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May 18, 2015

Ms. Gail L. Mount, Deputy Clerk North Carolina Utilities Commission, Public Staff 430 North Salisbury Street Dobbs Building Raleigh, North Carolina 27606-5918

Re: Sunflower Solar LLC, Docket No. SP-5272, Sub 0 – Direct Testimony

Dear Ms. Mount:

Please find attached the Direct Testimony and Exhibits for Georg Veit, Richard Kirkland and Tommy Cleveland in the above-referenced docket.

Please contact me at (919) 420-1707 if you have any questions.

Sincerely yours,

KILPATRICK TOWNSEND & STOCKTON LLP

Steven J. Levitas

Attachments

cc:

Georg Veit

Richard Kirkland Tommy Cleveland

Tim Dodge Paul Walden Jim Manley

# Before the North Carolina Utilities Commission Docket No. SP-5272, Sub 0

Direct Testimony and Exhibits of Georg Veit

On Behalf Of Sunflower Solar, LLC an affiliate of Geenex Solar LLC

1	Q.	Please state	your name	and address	ss for the	record.
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- A. My name is Georg Veit. My business address is 7804 C Fairview Road, #257,
  Charlotte, North Carolina 28226.
- 4 Q. By whom are you employed and in what capacity?
  - A. I am a Manager of Sunflower Solar, LLC ("Sunflower Solar"). Sunflower Solar is an affiliate of Geenex Solar, LLC ("Geenex"), which develops solar generating facilities.
  - Q. Please discuss your credentials.

- A. I have over six years of experience in the solar industry and lead Geenex's development of utility scale solar generating facilities. My experience covers all facets of project management, including commercial development, project finance, environmental permitting, process design, construction management, and operations. In the past, I led the efforts to develop HXOap Solar One, a 20 MW project located in Halifax County, which achieved commercial operation in December 2014. Initially, I gained my experience through the development and ownership of several solar systems in Germany. I earned a master degree in Philosophy from Freie Universität in Berlin, Germany.
- **Q.** What is the purpose of your testimony?
  - A. The purpose of my testimony is to support Sunflower Solar's application for a Certificate of Public Convenience and Necessity ("CPCN").
  - Q. Please describe the proposed facility for which Sunflower Solar seeks the CPCN.

- A. The proposed facility is described in detail in the application for the CPCN filed in this docket (the "Facility"), which is attached hereto as <a href="Exhibit 1">Exhibit 1</a>. The Facility will be located approximately two miles south of the town of Weldon on a parcel just east of the intersection of Dickens Wildwood Road and Highway 301 and south of the intersection of Lilly Lane and Highway 301, Halifax County, North Carolina. Sunflower Solar is leasing the real property from the current owners and currently owns 100% of the project. As proposed, the Facility will consist of approximately ninety-thousand (90,000) 310 to 330 w photovoltaic (PV) modules (or the equivalent) affixed to racks, which will be supported by piles driven in the ground. They system will utilize inverters ranging from one (1) to two and a half (2½) MW. The Facility will be surrounded by chain link fencing. It is anticipated that the Facility will be commissioned in June 2016.
- Q. To whom will Sunflower Solar sell the power generated by the Facility?
- A. Sunflower Solar will sell the output of the Facility to Dominion North Carolina Power pursuant to a negotiated power purchase agreement.
- Q. Please explain the steps that Sunflower Solar plans to take to minimize the disturbance to neighbors during the construction of the Facility.
- A. Geenex has developed, and is developing, numerous solar facilities in North

  Carolina and elsewhere. It strives to be a good neighbor through the permitting,

  design, and construction of the Facility; and to address concerns raised by

  neighboring property owners. During construction, we take measures to ensure that
  appropriate sedimentation and erosion control measures are in place; we maintain,

  to the greatest extent possible, a trash and litter-free construction site; and we

- operate heavy machinery during limited hours, typically from 7:00 am to 7:00 pm. In the case of the Facility, we plan to exceed the setback zoning requirements to include an additional voluntary buffer with vegetative screening along Reese's Store Road and parts of White Hill Road as further shown in Exhibit 2.
- Q. Please explain the steps that Sunflower Solar plans to take to maintain the Facility over the course of its operating life.
- A. Geenex and Sunflower Solar take great pride in the operation of facilities to ensure that they are well-maintained and orderly. With respect to maintenance of the site, once the facility has been constructed, Sunflower Solar will complete final grading, comply with all environmental and land use requirements, and perform final landscaping. The service roads will be graded and any disturbed land will be tilled and re-seeded for stabilization. The site will be completely fenced.

# Q. How will the community benefit from this facility?

A. First and foremost, the Facility will provide 44,000 MWh a year of emission-free renewable energy. The addition of this renewable energy to Dominion North Carolina Power's system has the potential to cause Dominion North Carolina Power to defer the addition of fossil fuel-fired generation to its generating fleet. Second, the energy generated by the Facility will be consumed by residences that are located on the same feeder line. Serving the load nearest to the Facility from energy generated by the Facility minimizes the loss of power that occurs in the transmission and distribution lines when these residences and business are served by generation that is located many miles away. Finally, the Facility will involve significant economic development benefits in Halifax County. It is anticipated that

this Facility will create 120 local construction jobs for approximately five months and will utilize local businesses during construction. In addition, the project will provide additional tax base to local governments resulting in approximately \$35,000 of dollars of additional personal property tax revenue annually.

- Q. Are there any additional benefits that will result from the construction and operation of the Facility?
- In 2007, with the enactment of Session Law 2007-397 ("Senate Bill 3"), North A. Carolina became the first state in the southeastern United States to adopt a renewable energy and energy efficiency portfolio standard ("REPS"). As required by Senate Bill 3, by 2021, investor-owned utilities, including Dominion North Carolina Power, are required to meet up to 12.5% of energy needs for retail sales through renewable energy resources or energy efficiency measures. Compliance with these REPS requirements is demonstrated through the purchase of renewable energy certificates ("RECs"). The Facility will provide a significant source of RECs for use by electric power suppliers to comply with their REPS obligations. It is anticipated that the Facility will provide 44,000 RECs annually. In addition to facilitating the compliance of the electric power suppliers in North Carolina with their REPS obligations, the Facility will promote the various objectives of Senate Bill 3, including: (1) diversifying the resources used to meet the energy needs of North Carolina consumers; (2) providing greater energy security through the use of indigenous resources; and (3) encouraging private investment in renewable energy. Finally, the electric utilities in North Carolina

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have acknowledged the generation benefits of distributed base load power to stabilize the grid.

# Q. How and why did Geenex select the location of the Facility?

A. When Geenex entered the market in 2012 and began looking at different sites for utility-scale solar projects, we were fortunate to discover and acquire control of the former airport in Halifax County, which is an excellent site for solar. In the course of successfully developing a 20 MW project on that site, we developed excellent relationships with elected officials and other community leaders in Halifax County and committed to leading and investing in energy education and training in the region. As a result, we have looked for additional solar development opportunities in Halifax County and the surrounding area.

# Q. How does Geenex generally select sites for its facilities?

- A. In general, Geenex selects sites in two ways. First, Geenex evaluates certain criteria for potential sites, including territory, potential for interconnection, size of the property, and topography. Based on these criteria, Geenex performs a GIS evaluation to identify potential parcels. Geenex then calls the land owners of identified parcels to determine interest. Second, as a result of our successful solar project located at the former county airport and our community involvement, Geenex is approached by landowners, either directly or indirectly, to inquire about potential opportunities. Geenex will then evaluate the screening criteria. If a parcel does not pass this initial screen, Geenex will not pursue the parcel further.
- Q. Does Geenex consider the race or other characteristics or residents in the

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- A. Absolutely not. Our site selection, including the selection of the Sunflower Solar site, is in no way based on the property owner's or surrounding citizens' race.

  Geenex does not consider race, color, national origin, or income in selecting its sites. Site selection is based solely upon the screening factors related to the property discussed above. In addition, Geenex is committed to assisting low-income and minority communities by promoting economic development and creating jobs above the local median wage.
- Q. With respect to the Facility in this proceeding, how did Geenex select the site?
- A. Geenex was contacted by the landowner. After being contacted by the landowner, Geenex evaluated each site criterion and determined that the parcel was feasible for a solar facility. Geenex negotiated and entered into a lease agreement with the landowner. Following the lease execution, Geenex initiated development of the site.
- Q. Has Geenex taken any steps to gain support for its solar projects from Halifax County and its citizens?
- A. Yes. Geenex and Halifax County seek to promote local economic development and create jobs above the median average wage in the County. Halifax County selected Geenex to construct and develop a 20 MW solar project at the former county airport. Geenex has a long-term plan, which consists of a strong local presence and base in Halifax County and this region of the State. We believe that community support is essential for a company and industry to be successful. To accomplish

this objective, we believe that it is important for the community to understand and embrace what we do. Geenex is therefore leading the efforts to build the Center for Energy Education, a non-profit dedicated to the advancement of renewable energies by creating awareness in the community; providing information, training, and education to students; and serving as a hub for the industry in eastern North Carolina. Geenex's unique commitment to Halifax County is an example of how Geenex goes above and beyond normal business activities to be a good corporate citizen that values and promotes the interests of local residents.

- Q. Has Geenex's development of solar projects in Halifax County been supported by members of the African-American community?
- A. Yes. Geenex has developed an excellent relationship with the Halifax Board of Commissioners, which includes, and has included, several members of the African-American community. Mr. James Pierce, former Chairman of the Board, supported our initial project in the County and now serves as Vice-Chairman of the Board of the Center for Energy Education (the "Center"), which I chair. Mr. Vernon Bryant, current Chairman of the Board of Commissioners, and Mr. Tony Brown, the Halifax County Manager, have both been strong supporters of solar development in Halifax County and of Geenex's efforts in particular.

  Geenex also has strong ties to Halifax Community College. Its President, Dr. Ervin Griffin, spoke at the ground breaking of the Center and Dr. Deryl Fulmer of the College faculty recently joined the Board of the Center. State Senator Angela Bryant also spoke at the Center groundbreaking.
- Q. Have you read the comments filed by Paul Weldon and Jim Manley in this

22.

A. Yes.

# Q. What is your response to these comments?

- A. Geenex and Sunflower Solar are open to hearing the concerns of neighbors and working cooperatively to ensure that any impact to neighbors caused by the construction of the Facility is minimized and that the Facility makes a positive contribution to the community. With respect to adequate public disclosure, Sunflower Solar seeks to be open and transparent with the surrounding community in connection with its development plans. As required by applicable laws and regulations, Sunflower Solar notified the public of its plans to construct the Facility. I have also reached out to both Mr. Weldon and Mr. Manley, via phone conversations and email, in an attempt to address their concerns.
- Q. Do you believe the project will have any adverse impacts on public health or the environment?
- A. No. The Facility will be required to meet environmental standards and obtain applicable permits from North Carolina Department of Environmental and Natural Resources, including a Stormwater Management Permit and an Erosion and Sedimentation Control Plan and Stormwater General Permit Coverage for Construction-Related Activities. In addition, Sunflower Solar will work with the local government to secure any and all necessary local approvals for the project. To the best of my knowledge, solar facilities such as the one proposed here do not create a potential for adverse impacts to public health. The testimony of Sunflower

- Solar's consulting engineer, Tommy Cleveland, supports this conclusion.
- Q. How do you respond to the comments about impacts to the neighbors' view-shed and property values?
  - A. Geenex has directly addressed this potential impact to neighboring landowners by voluntarily implementing a buffer zone and a vegetative screen. The voluntary buffer will significantly exceed Halifax County's mandatory setback requirements, which are: 40 feet for the front, 30 feet for the rear, and 15 feet for the sides of any Agricultural/Residential property. The vegetative screen will be planted along the fence line bordering Highway 301 and the voluntary buffer. The screen will consist of short shrubs that grow to a mature height of 6 to 10 feet. Geenex will consider four species of evergreen trees for the vegetative screen: American Holly, Red Tip Photinia, Leyland Cypress, or Wax Myrtle varieties. As set forth in his pre-filed testimony, Sunflower Solar's consultant, Mr. Richard Kirkland, has concluded that the Facility will not have an adverse impact on neighboring property values.
  - Q. Do you have any further response to the comments about the Facility?
  - A. As previously noted, Geenex did not consider race or other discriminatory factors in in selecting the site for the Facility. In addition, Geenex is not aware that its facilities or other solar facilities in North Carolina have been disproportionately sited in low-income or minority communities.
  - Q. What is your recommendation with respect to the application for a CPCN?
  - A. It is my recommendation that the Commission issue an order awarding the CPCN for the Facility.

- 1 Q. Does this conclude your testimony?
- 2 A. Yes.



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GEENEX

SP-5272, Sub 0

# BY ELECTRONIC SUBMISSION

March 2, 2015

Gail L. Mount Chief Clerk North Carolina Utilities Commission 430 North Salisbury Street Raleigh, North Carolina 27603

Re:

Docket No. SP- 5272, Sub 0

Sunflower Solar, LLC - Application for a Certificate of Public Convenience and

Necessity and Registration as a New Renewable Energy Facility

#### Dear Clerk Mount:

This is the application for Certificate of Public Convenience and Necessity and Registration as a New Renewable Facility.

Thank you for your time and attention.

Sincerely.

Walter Putnam, Jr.

Attachments:

CPCN Application Information per subsection (b)(1) of NCUC Rule R8-64 with Map Application for a New Renewable Energy Facility Pursuant to Rule R8-66 Verification



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# Application for a Certificate of Public Necessity and Convenience

In support of its application, Sunflower Solar, LLC shows the Commission the following:

#### Exhibit 1

(i) Full and correct name, business address, business telephone number, and electronic mailing address of the principal office of the facility owner.

Sunflower Solar, LLC 7804 - C Fairview Road #257 Charlotte, NC 28226

Email: interconnection@geenexsolar.com

Phone: (704) 907-7163

(ii) A statement of whether the facility owner is an individual, a partnership, or a corporation and, if a partnership, the name and the business address of each general partner and, if a corporation, the state and date of incorporation and the name, business address, business telephone number, and electronic mailing address of an individual duly authorized to act as corporate agent for the purpose of the application and, if a foreign corporation whether domesticated in North Carolina; and.

Sunflower Solar LLC is a North Carolina limited liability company with its principal place of business in Charlotte, North Carolina. The Articles of Incorporation were filed on May 30, 2014. The facility owner, applicant and Walter Putnam, Jr., an individual duly authorized to act as corporate agent for the purpose of the application have the same address, telephone number, and electronic mailing address.

(iii) Nature of the generating facility, including the type and source of its power or fuel.

The Facility will be a 20 MW AC photovoltaic (PV) array. The source of its power is solar energy.

(iii) The full and correct name of the site owner and, if the owner is other than applicant, the applicant's interest in the site.

Pierce, William A III & Sally J

Applicant plans to enter in a lease with site owner.



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#### Exhibit 2

(i) A color map or aerial photo showing the location of the generating facility site in relation to local highways, streets, rivers, streams, and other generally known local landmarks, with the proposed location of major equipment indicated on the map or photo, including: the generator, fuel handling equipment, plant distribution system, startup equipment, the site boundary, planned and existing pipelines, planned and existing roads, planned and existing water supplies, and planned and existing electric facilities. A U.S. Geological Survey map or an aerial photo map prepared via the State's geographic information system is preferred: and

See Attachment A

(ii) The E911 street address, county in which the proposed facility would be located, and GPS coordinates of the approximate center of the proposed facility site to the nearest second or one thousandth of a degree.

The final E911 address is obtained after the zoning permit is received. The site is located on a parcel with an address of 2979 Highway 301. The proposed facility is located just east of the intersection of Dickens Wildwood Road and Highway 301 in Halifax County, North Carolina. The latitude is 36°23'42.93"N and the longitude is 77°35'35.51"W

See map of property attached as "Exhibit A". The property line is marked in red.

#### Exhibit 3

(i) The nature of the generating facility, including the type and source of its power or fuel:

The facility will generate 20 MW electricity. The source of power is solar.

(ii) A description of the buildings, structures and equipment comprising the generating facility and the manner of its operation:

The facility will consist of approximately ninety-thousand (90,000) 310 - 330 W photovoltaic (PV) modules (or the equivalent) affixed to ground-mounted racks, which will be supported by piles driven into the ground. The system will utilize inverters ranging from one (1) to two and a half (2.5) MW.

(iii) The gross and net projected maximum dependable capability of the facility as well as the facility's nameplate capacity, express as megawatts (alternating current);

The facility's nameplate capacity is 20 MW. The gross capacity is 20 MW and net projected maximum capacity is 19.9 MW. With full solar resources, the dependable capacity is 20 MW. The dependable capacity will be reduced when the solar resources are diminished.



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(iv) The projected date on which the facility will come on line; and

June 1, 2016

(v) The applicant's general plan for sale of the electricity to be generated, including the utility to which the applicant plans to sell the electricity;

Applicant plans to sell electricity generated by the Facility to Dominion North Carolina Power.

(vi) Any provisions for wheeling of the electricity;

None

(vii) Arrangements for firm, non-firm or emergency generation;

None at this time

(viii) The service life of the project;

The service life of the equipment is a minimum of twenty five years.

(ix) The projected annual sales in kilowatt-hours; and

The projected year one annual sales of the facility is approximately 44,000,000 kWh/yr.

(x) Whether the applicant intends to produce renewable energy certificates that are eligible for compliance with the State's renewable energy and energy efficiency portfolio standard.

The applicant plans to produce renewable energy certificates that are eligible for compliance with North Carolina's renewable energy and energy efficiency portfolio standard.

#### Exhibit 4

- (i) A complete list of all federal and state licenses, permits and exemptions required for construction and operation of the generating facility and a statement of whether each has been obtained or applied for.
  - Stormwater Management Permit
  - Erosion and Sedimentation Control Plan and Stormwater General Permit Coverage for Construction-Related Activities
  - Conditional Use Permit
  - Building Permit
  - FERC Form 556

None of the above have been obtained at this time.



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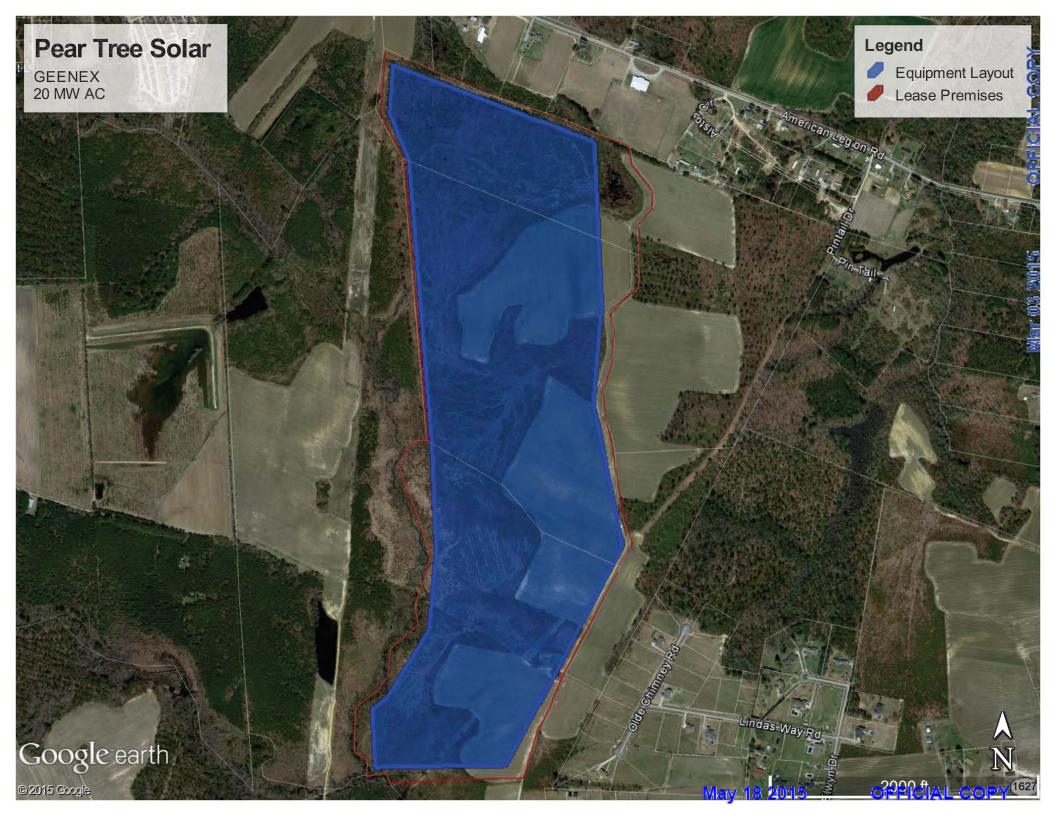
(ii) A copy of those that have been obtained should be filed with the application, a copy of those that have not been obtained at the time of the application should be filed with the Commission as soon as they are obtained.

# Exhibit 5

The expected cost of the Facility is \$60,000,000.

# BEFORE THE NORTH CAROLINA UTILITIES COMMISSSION

In the Matter of Application of Sunflower Solar, LLC for a Certificate of Convenience and Public Necessity and Registration as a New Renewable Energy Facility	) ) VERIFICATION ) )
company, verify that the contents of	flower Solar, LLC, a North Carolina limited liability this Application for a Certificate of Public Necessity et are true to the best of my knowledge. I am duly mited liability company.  CHARLES BASKERVILL Notary Public Mecklenburg Co., North Carolina My Commission Expires July 13, 2019
Sworn to and subscribed before me,	this the day of March, 2015.
Charles Bash	Charles Baskerviff
Notary Public (signature)	(Typed/ Printed Name)
My Commission Expires:	14 13,2019



Note: Please complete the form, print it, have it signed, notarized, make 15 copies and send them to the Chief Clerk of the Commission. Be sure to print a copy for your records as you cannot save data onto the form, nor can you file it online. Be sure to attach additional information, such as maps, as required.

# Application to Register a Renewable Energy Facility or New Renewable Energy Facility Pursuant to Rule R8-66

(Applicants should consult Rule R8-66 while completing this form in order to ensure they provide sufficient information.)

Facility name:	Pear Tree Solar
Full and correct name of the owner of the facility:	Pear Tree Solar LLC
Business address:	7804 - C Fairview Road #257 Charlotte, North Carolina, 28226
Electronic mailing address:	interconnection@geenexsolar.com
Telephone number:	(704) 907-7163
Owner's agent for purposes of this application, if applicable:	Walter Putnam, Jr.
Agent's business address:	7804 - C Fairview Road #257 Charlotte, North Carolina, 28226
Agent's electronic mailing address:	walter.putnam@geenexsolar.com
Agent's telephone number:	(704) 574-1587
The owner is: Pear Tree Solar LLC	Individual Partnership Corporation (including LLC)
If a corporation, state and date of incorporation.	State NC Date

If a corporation that is incorporated outside of North Carolina, is it domesticated in North Carolina?	Yes No	
If a partnership, the name and business address of each general partner. (Add additional sheets if necessary.)		
Nature of the renewable energy facility:		The second second
1. Describe the facility, including its technology, and the source of its power and_fuel(s). Thermal facilities should describe how its host uses the facility's thermal energy output. (Add additional sheets if necessary.)	Solar PV	
Whether it produces electricity, useful thermal energy, or both.	Electricity	
Nameplate capacity in kW/MW (AC) and/or maximum Btu per hour for thermal facilities.	20 MW AC	

The location of the facility set
forth in terms of local highways,
streets, rivers, streams, or other
generally known local landmarks.
Attach a map, such as a county
road map, with the location
indicated on the map.

The site is located adjacent to 3 Bridges Road approximately 1/2 mile West of the intersection of 3 Bridges Road and Elwyn Drive in Halifax County, North Carolina. The latitude is 36.40917N and the longitude is 77.66194W.

Site ownership:	
1. Is the site owner other than the facility owner? If yes, who is the site owner?	Yes. Franklin Danny Tripp & Benjamin Ronnie Tripp
2. What is the facility owner's legal interest in the site?	Plan to enter into lease agreement.

List the approvals that are required to build and/or operate this facility, and attach copies of those that have been obtained. Wind facilities with multiple turbines, where each turbine is licensed separately, may provide copies of approvals for one such turbine but shall add an attestation that approvals for all of the turbines are available for inspection.

1. Federal permits and licenses:

2. State permits and licenses:

3. Exemptions required for construction and operation of the facility:

4. Statement of whether each has been obtained or applied for (attach copy of those that have been obtained with this application):

FERC Form 556

Stormwater Management Permit, Erosion and Sedimination, Zoning

No permits or licenses have been obtained at this time

If the facility has been placed into service, on what date did the facility begin operating?	
If the facility is not yet operating, on what date is the facility projected to be placed into service?	June 1, 2016
If the facility is already operating, what is the amount of energy produced by the facility, net of station use, for the most recent 12-month or calendar-year period? Energy production data for a shorter time period is acceptable for facilities that have not yet operated for a full year.	
What entity does (or will) read the facility's energy production meter(s) for the purpose of issuing renewable energy certificates?	Dominion North Carolina Power
For thermal energy facilities, describe the method to be used to determine the facility's thermal energy production, in BTUs, that is eligible for REC issuance.	
Does the facility participate in a REC tracking system and if so, which one? If not, which tracking system will the facility participate in for the purpose of REC issuance?	NC RETs

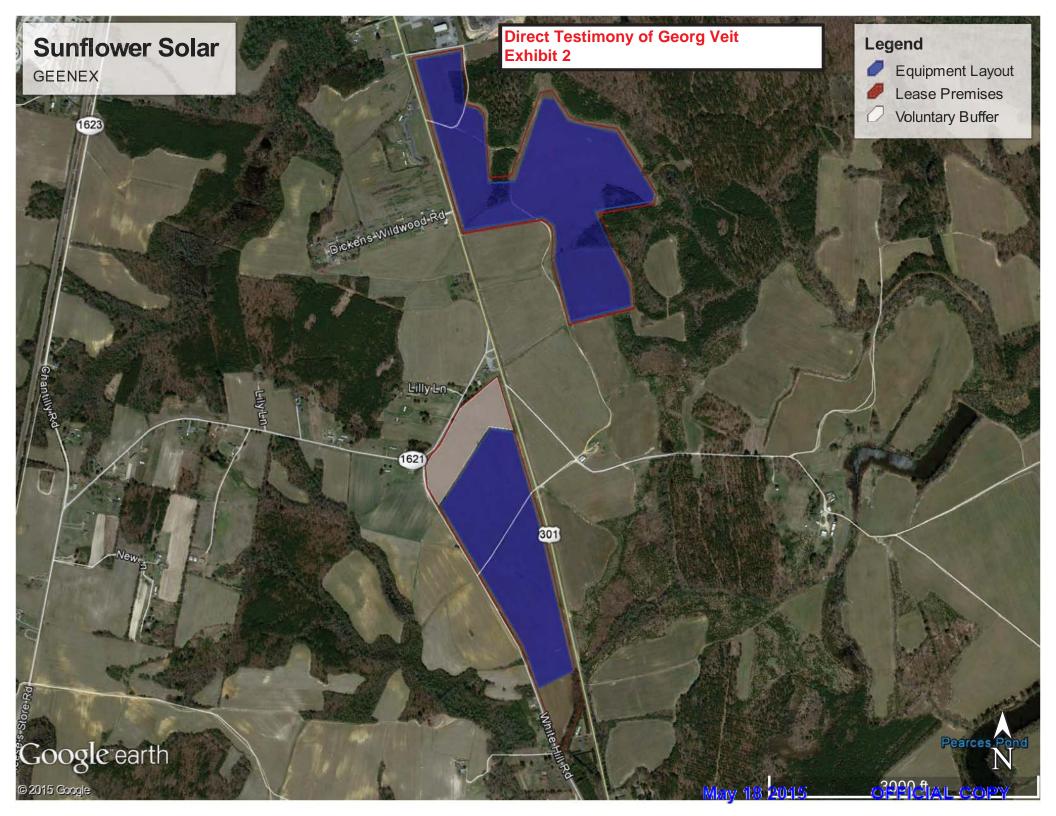
If this facility has already been the subject of a proceeding or submittal before the Commission, such as a Report of Proposed Construction or a Certificate of Public Convenience and Necessity, please provide the Commission Docket Number, if available.

	The owner of the renew and notarized:	able energy facility shall provide the following attestations, signed
	1. Yes No	I certify that the facility is in substantial compliance with all federal and state laws, regulations, and rules for the protection of the environment and conservation of natural resources.
	2. Yes No	I certify that the facility satisfies the requirements of G.S. 62-133.8(a)(5) or (7) as a:  renewable energy facility, or new renewable energy facility, and that the facility will be operated as a:  renewable energy facility, or new renewable energy facility.
	3. Yes No	I certify that 1) my organization is not simultaneously under contract with NC GreenPower to sell our RECs emanating from the same electricity production being tracked in NC-RETS; and 2) any renewable energy certificates (whether or not bundled with electric power) sold to an electric power supplier to comply with G.S. 62-133.8 have not, and will not, be remarketed or otherwise resold for any other purpose, including another renewable energy portfolio standard or voluntary purchase of renewable energy certificates in North Carolina (such as NC GreenPower) or any other state or country, and that the electric power associated with the certificates will not be offered or sold with any representation that the power is bundled with renewable energy certificates.
	4. Yes No	I certify that I consent to the auditing of my organization's books and records by the Public Staff insofar as those records relate to transactions with North Carolina electric power suppliers, and agree to provide the Public Staff and the Commission access to our books and records, wherever they are located, and to the facility.
My C	5. Yes No	I certify that the information provided is true and correct for all years that the facility has earned RECs for compliance with G.S. 62-133.8.
CHARLES BASKERVILL Notary Public Mecklenburg Co., North Carolina My Commission Expires July 13, 2019	6. Yes No	I certify that I am the owner of the renewable energy facility or am duly authorized to act on behalf of the owner for the purpose of this filing.  Officer
BASKERVILL ry Public Co., North Carolina Expires July 13, 2019	(Signature)  Walter Putnam, Jr  (Name - Printed or Ty	3 /2 (Title) 3 /2 (Date)

# VERIFICATION

STATE OF North Caroling COUNTY OF Mecklen burg
Veither Putnam JR, personally appeared before me this day and,
being first duly sworn, says that the facts stated in the foregoing application and any exhibits, documents, and statements thereto attached are true as he or she believes.
WITNESS my hand and notarial seal, this
T. (
My Commission Expires: July 13, 2019
Signature of Notary Public
Charles Baskervill
Name of Notary Public – Typed or Printed

The name of the person who completes and signs the application must be typed or printed by the notary in the space provided in the verification. The notary's name must be typed or printed below the notary's seal. This original verification must be affixed to the original application, and a copy of this verification must be affixed to each of the 15 copies that are also submitted to the Commission.



Direct Testimony of Georg Veit Exhibit 3

ore than 100 separately organized electric utilities serve North Carolina's consumers. Depending on where you live or work, you could receive electric service from a consumer-owned cooperative, an investor-owned utility, your city government, a university-owned utility or some other utility operating in the state. Each covers a designated service area.

In the early days of electrification, power generally was available only in larger communities, where power companies could be assured of an economic return. In the 1930s and '40s, rural residents formed cooperatives that they could own and manage themselves to bring electricity to more sparsely populated regions.

After World War II, growth in North Carolina's towns and cities began spilling over into these formerly rural areas.

12. Dallas

13. Drexel

25. Hamilton

26. Hertford

38. Lincolnton

39. Louisburg

51. Pinetops

52. Pineville

64. Tarboro

65. Wake Forest

University serves the university.

In 1965, the North Carolina Utilities Commission (an agency of state government formed in 1891) brought together investor-owned utilities and cooperatives in order to define and assign service areas. This division of service areas still stands today, although with some modifications.

Municipally-owned utilities serve customers within their city or town limits. In 2005, state legislation clarified the procedures by which cooperatives and municipal electric systems negotiate their respective service areas in relation to one another.

In the summer of 2012, a merger of the

investor-owned utilities Duke Energy and Progress Energy formed the largest electric utility in the nation. Duke Energy (the official name of the merged corporations) serves some 7.2 million electric accounts in six states, including about 3.2 million in North Carolina.

The North Carolina Utilities
Commission has jurisdiction over the
licensing of new generating plants operated by all electric utilities and over the
construction of new electric transmission
facilities that are 161 kilovolts and above
in size. Investor-owned utilities operate
within the jurisdiction of the commission,
which oversees their rates and service practices. Cooperatives and municipal electric
systems are regulated by their own local
governing bodies.

Cooperatives pay all the taxes that investor-owned utilities pay, except income tax, because cooperatives are not-for-profit businesses

The North Carolina Rural Electrification Authority, whose five members are appointed by the governor, reviews the cooperatives' federal loan applications and consumer comments.

#### **Investor-owned electric utilities**

#### **Duke Energy Carolinas**

- Headquartered in Charlotte.
- Serves approximately 2.4 million accounts in central and western North Carolina and western South Carolina in a service area of approximately 24,000 square miles.

#### **Duke Energy Progress**

- Wholly-owned subsidiary of Duke Energy.
- Serves approximately 1.5 million accounts in central and eastern North Carolina, plus an area in and around Asheville and in northeastern South Carolina. The total service area is approximately 34,000 square miles.

#### Domini

- Headquartered in Richmond. Operates in northeastern North Carolina as Dominion North Carolina Power.
- Serves approximately 120,000 North Carolina accounts.

## **Electric cooperatives**

- Owned and governed by their members.
- Approximately 950,000 North Carolina homes, farms and businesses (approximately 2.5 million people) are served by 26 cooperatives (also known as electric membership corporations or EMCs). Their service areas extend to 93 of the state's 100 counties.
- 5 co-ops based in Virginia, Tennessee, Georgia and South Carolina serve border areas in North Carolina.
- 25 co-ops belong to the North Carolina Electric Membership Corporation, a generation and transmission cooperative that supplies its members with power primarily purchased from other utilities. NCEMC is one of the largest buyers of wholesale electric power in the nation and also owns a partial interest in the Catawba Nuclear Station in York County, S.C., two natural gas-fueled plants (in Anson and Richmond counties), and two diesel-powered generating facilities in Buxton and Ocracoke.
- All 26 N.C. co-ops belong to the North Carolina Association of Electric Cooperatives, a service association that performs services statewide, including publishing Carolina Country magazine.

## **Publicly-owned utilities**

- More than 70 municipally-owned electric systems serve approximately 500,000 North Carolina households and businesses.
- Six universities own and operate electric utilities that serve the campuses: East Carolina, Elizabeth City State, N.C. State, UNC-Chapel Hill, UNC-Greensboro and Western Carolina.
- New River Power & Light is a unit of Appalachian State University and serves the university and the town of Boone. New River buys its power from the Blue Ridge Electric cooperative.
- Most of these systems are members of ElectriCities, an umbrella non-profit organization that provides its member systems such services as training, member and government relations, communications and emergency assistance. ElectriCities also manages two municipal power agencies supplying wholesale electricity directly to 51 ElectriCities members and indirectly to another five members. These power agencies are North Carolina Municipal Power Agency Number 1, which has a partial interest in the Catawba Nuclear Station, and North Carolina Eastern Municipal Power Agency, which has partial interests in Duke Energy's Mayo and Roxboro fossil steam plants and Brunswick and Harris nuclear plants.

#### **Electric utility service areas** A portion of the electric power for these municipally-owned systems is purchased wholesale from investor-owned utilities. **KEY 63 Publicly-owned electric systems** Publicly-owned electric systems 1. Albemarle 27. High Point 75. UNC-Greensboro serves 40. Lucama 53. Red Springs 66. Walstonburg the university. 15. Elizabeth City 2. Apex 28. Highlands 41. Lumberton 54. Robersonville 67. Washington Electric cooperatives 76. N.C. State University 3. Ayden 16. Enfield 42. Macclesfield 55. Rocky Mount 29. Hobgood 68. Waynesville 4. Belhaven 17. Farmville 30. Hookerton 43. Maiden 56. Scotland Neck 69. Wilson 77. UNC-Chapel Hill **Duke Energy Progress** Benson 18. Fayetteville 31. Huntersville 44. Monroe 57. Selma 70. Windsor serves the university 6. Black Creek 19. Forest City 32. Kings Mountain 45. Morganton 58. Sharpsburg 71. Winterville 78. East Carolina University **Duke Energy Carolinas** 20 Fountain 33 Kinston 7 Bostic 46. Murphy 59. Shelby 72. Lake Lure generates pow serves the university. 8. Cherryville 21. Fremont 34. LaGrange 47. New Bern 60. Smithfield for Duke Energy. 79. Elizabeth City State 73. New River Light & Power University serves the university 9. Clayton 22. Gastonia 35. Landis 48. Newton 61. Southport Dominion serves Annalachian State 10. Concord 23. Granite Falls 36. Laurinburg 49. Oak City 62. Stantonsburg University and the city of Boone 24. Greenville 50. Pikeville 63. Statesville 11. Cornelius 37. Lexington 74. Western Carolina

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