

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2024-203-E - ORDER NO. 2025-124
FEBRUARY 20, 2025

RECEIVED
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SC Court of Appeals

Application of Kingtree East 230 LLC for)	ORDER GRANTING CERTIFICATE
a Certificate of Environmental)	OF ENVIRONMENTAL
Compatibility and Public Convenience and)	COMPATIBILITY AND PUBLIC
Necessity for the Construction and)	CONVENIENCE AND NECESSITY
Operation of a 249 MWac Solar Facility in)	
Williamsburg County, South Carolina)	
Pursuant to S.C. Code Ann. § 58-33-10 et.)	
seq., and Request to Proceed with Initial)	
Construction Work, S.C. Code Ann. § 58-)	
33-110(7))	

This matter comes before the Public Service Commission of South Carolina (Commission) on the Application of Kingtree East 230 LLC (Kingtree East, the Company or Applicant) for a Certificate of Environmental Compatibility and Public Convenience and Necessity (Certificate) for the construction and operation of a 249 megawatt alternating current (MWac) photovoltaic (PV) generating facility (Solar Project) on an undeveloped site in Williamsburg County near the unincorporated area of Nesmith, South Carolina. Kingtree East filed its Application pursuant to the Utility Facility Siting and Environmental Protection Act (Siting Act), as set forth in S.C. Code Ann. sections 58-33-10 through -430 (Supp. 2024), and S.C. Code Ann. Regs. 103-304 (2012).

After careful consideration of the evidence of record, the Commission grants Kingtree East's Application for a Certificate, as set forth below.

I. PROCEDURAL HISTORY

A. Application and Notice

Kingtree East filed its Application on July 5, 2024, with evidence of proof of service of July 1, 2024, pursuant to S.C. Code Ann. section 58-33-120(2) (2015), via U.S. Mail on the South Carolina Office of Regulatory Staff (ORS), and the heads of each state and local governmental agency charged with the duty of protecting the environment or of planning land use in the area of the county in which any part of the facility will be located as shown on the Application. S.C. Code Ann. § 58-33-120(2) (2015). Kingtree East, pursuant to S.C. Code Ann. section 58-33-120(3), filed Affidavits of Publication with the Commission on July 9, 2024, which provided proof that notice of the Application was published in newspapers of general circulation on June 21 and June 26, 2024.

A Notice of Filing and Public Hearing (Notice) and Remaining Prefile Testimony Deadlines regarding the Application was prepared and issued by the Clerk's Office of the Commission (Clerk's Office) on July 10, 2024. The Notice established August 9, 2024, as the date by which interested parties or entities could timely file petitions to intervene or present their views in writing to the Commission and September 12, 2024, as the date of the public hearing.

At the parties' request, the Clerk's Office issued a Revised Notice of Filing (Revised Notice) on July 18, 2024. The Revised Notice established August 9, 2024, as the deadline for interested parties to file a petition to intervene as well as for Kingtree East to prefile any additional direct testimony. Further, the Revised Notice set September 5, 2024, as the deadline for intervenors and other parties of record to file and serve direct testimony. The Applicant published the Revised Notice in newspapers of general circulation in the

affected areas on July 24, 2024, and filed revised Affidavits of Publication on July 29, 2024.

On August 22, 2024, the Commission issued Directive Order No. 2024-598 granting the Applicant's Motion to Amend the Caption of the Application to delete a reference to battery storage.¹

On August 9, 2024, Cheryl O. Lane, Ph.D. (Intervenor Lane or Dr. Lane), filed a timely Petition to Intervene, which was granted on August 22, 2024.² ORS is automatically a party in this docket pursuant to S.C. Code Ann. sections 58-4-10(B) (Supp. 2024) and 58-33-140(1)(b). The South Carolina Department of Environmental Services (DES), South Carolina Department of Natural Resources (DNR), and South Carolina Department of Parks, Recreation and Tourism (PRT) (collectively, Other Parties of Record) are parties to the proceeding by operation of law and were advised of the Application in accordance with S.C. Code Ann. section 58-33-140(1)(b) (2015). None of the statutory parties objected to the Application. On August 13, 2024, Kingstree East filed a letter with the Commission to clarify its request to proceed with site clearing and initial construction work included in the Application. According to the letter, the request was included in the Application to make plain to the public that the Applicant may request to begin site clearing and initial construction work if circumstances deemed it necessary, and to preserve its right to do so. The Applicant explained that a separate motion would be made in the event the need to proceed with site clearing and initial construction arises. Letter Providing Clarification of Request to Proceed with Site Clearing and Initial Construction Work (Aug. 13, 2024).

¹ Kingstree East filed the Motion to Amend on July 30, 2024.

² See Order No. 2024-64-H.

B. Prefiled Testimony

On August 9, 2024, Kingtree East filed the Direct Testimony and Exhibits of Devi Glick, Senior Principal at Synapse Energy Economics, Inc.; Rick Thomas, leader of the Environmental & Energy Group at Timmons Group;³ Carol Tyrer, President of Circa~Cultural Resource Management, LLC (Circa); Matthew Meares, Managing Director of Sunworks NC LLC (Sunworks);⁴ and Kristen Resar, Acquisition Manager at Ingka Investments (Ingka).⁵ On the same date, Kingtree East filed a Motion for Confidential Treatment for certain portions of the prefiled Direct Testimony of Matthew Meares and Kristen Resar.⁶ On September 5, 2024, ORS filed redacted and confidential versions of the Direct Testimony of Brandon S. Bickley, Regulatory Manager in the Energy Operations Division, and Jeffrey A. Gordon, Regulatory Analyst in the Energy Planning and Emerging Technology Division.⁷ The DES filed a letter (DES Letter) with the Commission on October 7, 2024, and requested that it be entered into the record of this matter.⁸ The letter advised that post construction stormwater discharges for projects requiring a Certificate are exempt from the National Pollutant Discharge Elimination System permit requirement. DES Letter p. 1 (Oct. 7, 2024). The DES Letter referenced a letter Kingtree East filed with the Commission on September 5, 2024. In its letter, Kingtree East stated that while solar generation facilities are exempt from the requirement to obtain a permit to control

³ On October 7, 2024, Kingtree East filed an updated Exhibit RT-1, the Permit Matrix, to the prefiled Direct Testimony and Exhibits of Rick Thomas.

⁴ On October 7, 2024, Kingtree East filed an updated page 4 to the Direct Testimony of Matthew Meares.

⁵ On August 12, 2024, Kingtree East filed a letter correcting a small discrepancy between the public and confidential versions of Kristen Resar's prefiled Direct Testimony.

⁶ Kingtree East's request for confidential treatment was granted by the Commission on August 22, 2024, by Directive Order No. 2024-596.

⁷ ORS's request for confidential treatment was granted by the Commission on September 30, 2024, by Directive Order No. 2024-662.

⁸ At the start of the October 8, 2024, hearing, the DES Letter was entered into the record without any objection as Hearing Exhibit No. 1.

stormwater discharges from industrial activities “[Kingstree East] is cognizant of the fact that the impervious surface of its solar panels [would] change the pattern of stormwater discharges,” and would “includ[e] measures to address this issue[.]” Kingstree East Letter p. 1 (Sept. 5, 2024). The DES Letter requested that confirmation of Kingstree East’s assertion be made part of any Order that may be issued granting the Applicant a Certificate in the docket. DES Letter pp. 1-2 (Oct. 7, 2024).

C. Hearing

The Commission timely convened a hearing on this matter on September 12, 2024, pursuant to S.C. Code Ann. section 58-33-130 (2015), with the Honorable Delton W. Powers, Jr., Chairman, presiding. The Commission reconvened the hearing on October 8, 2024, with Chairman Powers presiding.

The Applicant was represented by Charles L.A. Terreni, Esquire, of the Terreni Law Firm, LLC, and Alexander G. Shissias, Esquire, of The Shissias Law Firm, LLC. ORS was represented by Donna L. Rhaney, Esquire, and John C. Torri, Esquire. Dr. Lane appeared *pro se*. Jacquelyn Dickman, Esquire, Deputy General Counsel of DES, appeared on behalf of DES. Kelvin Washington, Williamsburg County Supervisor, appeared on behalf of Williamsburg County. Neither DNR nor PRT appeared at the hearing.

The Commission heard testimony from the witnesses for the Applicant and for ORS. Dr. Lane did not present any witnesses but engaged in cross-examination of the witnesses.

As explained by Applicant Witness Resar, Kingstree East is wholly owned by Ingka. Tr. 23:2:5-6. According to Witness Resar, Ingka invests in renewable energy, forestland, circularity, and other investments to support its core business. Tr. 23:18-21.

In addition to Kingstree East, Ingka has another project in the pre-construction phase in Williamsburg County, known as Kingstree West, and it is using the same development/project team as used for Kingstree East, giving Kingstree West relevant information and experience. Tr. 23.3:1-2; Tr. 23.4:4-9. Kingstree East is a Delaware limited liability company authorized to transact business in South Carolina. Application p. 1, ¶ 1.

II. STATUTORY STANDARDS AND REQUIRED FINDINGS

Pursuant to the Siting Act, "[n]o person shall commence to construct a major utility facility without having first obtained a [C]ertificate issued with respect to such facility by the Commission." S.C. Code Ann. § 58-33-110(1) (2015). A major utility facility is defined to include "electric generating plant and associated facilities designed for, or capable of, operation at a capacity of more than seventy-five megawatts." S.C. Code Ann. § 58-33-20(2)(a) (Supp. 2024).

An application for a Certificate must include:

- (a) A description of the location and of the major utility facility to be built;
- (b) a summary of any studies which have been made by or for applicant of the environmental impact of the facility;
- (c) a statement explaining the need for the facility; and
- (d) any other information as the applicant may consider relevant or as the commission may by regulation or order require. A copy of the study referred to in item (b) shall be filed with the commission, if ordered, and shall be available for public information.

S.C. Code Ann. § 58-33-120(1) (2015).

An application submitted pursuant to the Siting Act must be, as provided below:

accompanied by proof of service of a copy of the application on the Office of Regulatory Staff, the chief executive officer of each municipality, and the head of each state and local government agency, charged with the duty of protecting the environment or of planning land use, in the area in the county in which any portion of the facility is to be located . . . [and] by a notice specifying the date on or about which the application is to be filed.

S.C. Code Ann. § 58-33-120(2) (2015).

In addition to proof of service, the Siting Act requires that an application must be, as set forth below:

accompanied by proof that public notice was given to persons residing in the municipalities entitled to receive notice . . . , by the publication of a summary of the application, and the date on or about which it is to be filed, in newspapers of general circulation as will serve substantially to inform such persons of the application.

S.C. Code Ann. § 58-33-120(3) (2015).

The Siting Act enumerates six mandatory findings the Commission is required to make before issuing a Certificate for the construction and operation of a major utility facility. Specifically, the Commission may not grant a Certificate unless it shall find and determine:

- (a) The basis of need for the facility.
- (b) The nature of the probable environmental impact of the facility.
- (c) That the impact of the facility upon the environment is justified, considering the state of available technology and nature and economics of the various alternatives and other pertinent considerations.
- (d) That the facilities will serve the interests of system economy and reliability.
- (e) That there is reasonable assurance that the proposed facility will conform to applicable state and local laws and regulations issued thereunder, including any

allowable variance provisions therein, except that the Commission may refuse to apply any local law or local regulation if it finds that, as applied to the proposed facility, such law or regulation is unreasonably restrictive in view of the existing technology, or of factors of cost or economics or of the needs of consumers whether located inside or outside of the directly affected government subdivisions.

- (f) That public convenience and necessity require the construction of the facility.

S.C. Code Ann. § 58-33-160(1) (2015).

Act No. 62 of 2019 (the Energy Freedom Act) added section 58-33-110(8)(a) to the South Carolina Code of Laws Annotated, providing, in pertinent part, the following language:

[A] person may not commence construction of a major utility facility for generation in the State of South Carolina without first having made a demonstration that the facility to be built has been compared to other generation options in terms of cost, reliability, and any other regulatory implications deemed legally or reasonably necessary for consideration by the commission.

S.C. Code Ann. § 58-33-110(8)(a) (2015).

III. FINDINGS OF FACT

Based upon the Application, the testimony and exhibits received into evidence at the hearing, and the entire record, the Commission makes the following findings of fact in granting Kingstree East a Certificate for the construction and operation of the Solar Project.

1. Kingstree East, a Delaware limited liability company, is a wholly owned subsidiary of Ingka Investments US Inc., and is authorized to transact business in South Carolina.
2. Kingstree East seeks a Certificate to construct and operate a 249 MWac

solar PV generating facility on an undeveloped site in Williamsburg County, near the unincorporated area of Nesmith, South Carolina. Kingstree East will operate and own the Solar Project as well as its energy.

3. The proposed Solar Project is a major utility facility as defined by S.C. Code Ann. section 58-33-20(2)(a). The Commission is authorized to issue a certificate for the construction of a major utility facility as set forth in S.C. Code Ann. section 58-33-110.

4. The Application, as submitted by Kingstree East, contains the information as set forth in and required by S.C. Code Ann. section 58-33-120(1)(a)-(d).

5. The Application, as submitted by Kingstree East, was properly served upon Andrew Bateman, Acting Executive Director of ORS, as required by S.C. Code Ann. section 58-33-120(2).

6. The Application, as submitted by Kingstree East, was properly served upon Kelvin Washington, Williamsburg County Supervisor, and Roosevelt Anderson, Deputy Code Enforcer and Building Inspector for Williamsburg County, the heads of the local government agency charged with the duty of protecting the environment or of planning land use in the area of the county in which the facility is to be located, as required by S.C. Code Ann. section 58-33-120(2).

7. The Application, as submitted by Kingstree East, was properly served upon Myra Reece, then Interim Director of DES, Marshall Taylor, Jr., General Counsel for DES; Robert Boyles, Director of DNR, Shannon Bobertz, Chief of Staff for DNR, Susan O. Porter, General Counsel, DNR; Adam King, Director, S.C. Institute of Archaeology and Anthropology; Scott Phillips, S.C. State Forester; Mike Ney, Regional Forester (Pee Dee),

S.C. Forestry Commission; and W. Eric Emerson, Ph.D., Director, S.C. Department of Archives & History. The aforementioned individuals are the heads of each state and local government agency charged with the duty of protecting the environment or of planning land use in the area of the county in which the Solar Project is to be located, as required by S.C. Code Ann. section 58-33-120(2).

8. The Applicant properly provided public notice to persons residing in the area of the county in which the Solar Project is to be located via publication in three newspapers of general circulation, as required by S.C. Code Ann. section 58-33-120(3). Updated notices were published on July 24, 2024.

9. The Applicant has demonstrated the need for the construction and operation of the Solar Project to meet the demand for solar energy identified in the Integrated Resource Plan (IRP) developed by the South Carolina Public Service Authority (Santee Cooper) and Central Electric Power Cooperative, Inc. (Central), on an undeveloped site in Williamsburg County near the unincorporated area of Nesmith, South Carolina, as required by S.C. Code Ann. section 58-33-160(1)(a).

10. The Applicant has demonstrated the construction and operation of the Solar Project will serve the interests of system economy and reliability, as required by S.C. Code Ann. section 58-33-160(1)(d).

11. The Applicant has demonstrated that public convenience and necessity require the construction and operation of the Solar Project, as required by S.C. Code Ann. section 58-33-160(1)(f).

12. The Applicant has demonstrated that the environmental impacts of the Solar

Project have been appropriately evaluated, and the Solar Project is not likely to have significant adverse impacts on the environment as required by S.C. Code Ann. section 58-33-160(1)(b).

13. The Applicant has demonstrated that the probable environmental impact from the construction, operation and maintenance of the Solar Project is justified, considering the state of the available technology and the nature and economics of various alternatives as required by S.C. Code Ann. section 58-33-160(1)(c).

14. The Applicant has offered reasonable assurance the Solar Project will conform to applicable state and local laws and regulations as required by S.C. Code Ann. section 58-33-160(1)(e).

15. The Applicant has demonstrated the Solar Project was compared to other generation options in terms of cost, reliability, and any other regulatory implications deemed legally or reasonably necessary for consideration by the commission as required by S.C. Code Ann. section 58-33-110(8)(a).

IV. EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT

A. Evidence and Conclusions for Findings of Fact Nos. 1-4

Summary of Evidence

The evidence supporting these findings of fact is contained in the Application, the testimony and exhibits of the witnesses, and the entire record in this proceeding.

1. Applicant's Position

Kingstree East, a Delaware LLC, as a wholly owned subsidiary of Ingka, is a developer, owner, and operator of utility scale solar projects and is authorized to transact business in South Carolina. Application p. 1, ¶¶ 1-2. Through its Application,

Kingstree East seeks to construct and operate the Solar Project on an undeveloped site in Williamsburg County near the unincorporated area of Nesmith, South Carolina. Application p. 2, ¶ 3; Tr. 59.3:7-8. The Applicant is participating in Santee Cooper’s current solar energy request for proposal (RFP). Tr. 21:22-23; Tr. 110.11:2-3. If selected, it will sell energy to Santee Cooper and, possibly, to Central. Tr. 21:19-22; Tr. 110.11:13-16. The Application describes the location and the major utility facility to be built. Application p. 2, ¶ 5. The Solar Project will likely impact three parcels of land, equaling approximately 4,700 acres, but only about one-third of the total acreage will be needed for its actual footprint. Tr. 20:22-25. The Solar Project will be comprised of a “solar racking system, solar arrays/modules, associated electric infrastructure, including inverters, a project switchyard, a utility substation, and civil infrastructure, including access roads, fencing, and stormwater management facilities.” Application p. 2, ¶ 3; *see also* Tr. 110.7:18-110.8:7. The Application was admitted into the record as Hearing Exhibit No. 2, Part 1 of 2, pp. 1-12.⁹

The Application included a report, entitled “Environmental Review for Kingstree East 230” (Timmons Report), which was prepared under the direction of Rick Thomas, the lead environmental consultant for the Solar Project. Tr. 55:6-14; Hearing Exhibit No. 2, Part 2 of 2, pp. 1-154.¹⁰ The Timmons Report includes a Threatened and Endangered Species Analysis, a Cultural Resource Analysis, and a Wetlands Delineation. Tr. 55:14-17. Hearing Exhibit No. 2, Part 2 of 2, pp. 11-72. The Timmons Report also provided a Permit

⁹ The page numbers referenced for Hearing Exhibit No. 2, Part 1 of 2 throughout this Order reflect the chronological numbering of the pages and may not correspond with the Commission’s watermark when the Application was originally filed in the Docket Management System (DMS) on July 5, 2024.

¹⁰ The page numbers referenced for Hearing Exhibit No. 2, Part 2 of 2 throughout this Order reflect the chronological numbering of the pages and may not correspond with the Commission’s watermark when the Application was originally filed in the Docket Management System (DMS) on July 5, 2024.

Matrix, which summarized the necessary local, state, and federal permits for the Solar Project. Hearing Exhibit No. 2, Part 2 of 2, pp. 7-9.

The Application included a cultural resource analysis report of the Solar Project's site prepared by Circa. Hearing Exhibit No. 2, Part 2 of 2, pp. 74-154; Application p. 3, ¶ 7. The cultural resources survey (Circa Report) was prepared by Carol Tyrer, Circa's President, who also appeared and testified for the Applicant and was qualified as an expert in cultural resource management. Tr. 73:1-75:11; Tr. 75:24-76:2. Her testimony included an explanation of the efforts that Kingstree East undertook to evaluate cultural resources at the proposed Solar Project site. Tr. 77:4-14.

The Application included a statement of need regarding the Solar Project. Kingstree East retained Synapse Energy Economics (Synapse) to assess the need for the Solar Project. Hearing Exhibit No. 2, Part 1 of 2, p. 3, ¶ 8; see also Application, p. 3, ¶ 8. Santee Cooper's 2023 Integrated Resource Plan (Santee Cooper IRP) described the utility's plans to meet the energy needs of its customers and sets out steps to implement its Preferred Resources Plan (the PRP) for meeting energy needs. Application p. 3, ¶ 9. The Santee Cooper IRP added 1,500 megawatts (MW) of solar resource capacity by 2030 and over 3,000 MW by 2040, which is proposed to reduce Santee Cooper's reliance on coal for energy generation. To add solar resources, Santee Cooper received Commission approval of a Competitive Procurement of Renewable Energy program (CPRE)¹¹ pursuant to S.C. Code Ann. section 58-31-227 and issued a Request for Proposal (RFP) on June 10, 2024, with the Applicant participating in the process. Kingstree East Witness Glick testified that Santee Cooper and

¹¹ See Order No. 2024-2, Docket No. 2022-351-E (Jan. 3, 2024).

Central's IRPs found that increasing the amount of solar PV on their systems would yield economic benefits for their customers. Tr. 191:12-17. Santee Cooper and Central both identified solar PV capacity as part of the least cost, reliable electricity system in their IRPs, and Santee Cooper included solar procurement in its short-term action plan. Tr. 194.6:2-7. Santee Cooper recently issued its second RFP for solar PV resources on June 10, 2024, in which Applicant is participating, with submissions due by August 5, 2024. Tr. 194.9:1-6. It intends to use this RFP as a first step in procuring the resources it will need to add 300 MW of solar PV every year from 2026 through 2032. Tr. 194.9:6-8. Central's IRP also moves away from coal and gas-fired resources towards renewables, with an emphasis on solar generation. Tr. 194.7:24-25.

2. ORS Position

ORS presented the testimony of Jeffrey A. Gordon and Brandon S. Bickley. Witness Gordon testified that ORS reviewed the application, the required statutory notifications, the direct testimonies of Applicant's witnesses, and accompanying studies to ensure compliance with the Siting Act. Tr. 211:14-18. Witness Bickley testified that he reviewed the Application and concluded it contained the information required by the Siting Act. Tr. 219.5:9- 219.8:20.

3. Intervenor's Position

Dr. Lane did not question the sufficiency of the Application.

4. Applicable Law

Section 58-33-20(2)(a) of the South Carolina Code of Laws defines "major utility facility" to include "electric generating plant and associated facilities designed for, or capable of, operation at a capacity of more than seventy-five megawatts." S.C.

Code Ann. section 58-33-110(1) provides the Commission with the authority to issue a certificate to construct a major utility facility.

S.C. Code Ann. section 58-33-120 sets forth the requirements necessary for an Applicant to obtain a certificate. The Application must contain:

- (a) A description of the location and of the major utility facility to be built;
- (b) A summary of any studies which have been made by or for applicant of the environmental impact of the facility;
- (c) A statement explaining the need for the facility; and
- (d) Any other information the applicant may consider relevant or as the commission by regulation or order require. A copy of the study referred to in item (b) above shall be filed with the commission, if ordered, and shall be available for public information.

S.C. Code Ann. § 58-33-120(l)(a)-(d) (2015).

5. Discussion and Application of Law to the Facts

By its Application, Kingstree East seeks to construct and operate a "major utility facility," and therefore it is necessary for Kingstree East to obtain a Certificate issued by the Commission as required by S.C. Code Ann. section 58-33-110(1). The Application describes the location of the major facility to be built, which is described as a 249 MWac capacity PV facility to be constructed on three adjacent parcels of undeveloped land in eastern Williamsburg County near the unincorporated area of Nesmith, South Carolina. The Solar Project will encompass 4,700 acres, although the total footprint of the facility will only use about one-third of the acreage. As set forth in the Application, the Solar Project will have ground mounted solar PV systems comprised of solar arrays, inverters, transformers, racking, posts, wiring, security cameras and other

accessories. ORS did not identify any area where the Application did not meet the requirements of Section 58-33-120(1)(a). Therefore, based on the evidence of record, the Application includes the information necessary to satisfy the requirements of Section 58-33-120(1)(a).

The Application included a summary of the studies performed on behalf of the Applicant to assess the Solar Project's environmental impact. As part of its Application, Kingtree East included copies of several reports, including the Timmons Report, analyzing what permits were required, analysis of federally and state protected species as well as a consultation with U.S. Fish and Wildlife Service, and a wetlands delineation. The Applicant also filed copies of a cultural resources survey performed by Circa as part of the Application.

The testimonies of Kingtree East Witnesses Tyrer and Thomas included an explanation of the efforts that Ingka undertook to evaluate the proposed Solar Project site. Both Witnesses Tyrer and Thomas testified that Ingka undertook environmental and cultural resource assessments of the site, including a wetlands survey, determined what permits and approvals would be required, and what was necessary to meet relevant regulatory requirements. According to Applicant Witnesses Resar and Meares, Ingka also considered criteria such as land availability, cultural and land use, electric transmission infrastructure, water permitting, and constructability, which resulted in the determination that the three identified parcels were the best sites for moving forward with the Solar Project.

ORS offered no evidence to contradict that the Application met the requirements of S.C. Code Ann. section 58-33-120(1)(b) and (d). Therefore, based on

the evidence in the record, the Commission finds that the Application included the information necessary to satisfy the requirements of Sections 58-33-120(1)(b) and (d).

The Application included a statement of need for the proposed Solar Project pursuant to S.C. Code Ann. section 58-33-120(1)(c). ORS offered no evidence to contradict that the Application met the requirements of Section 58-33-120(1)(c). Therefore, based on the evidence in the record, the Commission finds that the Application includes the information necessary to satisfy the requirements of Section 58-33-120(1)(c).

B. Evidence and Conclusions for Findings of Fact Nos. 5-8

Summary of Evidence

The evidence supporting these findings of fact is contained in the Application, Certificate of Service accompanying the Application, Affidavits of Publication, testimony of the witnesses, and the entire record in this proceeding.

The Application, including a Certificate of Service, was filed with the Commission on July 5, 2024. According to the Certificate of Service, Kingstree East served the Application by depositing same in the U.S. Mail on July 1, 2024, to the following individuals:

1. Roosevelt Anderson, Williamsburg County Code Enforcement
2. Kelvin Washington, Williamsburg County Supervisor
3. W. Marshall Taylor, Jr., General Counsel, DES
4. Myra Reece, Interim Director, DES
5. Adam King, Director, S.C. Institute of Archaeology and Anthropology
6. Shannon Bobertz, Chief of Staff, DNR
7. W. Eric Emerson, Ph.D., Director, S.C. Department of Archives &

History

8. Robert Boyles, Director, DNR
9. Susan O. Porter, General Counsel, DNR
10. Andrew Bateman, Executive Director, ORS
11. Mike Ney, Regional Forester, S.C. Forestry Commission
12. Scott Phillips S.C. State Forester, S.C. Forestry Commission.

Each of these individuals is either the Chief Executive of each impacted municipality, or the head of a state or local government agency (or counsel for that agency) charged with the duty of protecting the environment or of planning land use in Williamsburg County.¹² Hearing Exhibit No. 2, Part 1 of 2, p. 4, ¶ 12; Certificate of Service, pp. 1-2; *see also* S.C. Code Ann. § 58-33-120(2).

Kingstree East filed Affidavits of Publication (Affidavits) with the Commission on July 9, 2024. As required by S.C. Code Ann. section 58-33-120(3), Kingstree East provided public notice to people living in and around the area of the county where the facility will be located via publication in three newspapers of general circulation. The Public Notice was published in the *Kingstree News* and *The Georgetown Times* on June 26, 2024, and in *The Post and Courier* on June 21, 2024. The public notice stated that Kingstree East would file an Application with the Commission on or about July 1, 2024, for a Certificate for the construction and operation of the Solar Project. Hearing Exhibit No. 2, Part 1 of 2, p. 4-5, ¶ 13. Kingstree East published updated notices in the same three

¹² The Certificate of Service included Harry M. Lightsey, III, Secretary of Commerce, South Carolina Department of Commerce and Karen B. Manning, Esquire, Chief Legal Counsel, South Carolina Department of Commerce. They are not listed here as Applicant was not required by S.C. Code Ann. section 58-33-120(2) to serve the Application on the Department of Commerce. The Department of Commerce was not obligated and did not participate in this Docket following service of the Application.

newspapers on July 24, 2024, for which Revised Affidavits of Publication were filed with the Commission on July 29, 2024.

While Ms. Dickman appeared at the hearing on behalf of DES and Mr. Washington appeared on behalf of Williamsburg County, no testimony was made or offered by any municipality, state or local government agency charged with the duty of protecting the environment or of planning land use in Williamsburg County regarding Kingstree East's Application. Neither DNR nor PRT chose to appear at the October 8, 2024, hearing. ORS took part in, appeared, and offered testimony regarding the Application made by Kingstree East. Dr. Lane conducted cross-examination of all witnesses presented by the Applicant and ORS.

2. Applicant's Position

The Applicant contends all required notices pursuant to S.C. Code Ann. section 58-33-120 (1) – (2) were served on the appropriate parties or published as required.

3. ORS's Position

ORS Witness Gordon testified ORS reviewed the Application, the required statutory notifications, the included studies, the 2023 IRP for Santee Cooper, and additional materials provided in discovery. Tr. 213.3:1-7. ORS Witness Bickley also testified that as part of its review, ORS contacted DES, DNR, and PRT. Tr. 219.7:13-17. DES had no issues or objections to the Solar Project and Kingstree East confirmed in discovery that DES expressed no concerns. Tr. 219.7:17-21. PRT did not respond to ORS's inquiry regarding participation in this Docket and Kingstree East confirmed in discovery that PRT had not responded. Tr. 219.7:21-219.8:3. Kingstree East provided ORS with a copy of a letter from DNR in the discovery process, which set forth DNR's comments and recommendations.

Tr. 219.7:4-5. Subsequently, Kingstree East provided ORS with additional follow up communications between the Company and DNR regarding efforts to address DNR's concerns. Tr. 219.7:5-7. At the time of the filing of his Direct Testimony, Witness Bickley expressed that the Applicant and DNR were still engaged in resolving DNR's comments and recommendations. Tr. 219.7:7-9.

4. Intervenor's Position

Dr. Lane did not challenge the sufficiency of service or notice, nor did she elicit any testimony to that effect.

5. Applicable Law

S.C. Code Ann. section 58-33-120(2) provides, in pertinent part, that:

[e]ach application shall be accompanied by proof of service of a copy of the application on the Office of Regulatory Staff, the chief executive officer of each municipality, and head of each state and local government agency, charged with the duty of protecting the environment or of planning land use, in the area in the county in which any portion of the facility is to be located.

S.C. Code Ann. § 58-33-120(2).

Section 58-33-120(3) provides that:

[e]ach application also must be accompanied by proof that public notice under subsection (2) of this section, by the publication of a summary of the application, and the date on or about which it is to be filed, in newspaper of general circulation as well serve substantially to inform such persons of the application.

S.C. Code Ann. § 58-33-120(3).

6. Discussion and Application of Law to the Facts

Kingstree East filed proof of service at the time of the filing of the Application on July 5, 2024, and filed proof of publication on July 9, 2024, and July 29, 2024. The

Certificate of Service supports that the requisite individuals identified in the Siting Act were provided copies of the Application. The Affidavits supported that public notice had been provided to people living in and around the area of the county where the Solar Project will be located, which substantially informed those individuals of the Application. Therefore, the Commission finds that Kingstree East has met the requirements of S.C. Code Ann. section 58-33-120 (2)-(3).

C. Evidence and Conclusions for Findings of Fact Nos. 9-11

Summary of Evidence

The evidence supporting these findings of fact is contained in the Application, the testimony and exhibits of the witnesses, and the entire record in this proceeding.

Kingstree East presented testimony of Witnesses Resar, Meares, and Glick to establish the need for the construction and operation of the Solar Project, that the Solar Project will serve the interests of system economy and reliability, and that public convenience and necessity require the construction of the Solar Project as proposed by the Applicant. ORS Witnesses Bickley and Gordon testified to each topic. Intervenor Lane offered no testimony but cross-examined the other parties' witnesses.

1. Applicant's Position.

a. Kristen Resar

The Applicant presented Witness Resar to offer testimony on the need for the Solar Project. She explained that Kingstree East is taking part in Santee Cooper's solar energy RFP. Tr. 21:22-23. According to Witness Resar, based on the Santee Cooper and Central IRPs, as well as the demand for solar power, there is a strong market for the Solar Project. Tr. 23.7:1-3. She explained that due to the Solar Project's size, Kingstree East is not a

“[qualifying] facility” under the Public Utility Regulatory Policies Act of 1978 (PURPA), therefore utilities are not obligated to purchase the power which is produced. Kingtree East, and not ratepayers, will be responsible for all construction costs associated with the Solar Project. Tr. 21:23-22:3. According to Witness Resar, “Kingtree East would sell its output by being selected in an RFP or negotiating a [power purchase agreement] PPA.” Tr. 21:19-21.

b. Devi Glick

Based on her education and experience, Applicant Witness Glick was recognized as an expert in power plant economics and resource planning. Tr.189:12-18. Witness Glick testified that the Solar Project “meets a demonstrated need based on the long-term resource plans developed by both Santee Cooper and Central Electric Power Cooperative.” Tr. 190:3-6. She testified that Santee Cooper and Central “have identified incremental solar PV as part of a least-cost electricity system,” and as such, South Carolina needs solar developers like Kingtree East to put forth solar projects that can participate in utility RFPs, which will assist in meeting the utilities’ solar needs. Tr. 190:6-13.

Witness Glick explained that in its 2023 IRP, Santee Cooper outlined a plan to retire the 1,150 MW coal-fired Winyah Generating Station (Winyah) by 2030. Tr. 194.6:22-194.7:1. According to her testimony, Santee Cooper found it would be economical to add “substantial solar capacity in the near term” to provide low-cost energy as it retires fossil fuel resources such as Winyah. Tr. 194.7:13-16. Santee Cooper’s IRP settled on a resource portfolio that includes 300MW per year of solar capacity from 2026 through 2030, and an additional 1,550 MW in the 2030s. Tr. 194.7:20-23. Witness Glick testified that Central’s resource planning moves away from fossil fuels towards renewable energy, specifically

solar energy. Tr. 194.7:24-25. She added that there is also increasing demand for solar generation from sources other than Santee Cooper and Central. Tr. 194.11:13-15. According to Witness Glick's testimony, other utilities, such as Dominion Energy South Carolina, Inc. (DESC) and Duke Energy plan to procure additional solar energy as reflected in their most recent IRPs. Tr. 194.12:4-12. She outlined that various businesses and municipalities have adopted clean energy goals, and at least ten major employers, including Walmart, Amazon, and Starbucks, have committed to procuring 100 percent renewable energy. Tr. 194.11:15-22. Witness Glick concluded, "[t]here is compelling evidence of demand for projects such as Kingstree East from utilities as well as corporate and municipal customers in the state." Tr. 194.12:14-15.

Witness Glick also provided testimony that the Solar Project will serve the interests of system economy. According to her, Santee Cooper and Central found that increasing solar PV capacity on their systems would result in economic benefits for their respective customers. Tr. 194.12:22-25. Witness Glick testified that in both the respective IRPs filed by Santee Cooper and Central the scenarios with the lowest revenue requirements incorporated considerable solar buildout. Tr. 194.14:6-7. Further, she stated that Santee Cooper's solar RFP process will ensure that the utility's customers benefit from cost-effective solar generation as only bids that are economically beneficial to ratepayers will be selected. Tr. 194.14:15-23.

Witness Glick testified that the "modeling analyses that Santee Cooper and Central completed for their IRPs show that solar capacity is advantageous from a cost and reliability perspective." Tr. 194.22:14-16. Witness Glick concluded, based on her findings, that the public convenience and necessity required the facility's construction and recommended that the

Commission grant the Certificate. Tr. 194.22:4-6.

c. Matthew Meares

Based on his education and experience, Witness Meares was qualified as an expert in solar project development. Tr. 94:16-21. He testified that the Solar Project bid into the Santee Cooper RFP, which had a deadline for bids being due on August 5, 2024. Tr. 98:18-23. He confirmed that the Solar Project has an interconnection agreement with Santee Cooper for “energy resource interconnection service” and submitted a request to change its designation to “network interconnection service” which is required by the RFP. Tr. 102:3-103:2. According to Witness Meares, while the Solar Project submitted a bid in response to Santee Cooper’s RFP, Kingtree East is also exploring other options to sell its solar energy output. Tr. 110.6:18-19. In response to cross-examination by Dr. Lane, Witness Meares testified that Kingtree East is not building any new transmission lines and that the Solar Project will connect to an existing transmission line. Tr. 149:3-18.

2. ORS Position

ORS Witness Gordon testified that Kingtree East entered into a Large Generator Interconnection Agreement (LGIA) with Santee Cooper on April 15, 2024, for Energy Resource Interconnection Service (ERIS), and filed a Network Resource Interconnection Service (NRIS) interconnection request with Santee Cooper in the 2024 Cluster Study Process. Tr. 213.5:8-12. He testified the Solar Project anticipates receipt of a Phase I NRIS cluster study in January 2025. Tr. 213.5:12-13. Witness Gordon concluded that ORS does not object to the Project, and “[b]ased on the information provided by the Company, the [Solar] Project will serve the interests of system economy and reliability[.]” Tr. 213.6:9-11.

3. Intervenor's Position

Dr. Lane offered no evidence regarding these findings of fact.

4. Applicable Law

Prior to granting a Certificate for the construction, operation, and maintenance of a major utility facility, the Siting Act requires that the Commission make statutorily mandated findings. Those findings are as follows:

- (a) The basis of the need for the facility[;]
- ...
- (d) That the facilities will serve the interests of system economy and reliability[; and]
- ...
- (f) That public convenience and necessity require the construction of the facility.

S.C. Code Ann. § 58-33-160(1)(a), (d) and (f).

5. Discussion and Application of Law to Facts

The testimony of Applicant Witnesses Resar, Glick, and Meares supports the Applicant's position that there is a need for the Solar Project, that the Solar Project will serve the interests of system economy and reliability, and that public convenience and necessity require construction of the Solar Project. ORS Witness Gordon testified to the need for the Solar Project, that the facility will serve the interests of system economy and reliability, and that public convenience and necessity require the construction of the Solar Project as proposed by the Applicant.

According to the evidence presented, Kingstree East developed the Solar Project to construct and operate the Solar Project in direct response to the stated goals of Santee Cooper and Central to provide more clean, reliable, and cost-effective energy resources. Specifically, Santee Cooper's preferred portfolio in its 2023 IRP added 1,500 MW of new

solar resources by 2030. Tr. 194.7:20-23. Based on this plan, an RFP for solar energy was issued in 2024 by Santee Cooper with Central's participation, and the Project was proposed in response to the RFP process. Santee Cooper and Central both identified new solar generation as part of their respective long-term resource plans to meet their stated goals as electric providers. The need for the facility is supported by the IRPs of both Santee Cooper and Central. The Commission agrees there is a basis for the need for the Solar Project.

As for system economy, evidence supports that the Solar Project, as set forth in Witness Glick's analysis, would economically improve the overall performance of Santee Cooper's system. As demonstrated by the evidence presented in this docket, the economic analyses concluded that adding solar PV is part of a cost-effective mix of resources for meeting customer demand. Adding solar PV enhances supply diversity, providing economic benefits to customers. We agree that the Project serves the interest of system economy.

One of the Applicant's experts, Witness Glick, concluded that the Solar Project would also serve the interests of system reliability. Santee Cooper demonstrated that it could provide reliable service through the retirement of coal plants and the procurement of solar energy. We agree that the Solar Project serves the interest of system reliability.

The Applicant has made it evident that there is a need for the Solar Project to meet the demand for solar energy identified by Santee Cooper and Central. In addition, construction of the Solar Project will be financed by the Applicant and not paid for by utility customers. The evidence presented confirms that public convenience and necessity support the construction of the Solar Project.

In considering need, system economy, reliability, as well as public convenience and necessity, the Commission finds and concludes that the Application meets the statutory requirements set forth in S.C. Code Ann. sections 58-33-160(1)(a), (d), and (f).

D. Evidence and Conclusions for Findings of Fact Nos. 12-15

Summary of Evidence

The evidence supporting these findings of fact is contained in the Application, the testimony of the witnesses, and the entire record in this proceeding.

The Commission heard from Applicant Witnesses Resar, Glick, Thomas, Tyrer, and Meares regarding the impact of the facility on the environment, compliance with state and local regulations, and that the Solar Project was compared to other generation options in terms of cost and reliability. No testimony was offered by any local or state government agency charged with the duty of protecting the environment or of planning land use in Williamsburg County regarding the Application filed by Kingtree East. While DNR was represented by Shannon Bobertz, Esquire, she did not appear at the October 8, 2024, hearing. The DES filed a letter in the docket on October 7, 2024, informing the Commission that Kingtree East had agreed to take measures to address post-construction stormwater discharges, and DES' letter was accepted into the record at the hearing. Tr. 16:5-9; Hearing Exhibit No. 1. Counsel for Kingtree East confirmed this agreement at the hearing. Tr. 13:5-19. Counsel for DES appeared at the hearing on October 8, 2024, but did not present a witness or cross-examine witnesses. ORS Witness Bickley testified regarding the Solar Project's impact on the environment, the impact of the facility, and its conformity to local laws and regulations. Tr. 219.1-219.19.

1. Applicant's Position

a. Kristen Resar

Witness Resar testified that the Solar Project is part of Ingka's commitment to producing 15 terawatt-hours per year of renewable energy by 2030. Tr. 23.3:3-9. She stated that the Solar Project has the support of Williamsburg County, as evidenced by the Special Source Revenue Credit extended to the Solar Project by the County Council. Tr. 23.8:6-11. She further testified that the Solar Project would comply with Williamsburg County's recently enacted solar ordinance, which requires solar facilities to implement various measures such as setbacks, buffering and screening of the facility from public roads, rights-of-way, residences, and churches using fences, walls, and vegetative buffers under certain circumstances. Tr. 23.8:16-19. The Solar Project will also provide guarantees and a decommissioning plan for its end of service and follow DES's decommissioning regulations. Tr. 23.8:19-23.9:2. Finally, Witness Resar testified the Solar Project intends to adhere to the requirements of the voluntary Solar Habit Certification under S.C. Code Ann. section 50-4-10 (Supp. 2024) and to Best Management Practices for Site Selection, Design, and Construction. Tr. 23.9:11-13.

b. Devi Glick

Applicant Witness Glick provided testimony regarding Santee Cooper's plan to retire Winyah by 2030. Tr. 194.6:22-194.7:1. According to Witness Glick, Santee Cooper determined that it was economical to add substantial solar capacity in order to provide low-cost energy to replace fossil fuel resources. Tr. 194.7:13-16. The resource portfolio set forth in Santee Cooper's IRP includes solar capacity of 300 MW per year from 2026 through 2030, and more than five times that amount of solar capacity into the 2030's. Tr. 194.7:20-23.

Witness Glick also testified that the “modeling analyses that Santee Cooper and Central completed for their IRPs show that solar capacity is advantageous from a cost and reliability perspective.” Tr. 194.22:14-16. According to Witness Glick’s testimony, as the IRP involves extensive, rigorous analysis in the evaluation of generation alternatives, “[t]he IRP, and the subsequent RFP supported by the IRP, should be sufficient to demonstrate the value of the [Solar Project] compared to alternatives.” Tr. 194.15:1-7. She cited Santee Cooper’s IRP, which identified “solar PV [is] the least cost manner of meeting some of [Santee Cooper’s] energy needs.” Tr. 194.16:1-2. Witness Glick concluded, based on her findings, that the public convenience and necessity required the facility's construction and recommended that the Commission grant the Certificate. Tr. 194.22:4-6. On cross-examination, she testified that the lifecycle impact of solar energy compares favorably to other sources of generation, especially coal and natural gas. Tr. 196:4-21.

c. Rick Thomas

The Applicant put forth Witness Thomas to testify regarding environmental impacts of the Solar Project. Witness Thomas was qualified as an expert in natural resource assessment. Tr. 52:11-16. He described the efforts Kingtree East, and the Timmons Group on behalf of the Applicant, undertook to evaluate potential environmental impacts at the proposed site, as well as what permits and approvals would be required. Tr. 59.2:21-59.3:5; Tr. 59.5:5-9.

Witness Thomas testified that Kingtree East does not expect any adverse impact on state or federally listed species. Tr. 55:18-20. According to the Applicant, ongoing consultations are maintained with DNR and the U.S. Fish and Wildlife Service to address protected species, design considerations, and stream crossings. Tr. 56:10-15. As part of his

field wetland delineation, Witness Thomas testified that, as the project progresses, “field-delineated wetlands and streams will be verified by the United States (US) Army Corps of Engineers and some perpendicular crossings may be necessary. If wetland or stream impacts are required, Kingstree East will obtain the appropriate permits for any impacts to jurisdictional wetlands and streams.” Tr. 56:16-21.

Concerning his review of the impact to wetlands, Witness Thomas testified:

Pursuant to Sections 401 and 404 of the Clean Water Act, the project will consult with the US Army Corps of Engineers if impacts to federal jurisdictional wetlands and streams are anticipated. A field wetland delineation was performed to determine the limits of the Waters of the US on-site. The only planned impacts would be a limited number of temporary and permanent stream crossings. For this project, construction can be undertaken under a Nationwide 404 Permit and 401 Water Quality Certification — specifically, Nationwide Permit 57 for Electrical Utility Lines and Telecommunication Activities.

Tr. 55:21-56:6.

Witness Thomas testified that the Solar Project would provide environmental benefits. Tr. 59.6:1-2. Using the United States Environmental Protection Agency’s (EPA) AVOIDED Emissions and geneRATION Tool (AVERT), he determined the renewable energy produced by the Solar Project will result in the avoidance of 290,280 tons of carbon dioxide (CO₂) and 55,620 pounds of particulate matter entering the air when compared to the energy produced by conventional generation units. Tr. 59.6:2-5.

Finally, Witness Thomas testified that the Solar Project identified all required federal and state permits as stated in the permitting matrix, and he expected no problem obtaining the permits. Tr. 59.5:5-9.; Hearing Exhibit No. 2. Part 2 of 2, pp. 6-8.

d. Matthew Meares

As part of the Solar Project, Applicant Witness Meares testified that Kingtree East has requested that the US Army Corps of Engineers issue an official jurisdictional determination of the nature and extent of wetlands and streams. Tr. 110.3:11-22. He also testified that there was no indication of conditions that would adversely affect the Solar Project's ability to obtain all permits or approvals that would be needed. Tr. 110.7:12-14.

Witness Meares affirmed that the Solar Project intends to follow the Williamsburg County ordinance that was enacted in 2024. Tr. 103:6-8. He testified regarding minimizing the potential for visual effects, plantings in a 50-foot-wide buffer between fence and property lines will be used to screen the Solar Project from adjacent houses, with the solar panels needing to be at least 300 feet from a residence. Tr. 103:8-13; Tr. 176:1-9. Witness Meares also addressed Kingtree East's plan to minimize noise due to the requirement that the Solar Project cannot have a noise level exceeding 65 decibels, the equivalent of a car passing at 60 miles per hour, once the facility is operational. Tr. 103:17-21. He explained that inverters, because of their cooling fans, make noise and will be placed in the center of the Solar Project area to minimize the noise. Tr. 103:23-104:2. He acknowledged that while trackers make noise, it is minimal due to moving only about every fifteen minutes. Tr. 104:2-4. The primary noise during construction will be due to piling. Tr. 142:4-7. There will be no significant noise impacts to the surrounding area once the facility is operational, other than sounds from cooling fans in the inverters and motors on the tracking system for the panels. Tr. 103:23-104:6.

Witness Meares testified that there is a "decommissioning performance guarantee

that we have to post upfront, and that goes along with the decommissioning plan that we also have to provide to the County, and the County has to approval all these things.” Tr. 104:7-11. Finally, Witness Meares testified that the Solar Project will pay more than \$800,000 per year in taxes to Williamsburg County. Tr. 105:1-2.

In response to a question posed by Commissioner Belser, Witness Meares confirmed that Solar Project construction would only move forward with the appropriate permit from the US Army Corps of Engineers. Tr. 159:16-17. He responded to Commissioner Caston that he was familiar with the National Electric Reliability Council (NERC) requirements and testified that Kingstree East must follow them. Tr. 165:10-166:3. Witness Meares also discussed the Solar Project’s ability to withstand flooding explaining solar panels would be about four feet off the ground, and the inverters would be mounted on skids typically 18-20 inches high. Tr. 171:2-18. He confirmed to Commissioner Carolee Williams that personnel would be on-site to verify that environmental, health, and safety requirements are met. Tr. 177:19-178:4.

e. Carol Tyrer

Witness Tyrer, Circa’s President, testified on behalf of Kingstree East and was qualified as an expert in cultural resource analysis and archeology. Tr. 74:25-75:10. She testified as to the efforts that Kingstree East undertook to evaluate cultural resources at the proposed Solar Project site. Tr. 77:4-8. According to Witness Tyrer, Kingstree East first surveyed the three parcels with a Section 106 Project Review Form from the S.C. Department of Archives and History State Historic Preservation Office (SHPO). Tr. 80:2:7-9. Witness Tyrer prepared a “Cultural Resource Analysis of High Probability Areas” of the site and then performed extensive onsite investigations,

including visual surveys and shovel testing at 296 locations. Tr. 78:11-17; Tr. 80.2:9-11. She concluded that it would be unlikely that any significant cultural resources would be found on the site. Tr. 77:15-16. The Applicant presented its findings to the SHPO, which agreed with these findings in a letter dated July 10, 2024. Tr. 78:18-23; Hearing Exhibit No. 4, pp. 33-35.

Witness Tyrer testified that the Solar Project site has been in silviculture for nearly 100 years. Tr. 84:19-22. She stated, “[t]he timber planting and harvesting process has greatly impacted most of the land.” Tr. 80.4:2. On cross-examination by Dr. Lane, Witness Tyrer testified that the application filed with SHPO included an emergency discovery plan that goes into place if artifacts are found during construction. Tr. 85:21-86:6.

2. ORS Position

According to ORS Witness Gordon, ORS reviewed the Application, the testimony of the Applicant's witnesses, studies included with the Application, and materials provided in discovery, to ensure compliance with requirements of the Siting Act. Tr. 211:14-18. Further, ORS does not object to the Project. Tr. 213.6:9-10.

ORS Witness Bickley testified that his review of the Solar Project focused on the environmental impact of the Solar Project, whether its impact on the environment is justified, whether there are reasonable assurances that the Solar Project will conform with state and local laws and regulations, and whether the public convenience and necessity requires the construction of the Solar Project. Tr. 217:17-24. According to Witness Bickley, “ORS understands the project may result in minimal impact to the environment and as addressed by ORS Witness Gordon, may serve the interests of system economy and

reliability.” Tr. 217:25-218:3. Commissioner Caston asked Witness Bickley whether “based on [his] review, [could Witness Bickley] clearly state that the impact of the project on the environment is justified?” Tr. 226:22-24. Witness Bickley responded, “[y]es, Commissioner, based on the review of all available factual information during our review, provided by the company in discovery, it is — as I state at the end of my testimony, we believe [the Solar Project] may result in minimal impact.” Tr. 226:25-227:4.

3. Intervenor’s Position.

While Dr. Lane offered no direct testimony related to these findings of fact, she did engage in the cross-examination of Applicant Witness Meares. In response to questioning by Dr. Lane about the age of data used in flood and hydrologic studies, Witness Meares responded that “[t]he data that was used to calculate the 100-year flood only goes – that period ends in the year 2000. And it is a flaw.” Tr. 123:14-21. He also explained that the calculation was required by the applicable regulations. Tr. 123:22-124:2. Dr. Lane asked about residents’ close proximity to the Solar Project, to which Witness Meares responded that it depended on how she defined close but that he knew of four residences within 100 feet of the Solar Project’s boundaries, two at 25 feet and one at 87 feet but could not recall the final property’s distance. Tr. 132:7-12. He went on to testify that according to the county solar ordinance, no panels would be erected within 300 feet of the houses which were within 100 feet of the Solar Project’s boundaries. Tr. 132:16-21. Dr. Lane inquired as to the type of fencing which would be used and if permeable fencing that would allow small animals to move through the Solar Project. Tr. 135:18-19; Tr. 136:8-10. Witness Meares responded that permeable fencing is an option that the Solar Project may use but that no final decisions on the type of fencing had been made. Tr. 136:23-137:2. He was asked if

the public would have any input into the type of fencing used and he responded “[t]he short answer is no...” but that the Applicant was required to submit its plans to Williamsburg County and that the County Board of Supervisors could make a change in the type of fencing required. Tr. 137:3-8.

Dr. Lane asked Witness Meares about noise resulting from the construction and operation of the Solar Project. Tr. 141:24-144:5. He responded that the primary source of construction noise would come from piling for the beams supporting the solar panels, but that the piling would cause less noise than the current silviculture activities on the property. Tr. 142:4-13. In addition, the inverters would be placed in the center of the Solar Project area to minimize noise. Tr. 141:25-142: 3.

Witness Meares was questioned by Dr. Lane about decommissioning and if the performance guarantee involves financial obligations by Kingstree East. Tr. 104:12-13. He testified that Kingstree East must post surety that can be cash, a letter of credit, or a surety bond. Tr. 104:14-18. According to his testimony, it must be updated five years from the date of submission. Tr. 104:19-21.

Dr. Lane questioned whether the solar panels would cause a “heat island effect” and whether this documented phenomenon is possible in a utility-scale solar project. Tr. 145:17-18; Tr. 145:21-22. Witness Meares explained that the heat island effect is found in large, paved areas such as department store parking lots but would not be caused by the Project. Tr. 145:19-20; Tr. 145:23-146:11. He then explained that while the solar panels would be placed on about 1500 acres, they would cover only about a third of that area. Tr. 145:23-146:5. While the panels would heat up, they would not cause heat islanding because so much of the land around them would be covered in grass. Tr. 146:12-19.

In response to questioning by Dr. Lane about the presence of hazardous materials in the Solar Project's panels, Witness Meares responded "I know of no solar panels that have hazardous materials." Tr. 151:16-17. He testified that the solar panels could survive ten perpendicular strikes by one-inch hail, but they would most likely be rotated at a diagonal angle during a hailstorm, enabling them to withstand much more force. Tr. 155:1-10.

4. Applicable Law

The Siting Act requires that the Commission, before granting a Certificate for the construction, operation, and maintenance of a major utility facility, make specific statutorily mandated findings. Pursuant to S.C. Code Ann. section 58-33-160(1)(b), the Commission must find and determine the nature of the probable environmental impact of the facility has been considered and properly evaluated. Pursuant to S.C. Code Ann. section 58-33-160(1)(c), the Commission must also find and determine that the impact of the facility upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. The Applicant must also demonstrate that there is reasonable assurance the proposed facility will conform to applicable state and local laws and regulations as required by S.C. Code Ann. section 58-33-160(1)(e).

Finally, no major utility facility can begin construction without first demonstrating that "the facility to be built has been compared to other generation options in terms of cost, reliability, and any other regulatory implications deemed legally or reasonably necessary for consideration by the commission." S.C. Code Ann. §58-33-110(8)(a).

5. Discussion and Application of Law to Facts

The Siting Act requires that the Commission evaluate the nature of the probable environmental impact of the Solar Project. In the present case, no objections were filed by any state and local government agency charged with the duty of protecting the environment or of planning land use in Williamsburg County regarding the Application made by Kingstree East.

Applicant Witness Thomas testified on behalf of Kingstree East regarding environmental impacts at the site. The Solar Project site has been in silviculture for nearly 100 years, and most of the site remains active in silviculture. A network of ditches is present that have changed hydrology, and soils have been disturbed by the timber farming.

Kingstree East completed a wetlands delineation for the Solar Project area, which was submitted to the US Army Corps of Engineers. The Applicant must obtain verification of that delineation before applying for the 401 water quality certification and the 404 permit. The Solar Project is configured to avoid any impact to wetlands located on the site; only a few temporary and permanent stream crossings are expected. The evidence presented confirms that the Solar Project will have no significant environmental impact and will provide clean, renewable power with minimal environmental effect.

Kingstree East presented evidence to support that through Santee Cooper's IRP and solar energy RFP, the Solar Project meets a demonstrated need by electric utilities for low-cost energy.

ORS's testimony supports that the Solar Project will not significantly impact the environment, and the impact on cultural and land use resources will be reduced by the Solar Project. DES, DNR, and PRT are all statutory parties to this matter and did not object or

put forth contrary evidence.

The evidence presented fully supports that the Solar Project will be constructed and operated in compliance with all federal, state and local laws and regulations. Applicant Witness Thomas' testimony discussed the efforts made by the Applicant to apply for and obtain the necessary permits, consultations and certifications. In addition, Witness Thomas testified and explained that the Applicant will obtain all required permits and approvals prior to beginning construction. Witness Thomas testified that there are likely no conditions to prevent finalizing the remaining government approvals. The testimony and exhibits submitted provide the most up to date status of the permits, consultations, and certifications. The testimony and evidence presented confirms that the Applicant is following the zoning ordinance, consulting with Williamsburg County about local permits, and will obtain site plan approval from the county. No objections were filed by any state and local government agency charged with the duty of protecting the environment or of planning land use in Williamsburg County regarding the Solar Project.

The Siting Act also requires that the Commission find that the impact of the facility upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. Again, there were no objections filed by any state and local government agency charged with the duty of protecting the environment or of planning land use in Williamsburg County regarding the Application filed by Kingstree East.

The evidence presented establishes that the Solar Project area, including its wetlands, has been heavily used for silviculture for nearly 100 years, resulting in significant

alteration of wetland hydrology, soils, and vegetation. The testimony presented by the Applicant demonstrates that the Solar Project is designed to avoid impacts to wetlands.

Williamsburg County's solar ordinance and S.C. Code Ann. Regs 61-107.20 require a bonding mechanism so that when the Solar Project is retired, the site can be returned to silvicultural or agricultural use. Without air or water emissions, environmental contamination, or other impacts, the Solar Project will provide clean, renewable power with minimal environmental effects.

The evidence also supports there is a need for the Solar Project in order to meet the demand for solar energy as set forth by Santee Cooper and Central. Based on the analyses contained in both the Santee Cooper and Central IRPs, adding solar PV to the respective systems is expected to reduce power costs relative to alternate supply options. Witness Glick's testimony further supports that the Solar Project compares favorably to other sources of electric energy generation.

Based on careful consideration of the evidence in the record, the Commission finds that the impact of the solar facility on the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. Further, the environmental impact of the Solar Project has been appropriately evaluated as described in the record. The Commission finds and concludes that Kingstree East has provided reasonable assurance that the Solar Project will conform to applicable State and local laws and regulations. The Commission also finds and concludes that the Solar Project has been compared to other generation options in terms of cost and reliability. The Commission finds and concludes that the Application meets the

statutory requirements set forth in S.C. Code Ann. section 58-33-160(1)(b)-(c) and (e) as well as S.C. Code Ann. section 58-33-110(8)(a) and is supported by the evidence in the record.

V. CONCLUSIONS OF LAW

Based upon the discussion set forth herein and the record of the instant proceeding, the Commission makes the following Conclusions of Law:

1. Kingstree East is required to seek authorization under S.C. Code Ann. section 58-33-110(1) to construct and operate a “major utility facility,” as defined by S.C. Code Ann. section 58-33-20(2)(a).
2. The Commission is authorized to issue a certificate for the construction of a major utility facility as set forth in S.C. Code Ann. section 58-33-110.
3. The Application submitted by Kingstree East 230 contains the information as set forth in and required by S.C. Code Ann. section 58-33-120(1)(a)-(d).
4. The Application was properly served, and notice was provided as required by S.C. Code Ann. section 58-33-120(2)-(3).
5. Kingstree East has demonstrated the need for the construction and operation of a 249 MWac solar PV generating facility to meet the demand for solar energy identified in the long-term resource plans developed by Santee Cooper and Central on an undeveloped site in Williamsburg County near the unincorporated area of Nesmith, South Carolina, as required by S.C. Code Ann. section 58-33-160(1)(a).
6. Kingstree East has demonstrated the construction and operation of a 249 MWac solar PV generating facility on an undeveloped site in Williamsburg County near

the unincorporated area of Nesmith, South Carolina, will serve the interests of system economy and reliability as required by S.C. Code Ann. section 58-33-160(1)(d).

7. Kingstree East has demonstrated public convenience and necessity require the construction and operation of a 249 MWac solar PV generating facility on an undeveloped site in Williamsburg County near the unincorporated area of Nesmith, South Carolina, as required by S.C. Code Ann. section 58-33-160(1)(f).

8. Kingstree East has demonstrated that the environmental impacts of the Solar Project have been appropriately evaluated and the Solar Project is not likely to have significant adverse impacts on the environment as required by S.C. Code Ann. section 58-33-160(1)(b).

9. Kingstree East has demonstrated that the probable environmental impact from the construction, operation and maintenance of the facility is justified, considering the state of the available technology and the nature and economics of various alternatives as required by S.C. Code Ann. section 58-33-160(1)(c).

10. Kingstree East has demonstrated reasonable assurance the Solar Project will conform to applicable state and local laws and regulations as required by S.C. Code Ann. section 58-33-160(1)(e).

11. Kingstree East has demonstrated the Solar Project has been compared to other generation options in terms of cost, reliability, and any other regulatory implications deemed legally or reasonably necessary for consideration by the commission as required by S.C. Code Ann. section 58-33-110(8)(a).

VI. ORDERING PROVISIONS

IT IS THEREFORE ORDERED THAT:

1. Kingtree East is granted a Certificate of Environmental Compatibility and Public Convenience and Necessity for the construction and operation of the Solar Project, subject to the Applicant obtaining all required federal, state and local permits, consultations and certifications.

2. Kingtree East shall file a report updating the Commission when all permits are issued for this solar facility, which identifies all permits and licenses received, including the permit title or name, issuer of the permit, and the date of issuance.

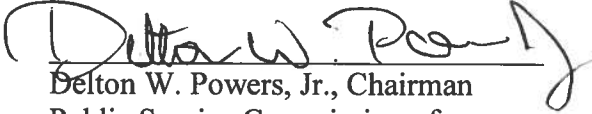
3. Kingtree East shall notify the Commission and ORS of the commercial operation of the facility within ten (10) days of such operation. Kingtree East shall also provide notification to the Commission and ORS regarding any changes or delays to the planned commercial operation date.

4. The Commission requests that Kingtree East file a report identifying Best Management Practices for site selection and operations within wetlands, which may include Best Management Practices associated with or contemplating potential flood or extreme weather events, upon the completion of this development. These Best Management Practices shall be filed within this docket upon the completion of this facility.

5. This Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:




Delton W. Powers, Jr., Chairman
Public Service Commission of
South Carolina

Commissioner C. Williams and Commissioner Caston, concurring:

We join the majority in its decision to grant Kingstree East a Certificate of Environmental Compatibility and Public Convenience and Necessity (Certificate). However, we write separately to address the requirement under S.C. Code Ann. section 58-33-110(8)(a) that, we respectfully submit, merits further discussion.

The Applicant must meet the requirements of the Siting Act by a preponderance of the evidence.¹³ We agree that the Applicant met the filing requirements identified in S.C. Code Ann. section 58-33-120. Further, we concur with the majority's opinion that

¹³ The Administrative Procedures Act provides that the rules of evidence as applied in civil cases in the court of common pleas shall be followed. S.C. Code Ann. § 1-23-330(1) (2015). Accordingly, the standard of proof is by the preponderance of the evidence. S.C. Code Ann. § 1-23-330(1) (2015); see also *Smith v. Barr*, 375 S.C. 157, 161, 650 S.E.2d 486, 489 (2007) (“In civil cases, the burden of persuasion rests with the plaintiff to prove his or her case, usually, by a preponderance of the evidence.”)

Kingstree East's Application met the requisite findings of the Commission as established in S.C. Code Ann. section 58-33-160.

However, we have concerns about the Applicant's ability to demonstrate compliance with S.C. Code Ann. section 58-33-110(8)(a). Act No. 62 of 2019 (the Energy Freedom Act) added section 58-33-110(8)(a) to the South Carolina Code of Laws, providing, in pertinent part, the following language:

[A] person may not commence construction of a major utility facility for generation in the State of South Carolina without first having made a demonstration that the facility to be built has been compared to other generation options in terms of cost, reliability, and any other regulatory implications deemed legally or reasonably necessary for consideration by the commission. The commission is authorized to adopt rules for such evaluation of other generation options.

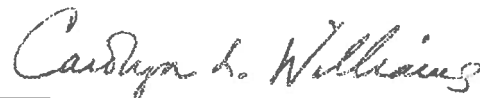
S.C. Code Ann. § 58-33-110(8)(a) (2015).

As applied here, we find that the Applicant did not compare its generation options in terms of cost, reliability, and any other regulatory implications deemed legally or reasonably necessary for consideration by the Commission. However, the obligation to compare generation options has routinely been placed on investor-owned utilities rather than on private entities, such as Kingstree East. According to Witness Glick, “[w]hile there is precedent from other states for Commissions to require utilities to compare bids and analyze RFP results using capacity expansion and production cost modeling software, **that is something that only utilities can do.**” Tr. 194.15:10-12 (emphasis added). Witness Glick testified that as a private developer, the Applicant would not be able to meaningfully conduct cost and reliability analyses of RFP bids as they do not have access to sensitive project bid data or access to competitively sensitive utility cost data on resource

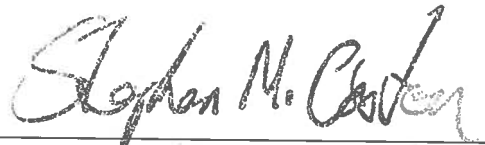
alternatives. Tr. 194.15:13-18.

As a private entity, Kingstree East places its energy in a competitive marketplace where cost and reliability will ultimately be evaluated by utilities. Based on the evidentiary record, we are assured that the investor-owned utilities' processes regarding power purchase agreements—which is how this energy will be offered to South Carolina's balancing authorities—will satisfy S.C. Code Ann. section 58-33-110(8)(a) and sufficiently demonstrate the value of the project compared to alternatives.

Considering the evidence before us, we believe the Siting Act requirement found in S.C. Code Ann. section 58-33-110(8)(a) will be satisfied through the investor-owned utility RFP process. Therefore, the Applicant has met its burden, and we concur with the majority's approval.



Carolyn L. Williams, Commissioner
1st Congressional District



Stephen M. Caston, Commissioner
3rd Congressional District

NOTICE TO ALL PARTIES: Pursuant to S.C. Code Ann. section 58-27-2150 (2015), any party to this proceeding may petition for a rehearing within ten (10) days after service of the notice of the entry of this order. An applicant may seek rehearing in respect to any matter determined in this proceeding. Pursuant to S.C. Code Ann. Regs 103-825(A)(4) (2012), the petition for rehearing shall set forth clearly and concisely: (a) the factual and legal issues forming the basis for the petition; (b) the alleged error or errors in the Commission order; and (c) the statutory provision or other authority upon which the petition is based. Additionally, pursuant to S.C. Code Ann. Regs 103-825(B) (2012), any petition for rehearing must conform to the requirements of R. 103-819 through 103-822.