



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

July 10, 2020

Ms. Kimberley A. Campbell, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

Re: Docket No. SP-11723, Sub 0 – Application of Apex Solar, LLC, for a Certificate of Public Convenience and Necessity to Construct a 30-MW Solar Facility in Cleveland County, North Carolina

Dear Ms. Campbell:

In connection with the above-referenced docket, we transmit herewith for filing on behalf of the Public Staff the testimony and exhibits of Jay B. Lucas, Utilities Engineer, Electric Division.

By copy of this letter, we are forwarding a copy to all parties of record by electronic delivery.

Sincerely,

/s/ Nadia L. Luhr  
Staff Attorney  
[nadia.luhr@psncuc.nc.gov](mailto:nadia.luhr@psncuc.nc.gov)

NL/cla

Attachment(s)

<b>Executive Director</b> (919) 733-2435	<b>Communications</b> (919) 733-5610	<b>Economic Research</b> (919) 733-2267	<b>Legal</b> (919) 733-6110	<b>Transportation</b> (919) 733-7766
<b>Accounting</b> (919) 733-4279	<b>Consumer Services</b> (919) 733-9277	<b>Electric</b> (919) 733-2267	<b>Natural Gas</b> (919) 733-4326	<b>Water</b> (919) 733-5610

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Jul 10 2020

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

DOCKET NO. SP-11723, SUB 0

In the Matter of  
Application of Apex Solar, LLC, for a )  
Certificate of Public Convenience and )  
Necessity to Construct a 30-MW Solar )  
Facility in Cleveland County, North )  
Carolina )

TESTIMONY OF  
JAY B. LUCAS  
PUBLIC STAFF – NORTH  
CAROLINA UTILITIES  
COMMISSION

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

**DOCKET NO. SP-11723, SUB 0**

**Testimony of Jay B. Lucas**

**On Behalf of the Public Staff**

**North Carolina Utilities Commission**

**July 10, 2020**

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS FOR THE**  
2 **RECORD.**

3 A. My name is Jay B. Lucas. My business address is 430 North  
4 Salisbury Street, Raleigh, North Carolina.

5 **Q. WHAT IS YOUR POSITION WITH THE PUBLIC STAFF?**

6 A. I am an engineer in the Electric Division of the Public Staff  
7 representing the using and consuming public.

8 **Q. WOULD YOU BRIEFLY DISCUSS YOUR EDUCATION AND**  
9 **EXPERIENCE?**

10 A. Yes. My education and experience are outlined in Appendix A of my  
11 testimony.

12 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
13 **PROCEEDING?**

1 A. The purpose of my testimony is to make recommendations to the  
2 Commission on the amended request for a certificate of public  
3 convenience and necessity (CPCN) filed by Apex Solar, LLC  
4 (Applicant), to construct a 30 megawatt AC (MW<sub>AC</sub>) solar  
5 photovoltaic (PV) electric generating facility near Lawndale, in  
6 Cleveland County, North Carolina (the Facility).

7 Specifically, my testimony:

- 8 1. describes the Application;
- 9 2. discusses concerns raised by the complainants;
- 10 3. makes a recommendation regarding whether the Commission  
11 should grant the requested CPCN; and
- 12 4. makes a recommendation regarding whether the Commission  
13 should accept the Applicant's registration statement for a new  
14 renewable energy facility.

15 **Q. PLEASE BRIEFLY DESCRIBE THE APPLICATION.**

16 A. The Applicant initially applied for a CPCN on May 7, 2018, and the  
17 Commission granted the CPCN on July 23, 2018. On September 13,  
18 2019, the Applicant filed a motion to amend its CPCN to change  
19 ownership of the Applicant, change the Applicant's contact  
20 information, and add additional land to the Facility on the west side  
21 of Fallston Waco Road to bring the total leased area to 475 acres.  
22 On November 5, 2019, the Applicant filed a registration statement to

1           have the Commission accept the Facility as a new renewable energy  
2           facility.

3   **Q.   HAS THE STATE CLEARINGHOUSE COMPLETED ITS**  
4   **APPLICATION REVIEW?**

5   A.   Yes. On October 29, 2019, and November 6, 2019, the State  
6       Clearinghouse filed letters with the Commission responding to the  
7       application with attached comments. Both letters stated the  
8       following: “Because of the nature of the comments, it has been  
9       determined that no further State Clearinghouse review action on your  
10      part is needed for compliance with the North Carolina Environmental  
11      Policy Act.”

12   **Q.   PLEASE SUMMARIZE THE NATURE OF THE COMPLAINTS**  
13   **RECEIVED IN RESPONSE TO THE APPLICANT’S REQUEST**  
14   **FOR AN AMENDED CPCN.**

15   A.   The Commission received four complaints in response to the  
16       Applicant’s request for an amended CPCN, which were filed from  
17       September 26, 2019, through November 1, 2019. The complaints  
18       raised the following concerns:

- 19                   i. Alteration of the landscape  
20                   ii. Safety  
21                   iii. Changes to Cleveland County’s solar ordinance

- 1                   iv. Another solar facility in the county, owned by a different
- 2                   entity, that is not operating
- 3                   v. Decrease in land values
- 4                   vi. Operation of the facility
- 5                   vii. Decommissioning and disposal of solar panels
- 6                   viii. Toxic materials in solar panels
- 7                   ix. Loss of farmland

8   **Q.   WHAT IS THE PUBLIC STAFF’S POSITION REGARDING THE**  
9   **COMPLAINTS?**

10  A.   The Public Staff has carefully reviewed the complaints. With regard  
11       to the concerns listed above, the Public Staff believes that they are  
12       more appropriately addressed through the local permitting process  
13       and through the environmental permitting process. In its April 24,  
14       2008 Order in Docket No. SP-231, Sub 0, the Commission discussed  
15       local authority over the siting of facilities, stating that “such decisions  
16       are, in most instances, best left to the local community through the  
17       exercise of its zoning authority rather than made by the  
18       Commission.”

19       The issues listed above are of the type that the Commission has  
20       previously determined are best left to the purview of local zoning  
21       boards and environmental regulators who have authority over such

1 matters and who are responsible for issuing specific permits that  
2 apply to the Facility.

3 **Q. DOES CLEVELAND COUNTY HAVE A SOLAR ORDINANCE**  
4 **THAT WILL APPLY TO THE FACILITY?**

5 A. Yes. Cleveland County has a solar ordinance, attached as **Lucas**  
6 **Exhibit 1**, that will apply to the Facility. Cleveland County updated  
7 this ordinance in 2019, but this update does not apply to the Facility  
8 because it was not in effect when the Applicant's conditional use  
9 permit was granted in 2018. **Lucas Exhibit 2** is the Cleveland  
10 County ordinance on visual screens that applies to the Facility as  
11 required by the solar ordinance. **Lucas Exhibit 3** is the  
12 decommissioning plan for the Facility as required by the solar  
13 ordinance.

14 **Q. WHAT IS THE PUBLIC STAFF'S RECOMMENDATION ON THE**  
15 **APPLICATION FOR A CPCN?**

16 A. The Public Staff recommends that the Commission approve the  
17 application and grant the certificate, subject to the following  
18 conditions:

19 1. The Applicant constructs and operates the Facility in  
20 strict accordance with applicable laws and regulations,  
21 including any environmental permitting requirements;  
22 and

1                   2.     The CPCN shall be subject to Commission Rule  
2                                   R8-64 and all orders, rules, and regulations as are now  
3                                   or may hereafter be lawfully made by the Commission.

4     **Q.     WHAT IS THE PUBLIC STAFF'S RECOMMENDATION ON THE**  
5           **APPLICANT'S REGISTRATION STATEMENT?**

6     A.     The Public Staff recommends that the Commission accept the  
7           Facility as a new renewable energy facility.

8     **Q.     DOES THIS CONCLUDE YOUR TESTIMONY?**

9     A.     Yes, it does.

**QUALIFICATIONS AND EXPERIENCE**

JAY B. LUCAS

I graduated from the Virginia Military Institute in 1985, earning a Bachelor of Science Degree in Civil Engineering. Afterwards, I served for four years as an engineer in the Air Force performing many civil and environmental engineering tasks. I left the Air Force in 1989 and attended the Virginia Polytechnic Institute and State University (Virginia Tech), earning a Master of Science degree in Environmental Engineering. After completing my graduate degree, I worked for an engineering consulting firm and worked for the North Carolina Department of Environmental Quality in its water quality programs. Since joining the Public Staff in January 2000, I have worked on utility cost recovery, renewable energy program management, customer complaints, and other aspects of utility regulation. I am a licensed Professional Engineer in North Carolina.



**Sec. 12-160. - Solar electric power generation.**

The following development standards shall apply to the construction of any solar facility designed to generate electricity for a commercial purpose. Any solar facility on properties less than ten (10) acres shall be prohibited:

- (a) A site plan shall be prepared in accordance with section 12-33. The site plan does not require a boundary survey as described in subsection 12-33(a)(1). The site plan shall show the location of any structures within one hundred (100) feet of the property line, and also demonstrate compliance with the other standards in this section.
- (b) Opaque (Type A) screening shall be installed between the security fence and adjacent non-participating property and the road right-of-way, prior to the operation of any solar equipment.
- (c) Security fencing shall be installed around the perimeter of the solar farm. The fencing shall be a minimum of six (6) feet in height, chain link, and equipped with a gate and locking mechanism.
- (d) Setbacks shall be measured from the security fencing:
  - (1) Fifty (50) feet from any non-participating property;
  - (2) One hundred (100) feet from any habitable dwelling or commercial structure;
  - (3) One thousand (1,000) feet from the right-of-way of a NCDOT Scenic Byway.
- (e) Landscape screening, fencing, gates and warning signs shall be maintained in good condition until the facility is decommissioned.
- (f) *Decommission plan.*
  - (1) The owner/operator of the solar facility shall submit a decommissioning plan prior to the issuance of a zoning permit or conditional use permit (example provided following this section); however, nothing about the issuance of this permit relieves the landowner of the obligation to remove the equipment as outlined in the conditional use or zoning permit.
  - (2) If the owner/operator of the solar facility fails to ensure the removal of the equipment within six (6) months after power production ceases for a period of twelve (12) continuous months, the landowner shall be in violation of the conditional use or zoning permit, and be subject to the penalties set forth in section 12-94.
  - (3) Each day that the violation continues after notification to the landowner by the administrator, shall be considered a separate offense for purposes of penalties and remedies.

(g) *Enforcement by injunction, abatement and liens.*

- (1) If a violation continues under section 12-94, the violation may be enforced by an order of abatement issued by the general court of justice for failure of the landowner to correct the unlawful condition of the property. Upon issuance of an abatement order by the general court of justice, a landowner must comply with the order within the time limit specified. If the landowner fails to do so, the county may take steps necessary to correct the condition of the property. The cost to correct the condition shall be a lien on the property in the nature of a mechanic or material man lien.
- (2) The equipment which remains shall be deemed abandoned and salvaged for the cost of decommissioning.
- (3) Should the salvage value exceed the cost of decommissioning, the balance shall be placed with the office of the clerk of court for abandoned funds.

(Ord. of 4-5-16(1))

**Example of the Decommissioning Plan**

Decommission Plan for Big Bright Solar ("Facility"), located at \_\_\_\_\_.

Prepared and Submitted by \_\_\_\_\_, the owner of Big Bright Solar

This decommissioning plan is presented as required by Subsection 12-160(f) of the Cleveland County Code.

Decommissioning will occur as a result of any of the following conditions:

1. The land lease ends
2. The system does not produce power for 12 months
3. The system is damaged and will not be repaired or replaced

The owner of the Facility, as provided for in its lease with the landowner, will do the following as a minimum to decommission the project.

1. Remove all non-utility owned equipment, conduits, structures, fencing, and foundations to a depth of at least three feet below grade.

2. Remove all graveled areas and access roads unless the owner of the leased real estate requests in writing for it to stay in place.
3. Restore the land to a condition reasonably similar to its condition before SES development, including replacement of top soil removed or eroded.
4. Re-vegetate any cleared areas with warm season grasses that are native to the Piedmont region, unless requested in writing by the owner of the real estate to not re-vegetate due to plans for agricultural planting.

All said removal and decommissioning shall occur within 12 months of the facility ceasing to produce power for sale.

The Facility Owner, currently \_\_\_\_\_, is responsible for this decommissioning. Nothing in this plan relieves any obligation that the real estate property owner may have to remove the facility as outlined in the Conditional Use Permit in the event the operator of the facility does not fulfill this obligation.

The owner of the Facility will provide the Cleveland County Planning Department and the Register of Deeds with an updated signed decommissioning plan within 30 days of change in the Facility Owner.

This plan may be modified from time to time and a copy of any modified plans will be provided to the planning staff and filed with the Register of Deeds by the party responsible for decommissioning.

Facility Owner Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Landowner (if different) Signature: \_\_\_\_\_  
Date: \_\_\_\_\_

(Ord. of 4-5-16(1))

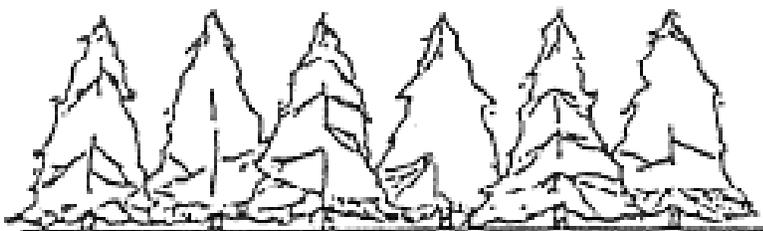
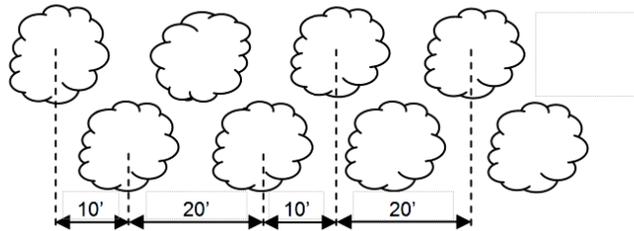
Secs. 12-161—12-170. - Reserved.



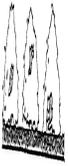
The following three (3) basic types of screens are hereby established and are used as the basis for the screening standards set forth in section 12-302:

- (1) *Opaque screen, Type A*: A screen that is opaque in all seasons from the ground to a height of at least six (6) feet, with intermittent visual obstructions from the opaque portion to a height of at least twenty (20) feet. An opaque screen is intended to exclude all visual contact between uses and to create a strong impression of separation. The opaque screen may be composed of a landscaped earth berm, planted vegetation, or existing vegetation. Planted trees shall be an evergreen species, at least six (6) feet in height at planting and have branches to the ground. The opaque portion of the screen must be opaque in all seasons of the year. Cypress and Holly trees are examples of species that can achieve this standard.

Suggested planting pattern that will achieve this standard is illustrated below:

	<p>EVERGREEN TREE 20 feet mature height Staggered planting Branches to ground</p>
	<p>PLANTING LAYOUT Staggered rows 10 feet on center Branches to ground</p>

- (2) *Semi-opaque screen, Type B*: A screen that is opaque from the ground to a height of three (3) feet, with intermittent visual obstruction from above the opaque portion to a height of at least twenty (20) feet at maturity. This screen is intended to partially block visual contact between uses and to create a strong impression of the separation of spaces. The semi-opaque screen may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Planted trees shall be at least three (3) feet in height at planting. Suggested planting patterns which will achieve this standard are illustrated below:



SMALL TREES

30 feet on center

20 feet mature height

WALL OR FENCE

3 feet in height



SMALL TREES

20—30 feet on center

20 feet mature height

BERM

3 feet high & seeded



LARGE TREES

40 feet on center

HEDGE SHRUBBERY

3 feet on center

3 feet mature height

- (3) *Broken screen, Type C:* A screen composed of intermittent visual obstructions from the ground to a height of at least twenty (20) feet. The broken screen is intended to create the impression of a separation of spaces without necessarily eliminating visual contact between the spaces. It may be composed of a wall, fence, landscaped earth berm, planted vegetation, or existing vegetation. Planted trees shall be at least three (3) feet in height at planting. Suggested planting patterns which will achieve this standard are illustrated below:



SMALL TREES

30 feet on center

20 feet mature height



SMALL TREES

30 feet on center

20 feet mature height

SPLIT RAIL FENCE

3 feet high



LARGE TREES

40 feet on center

20 feet mature height

ASSORTED SHRUBS

10 feet on center

3 feet mature height

(Amd. of 11-20-07; Amd. of 4-1-08, § 41; Ord. of 4-5-16(2))



### **Decommissioning Plan**

Decommission Plan for Apex Solar, LLC ("Facility"), located at Pony Barn Road, Lawndale, NCC 28090.

Prepared and Submitted by Apex Solar, LLC, the owner of Apex Solar

This decommissioning plan is presented as required by Subsection 12-160(f) of the Cleveland County Code.

Decommissioning will occur as a result of any of the following conditions:

1. The land lease ends
2. The system does not produce power for 12 months
3. The system is damaged and will not be repaired or replaced

The owner of the Facility, as provided for in its lease with the landowner, will do the following as a minimum to decommission the project.

1. Remove all non-utility owned equipment, conduits, structures, fencing, and foundations to a depth of at least three feet below grade.
2. Remove all graveled areas and access roads unless the owner of the leased real estate requests in writing for it to stay in place.
3. Restore the land to a condition reasonably similar to its condition before SES development, including replacement of top soil removed or eroded.
4. Re-vegetate any cleared areas with warm season grasses that are native to the Piedmont region, unless requested in writing by the owner of the real estate to not re-vegetate due to plans for agricultural planting.

All said removal and decommissioning shall occur within 12 months of the facility ceasing to produce power for sale.

The Facility Owner, currently Apex Solar, LLC, is responsible for this decommissioning. Nothing in this plan relieves any obligation that the real estate property



owner may have to remove the facility as outlined in the Conditional Use Permit in the event the operator of the facility does not fulfill this obligation.

The owner of the Facility will provide the Cleveland County Planning Department and the Register of Deeds with an updated signed decommissioning plan within 30 days of change in the Facility Owner.

This plan may be modified from time to time and a copy of any modified plans will be provided to the planning staff and filed with the Register of Deeds by the party responsible for decommissioning.

Facility Owner Signature: \_\_\_\_\_ *Authorized Person on behalf of Apex Solar, LLC*

Date: \_\_\_\_\_

Landowner (if different) Signature: *Reilly Elliott*

Date: *June 1 2019*

owner may have to remove the facility as outlined in the Conditional Use Permit in the event the operator of the facility does not fulfill this obligation.

The owner of the Facility will provide the Cleveland County Planning Department and the Register of Deeds with an updated signed decommissioning plan within 30 days of change in the Facility Owner.

This plan may be modified from time to time and a copy of any modified plans will be provided to the planning staff and filed with the Register of Deeds by the party responsible for decommissioning.

Facility Owner Signature: \_\_\_\_\_ *Authorized Person on behalf of Apex Solar, LLC*

Date: \_\_\_\_\_

Landowner (if different) Signature: *Dennis Dale Feder Elizabeth Feder*

Date: *6-1-18*

owner may have to remove the facility as outlined in the Conditional Use Permit in the event the operator of the facility does not fulfill this obligation.

The owner of the Facility will provide the Cleveland County Planning Department and the Register of Deeds with an updated signed decommissioning plan within 30 days of change in the Facility Owner.

This plan may be modified from time to time and a copy of any modified plans will be provided to the planning staff and filed with the Register of Deeds by the party responsible for decommissioning.

Facility Owner Signature: \_\_\_\_\_ *Authorized Person on behalf of Apex Solar, LLC*

Date: \_\_\_\_\_

Landowner (if different) Signature: *P. Leonard*

Date: *6-14-18*