesses Schultz, Montgomery, and Thienpont; and the Public Staff's witness Lawrence.

Based upon the foregoing and the entire record in this proceeding, and consistent with the foregoing findings of fact and supporting evidence and conclusions, the Commission finds good cause to grant the requested CPCN, subject to the conditions set forth herein. The amended site map filed by the Applicant on October 9, 2017, indicates that, without modifying the original project boundary, the Applicant no longer intends to place solar panels on the property adjoining the School and that it is moving the substation and potential future battery storage facility to the southwestern portion of the project footprint, on the south side of Terra Ceia Road. The Commission notes that the placement of solar panels or other equipment on property other than that identified in the application, as amended, filed and approved herein will require a further amendment of the CPCN and approval by the Commission.

IT IS, THEREFORE, ORDERED as follows:

1. That a certificate of public convenience and necessity shall be, and is hereby, issued to Wilkinson Solar LLC for the construction of a 74-MW_{AC} solar PV merchant plant electric generating facility, associated equipment, and ancillary transmission facilities;

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

3. That the certificate of public convenience and necessity is conditioned upon the following requirements:

a. That the Applicant construct and operate the facility in strict accordance with applicable laws and regulations, including any local zoning and environmental permitting requirements;

b. That the Applicant or any successor certificate holder will not assert that issuance of the CPCN in any way constitutes authority to exercise a power of eminent domain, and it will abstain from attempting to exercise such power;

c. That the CPCN shall be subject to Commission Rule R8-63(e) and all orders, rules and regulations as are now or may hereafter be lawfully made by the Commission.

ISSUED BY ORDER OF THE COMMISSION.

This the 11th day of October, 2017.

NORTH CAROLINA UTILITIES COMMISSION

A handwritten signature in dark ink, appearing to read "Linnetta Threatt", is written over the printed name.

Linnetta Threatt, Acting Deputy Clerk

**STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH**

DOCKET NO. EMP-93, SUB 0

Wilkinson Solar, LLC
One South Wacker Dr., Suite 1800
Chicago, IL 60606

is hereby issued this

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

for construction of a 74-MW solar photovoltaic
merchant plant electric generating facility
to be commenced within three years of this Certificate

located

in Beaufort County, North Carolina, on the south side of Terra Ceia Road, between
Vreugdenhil Road and Christian School Road, and the north side of Terra Ceia Road,
east of Christian School Road,

subject to the following conditions: (a) until Wilkinson Solar LLC has obtained all
necessary easement(s) to connect the arrays, the CPCN should be effective only with
respect to the portion of the facility proposed to be located north of Terra Ceia Road,
and that Wilkinson Solar LLC shall file a letter with the Commission verifying that legal
control has been obtained before beginning construction on the portion of the proposed
facility south of Terra Ceia Road; (b) Wilkinson Solar LLC will construct and operate the
generating facility in strict accordance with applicable laws and regulations, including any
local zoning and environmental permitting requirements; (c) Wilkinson Solar LLC will not
assert that the issuance of the certificate in any way constitutes authority to exercise any
power of eminent domain, and it will abstain from attempting to exercise such power;
(d) this certificate is subject to Commission Rule R8-63 and all orders, rules, regulations
and conditions as are now or may hereafter be lawfully made by the Commission.

ISSUED BY ORDER OF THE COMMISSION

This the 11th day of October, 2017.

NORTH CAROLINA UTILITIES COMMISSION



Linnetta Threatt, Acting Deputy Clerk