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4140 Parklake Avenue GlenLake One | Second Floor Raleigh, NC 27612 T 919.329.3800 F 919.329.3799 nelsonmullins.com

August 10, 2020

North Carolina Utilities Commission c/o: Ms. Kim Campbell, Chief Clerk Dobbs Building 430 North Salisbury Street Raleigh, NC 27603-5918

Re: Bethel NC 11 Solar, LLC's Application For Certificate Of Public Convenience and

Necessity – Merchant Plant Docket No. EMP-102, Sub 1 Our File: 054943.09015

Dear Ms. Campbell:

By this letter we are submitting for public filing in the above-referenced matter, the following application and exhibits:

(i) Bethel NC 11 Solar, LLC's Application For Certificate of Public Convenience and Necessity – Merchant Plant, submitted pursuant to N.C. Gen. Stat. § 62-110.1 and NCUC Rule R8-63 (the "Application"), which also includes the pre-filed direct testimony of Ms. Linda Nwadike, Director of Permitting and Community Relations for SunEnergy1 LLC, the parent and affiliate of the Applicant, Bethel NC 11 Solar, LLC, incorporating and supporting the Application (the "Supporting Testimony").

In accordance with NCUC Rule R8-63 (c), the attached public versions of the Application and Supporting Testimony reference but do not include certain exhibits that contain or reveal confidential information submitted in support of the Application or in connection with the Supporting Testimony, such as financial information relating to SunEnergy1 LLC, a private company, and estimates of the costs of construction of the proposed solar facility.

The Application, including the exhibits that contain or reveal Confidential Information, will be uploaded separately immediately after the electronic submission of the public filing listed above for submission under seal. Because the relevant exhibits are confidential in nature and contain proprietary trade secrets under N.C. Gen. Stat. § 132-2.1, they

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accordingly are being submitted as sealed attachments to, and in support of, the public Application and Supporting Testimony.

Thank you in advance for your assistance with the filing of the public versions of the Application and Supporting Testimony, and with the subsequent filing under seal of the materials containing Confidential Information.

I remain,

Very truly yours,

JWE:wg Enclosures oseph W. Bason

STATE OF NORTH CAROLINA UTILITIES COMMISSION RALEIGH, NORTH CAROLINA

DOCKET NO. EMP 102 Sub 1

In the Matter of the Application of Bethel)	BETHEL NC 11 SOLAR, LLC'S
NC 11 Solar, LLC for a Certificate of)	APPLICATION FOR A CERTIFICATE OF
Public Convenience and Necessity for)	PUBLIC CONVENIENCE AND
Merchant Plant Pursuant to N.C Gen. Stat.)	NECESSITY FOR MERCHANT PLANT
62-110.1 and Commission Rule R8-63)	

Bethel NC 11 Solar, LLC (the "Applicant"), by and through its undersigned counsel, hereby applies to the North Carolina Utilities Commission (the "Commission") pursuant to N.C. Gen. Stat. § 62-110.1, and Commission Rule R8-63, for a Certificate of Public Convenience and Necessity for Merchant Plant authorizing the construction of a solar photovoltaic merchant plant facility with a capacity of 150 MW AC to be located in the Town of Bethel and Pitt County, North Carolina. In support of its application, the Applicant provides the Commission with the exhibits attached hereto as required by N.C.U.C. Rule R8-63, and also shows unto the Commission the following:

- 1. Exhibit 1 attached hereto contains the required information about the Applicant.
- 2. All correspondence, documents and filings regarding this application should be sent to:

Joseph W. Eason
Nelson Mullins Riley & Scarborough LLP
GlenLake One, Suite 200
4140 Parklake Avenue
Raleigh, North Carolina 27612
Tel: (919) 329-3800
joe.eason@nelsonmullins.com
Attorney for the Applicant

And, with a copy also to the following corporate agent of Applicant:

Bethel NC 11 Solar, LLC
Attn: Kenny Habul
192 Raceway Drive
Mooresville, NC 28117
704-662-0375
project.development@sunenergy1.com

The Applicant and its Counsel consent to electronic service of filings related to this application.

- 3. Exhibit 2 attached hereto contains the required information about the proposed generation facility.
- 4. Exhibit 3 attached hereto provides a description of the need for the facility in the state and/or region, with supporting documentation.
- 5. This Application has been signed and verified by an individual duly authorized to act on behalf of the Applicant for that purpose.
- 6. This Application is submitted together with the pre-filed direct testimony of Linda Nwadike, Director of Permitting and Community Relations for SunEnergy1, which testimony incorporates and supports this application and is submitted on behalf of the Applicant in accordance with NCUC Rule R8-63 (b)(5).
- 7. Confidential Information has been designated as such and filed under seal with this Commission contemporaneously with the filing of this Application in accordance with Rule R8-63(c).

WHEREFORE, the Applicant respectfully prays that this Commission consider the foregoing information submitted in support of this application and issue the Applicant a Certificate of Public Convenience and Necessity for the construction of the merchant plant described herein in accordance with N.C. Gen. Stat. §62-110.1 and NCUC Rule R8-63.

Respectfully submitted this 10 day of August, 2020.

Joseph W. Eason Nelson Marin Nelson Mullins Riley & Scarborough LLP

GlenLake One, Suite 200

4140 Parklake Avenue

Raleigh, North Carolina 27612

Tel: (919) 329-3800

joe.eason@nelsonmullins.com

Attorneys for the Applicant

VERIFICATION

NOW COMES, Linda Nwadike, being first duly sworn, and deposes and says that I am duly authorized to act on behalf of Bethel NC 11 Solar, LLC as Director of Permitting and Community Relations for SunEnergy1, LLC, parent and affiliate of the Applicant; that I have read the foregoing Pre-Filed Direct Testimony and also Bethel NC 11 Solar, LLC's Application For A Certificate Of Public Convenience And Necessity For Merchant Plant incorporated therein, and that the statements and information therein is true and accurate to my personal knowledge and belief, except where otherwise indicated, and in those instances, I believe the statements and information to be true.

Signed this 7 day of August, 2020.

Linda Nwadike
Director of Permitting & Community
Relations
SunEnergy1, LLC

SIGNED AND SEALED BEFORE ME THIS $\frac{1}{2}$ DAY OF AUGUST, 2020.

Sworn to and subscribed to before me

this _____ day of August, 2020.

Notary Public (Signature)

Shelby F. Smithwick

My Commission Expires: 3/27/23

INFORMATION ABOUTTHE APPLICANT EXHIBIT 1

i. The full and correct name, business address, business telephone number and electronic mailing address of the Applicant;

Bethel NC 11 Solar, LLC 192 Raceway Drive Mooresville, NC 28117 704-662-0375 project.development@sunenergyl.com

ii. A description of the Applicant, including the identities of its principal participant(s) and officers, and the name and business address of a person authorized to act as corporate agent or to whom correspondence should be directed;

Bethel NC 11 Solar, LLC is a North Carolina limited liability company formed on August 17, 2016. Kenny Habul is duly authorized to act as a corporate agent of the Applicant for the purpose of this application. A copy of the Articles of Organization of the Applicant as filed with the North Carolina Secretary of State is attached as **Schedule 1-1**.

iii. A copy of the Applicant's most recent annual report to stockholders, which may be attached as an exhibit, or, if the Applicant is not publicly traded, its most recent balance sheet and income statement. If the Applicant is a newly formed entity with little history, this information should be provided for its parent company, equity partner, and/or the other participant(s) in the project;

Bethel NC 11 Solar, LLC is an affiliate of SunEnergyl, LLC ("SunEnergyl"); SunEnergyl is the direct parent of the Applicant.

SunEnergyl is one of the largest solar developers and engineering, procurement and construction companies in the U.S. SunEnergyl is not a publicly traded company; therefore, its most recent balance sheet and income statement are filed under seal as confidential information (See <u>Confidential Schedule 1-2</u> of the Confidential Documents submitted with this Application).

iv. Information about generating facilities in the Southeastern Electric Reliability Council region which the Applicant or an affiliate has any ownership interest in and/or the ability to control through leases, contracts, options, and/or other arrangements and information about certificates that have been granted for any such facilities not yet constructed.

The Applicant does not have any generating facilities in the Southern Electric Reliability Council region. The Applicant is an individual project company formed to own the solar facility assets for the project that is the subject of this application.

The Applicant's parent-affiliate, SunEnergyl, has ownership interests in and/or the ability to control through leases or contracts numerous solar generating facilities in the Southeastern

Electric Reliability Council ("SERC") region. A list of generating facilities that SunEnergyl has constructed within the Southern Electric Reliability Council region is attached as <u>Schedule 1-3</u>. A list of generating facilities that SunEnergy1 has under development but that have not been completed sufficient to achieve commercial operation is attached as <u>Schedule 1-4</u>.

Schedule 1-1

Articles of Organization



NORTH CAROLINA Department of the Secretary of State

To all whom these presents shall come, Greetings:

I, Elaine F. Marshall, Secretary of State of the State of North Carolina, do hereby certify the following and hereto attached to be a true copy of

ARTICLES OF ORGANIZATION

OF

BETHEL NC 11 SOLAR, LLC

the original of which was filed in this office on the 17th day of August, 2016.





Scan to verify online.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal at the City of Raleigh, this 17th day of August, 2016.

Elaine J. Marshall

Secretary of State

Certification# C201622900620-1 Reference# C201622900620-1 Page: 1 of 3 Verify this certificate online at http://www.sosnc.gov/verification

State of North Carolina Department of the Secretary of State

SOSID: 1537553
Date Filed: 8/17/2016 9:09:00 AM
Elaine F. Marshall
North Carolina Secretary of State
C2016 229 00620

Limited Liability Company ARTICLES OF ORGANIZATION

Pursuant to §57D-2-20 of the General Statutes of North Carolina, the undersigned does hereby submit these Articles of Organization for the purpose of forming a limited liability company.

Lau	th. Note: This document must be signed by all persons listed.) Iren LaGrua, 192 Raceway Drive, Mooresville, NC 28117, Organizer
The n	name of the initial registered agent is: Kenny Habul
The <u>st</u>	reet address and county of the initial registered agent office of the limited liability company is:
Numt	per and Street 192 Raceway Drive
City	Mooresville State: NC Zip Code: 28117 County: Iredell
	nailing address, if different from the street address, of the initial registered agent office is:
	per and Street
City_	State: NC Zip Code: County:
Princ	sipal office information: (Select either a or b.)
	The limited liability company has a principal office.
	principal office telephone number: 704-662-0375
	street address and county of the principal office of the limited liability company is:
Num	ber and Street 192 Raceway Drive
	Mooresville State: NC Zip Code: 28117 County: Iredell

CORPORATIONS DIVISION (Revised January 2014)

P.O. Box 29622

RALEIGH, NC 27626-0622 (Form L-01)

			County:
b. The limited liability of	company does n	ot have a principal of	īce.
Any other provisions which are attached.	the limited liabi	lity company elects to	include (e.g., the purpose of the en
cost when a document is fi	led. The e-mail	provided will not be	viewable on the website. For more
These articles will be effect	ive upon filing,	unless a future date is	specified:
s the 16th day of August	, 20 <u>1</u> 1	Zauru	Lachua
			Signature a, Organizer or Print Name and Title
ow space to be used if more the	nan one organize	er or member is listed	in Item #2 above.
low space to be used if more the	han one organize	er or member is listed	in Item #2 above. Signature
Signature			Signature
	cost when a document is fi information on why this se These articles will be effect	cost when a document is filed. The e-mail information on why this service is offered, These articles will be effective upon filing,	(Optional): Please provide a business e-mail address: The Secretary of State's Office will e-mail the business automatic cost when a document is filed. The e-mail provided will not be information on why this service is offered, please see the instructor. These articles will be effective upon filing, unless a future date is sthe 16th day of August

Schedule 1-2

CONFIDENTIAL

SEE CONFIDENTIAL EXHIBITS SUBMITTED WITH APPLICATION

SunEnergy1, LLC Financial Statements

$\begin{array}{c} {\rm Bethel~NC~11~Solar,\,LLC} \\ {\rm CPCN~Application-Merchant~Plant} \\ {\rm NCUC~EMP\text{-}102,\,Sub~1} \end{array}$

Schedule 1-3

Applicant's Affiliated Generating Facilities in SERC

Schedule 1-3

${\bf Applicant's\ other\ affiliated\ generating\ facilities\ in\ the\ Southeastern\ Electric\ Reliability\ Council\ Region}$

The Applicant's affiliate SunEnergyl has completed numerous solar generating facilities in the Southeastern Electric Reliability Council (SERC) region as shown in the below table.

Sites developed by SunEnergyl with ownership interest through leases or contracts

Project	MW	County/State	Completion Date
Bethel 7		Pitt, NC	May 2016
Elizabeth City 28		Pasquotank, NC	April 2015
Everetts	7	Martin, NC	April 2015
Scotland Neck	28	Halifax, NC	March 2014
Battleboro	7	Edgecombe, NC	June 2015
Conetoe II	112	Edgecombe, NC	April 2016
Creswell	19.95	Washington, NC	June 2015
Kelford	30.10	Bertie, NC	February 2016
Sunbury	7	Gates, NC	March 2016
Whitakers	16.8	Whitakers, NC	February 2016
Whitepost I	14.99	Beaufort, NC	February 2013
Whitepost II	6.4	Beaufort, NC	May 2014
Windsor	7	Bertie, NC	April 2014
River Road	7	Hertford, NC	December 2016
Leggett	7	Whitakers, NC	July 2017
Barnhill	4	Pasquotank, NC	December 2016
Aulander Hwy 42	7	Hertford, NC	July 2017
Summit	84	Currituck, NC	February 2017
Shiloh Hwy 1108	7	Camden, NC.	March 2018
Sandy Solar	7	Camden, NC	April 2018
Chowan Jehu	7	Chowan, NC	March 2018
Scotland Neck 3	4	Halifax, NC	January 2015
Elk Park	0.197	Avery, NC	March 2012
SE1-Asheville	0.25	Buncombe, NC	May 2010
Plymouth Solar	6.5	Plymouth, NC	December 2014
Pamlico Solar	6.6	Beaufort, NC	February 2014
Choco Solar	7	Beaufort, NC	March 2015
Sugar Run Solar	6.6	Gates, NC	December 2015

Project	MW	County/State	Completion Date
Albertson Solar	7	Duplin, NC	December 2014
Conetoe Solar	6.6	Edgecombe, NC	January 2016
Williamston Speight	20.84	Martin, NC	December 2016
Ranchland	84	Currituck, NC	January 2018
Mill Pond	7	Martin, NC	September 2019
Jamesville	7	Martin, NC	October 2019
Aulander Holloman	112	Hertford, NC	June 2019

Schedule 1-4

Projects in SERC Region in Development

Schedule 1-4
Projects in SERC region in development

Project	MW	County/State	Completion Date		
Gliden	7	Chowan, NC			
Camden Dam	7	Camden, NC			
Windsor Hwy 17	7	Bertie, NC			
Ryland Road	7	Chowan, NC			
Mechanicsville	28	Hanover, VA			
Albemarle Beach	112	Washington, NC			
Bethel NC 11	112	Pitt, NC			
Wildcat Road	7	Martin, NC			
Williamston Hwy 125	7	Martin, NC			
Shawboro Ridge	80	Currituck, NC			
Colice Hall	7	Hertford, NC			
Creswell Hwy 64	20	Tyrrell & Washington, NC			
Manning	7	Edgecombe, NC			

INFORMATION ABOUT THE PROPOSED FACILITY EXHIBIT 2

I. The nature of the proposed generating facility, including its type, fuel, expected service life, and the gross, net, and nameplate generating capacity of each generating unit and the entire facility, as well as the facility's total projected dependable capacity, in megawatts (alternating current); the anticipated beginning date for construction; the expected commercial operation date; and estimated construction costs;

The Applicant is proposing to construct a 150MW AC solar facility in Pitt County, based on the nameplate capacity of the panels. The gross and net capacity of the resource is equal to its nameplate capacity. The expected service life of the facility is approximately 50 years.

The Applicant anticipates beginning construction of the site during the 2Q of 2022. The Applicant expects that commercial operation of the facility will be achieved in phases, with the first phase operational by the 4Q of 2022, and the last phase operational by the 4Q of 2023. The estimated construction cost of the facility is filed under seal as confidential information (See **Confidential Schedule 2-1** of the Confidential documents submitted with this Application.)

II. A color map or aerial photo (a U.S. Geological Survey map or aerial photo map prepared via the State's geographic information system is preferred) showing the proposed site boundary and layout, with all major equipment, including the generator, fuel handling equipment, plant distribution system, startup equipment, planned and existing pipelines, planned and existing roads, planned and existing water supplies, and planned and existing electric facilities;

A site map of Bethel NC 11 Solar, LLC showing the equipment layout is attached as Schedule 2-2.

An aerial view showing the relationship of the site to nearby highways and state boundaries and county lines in its vicinity is reproduced below as Image 2-1.

IMAGE 2-1



- iii. The E911 street address, and 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 is set out below.
 - E911 address(es) have not been obtained for the proposed facility; however, the facility is located at GPS coordinates 35.790974, -77.366634.
- iv. In the case of natural gas-fired facilities, a map showing the proximity of the facility to existing natural gas facilities; a description of dedicated facilities to be constructed to serve the facility; and any filed agreements, service contracts, or tariffs for interstate pipeline capacity;

The facility is not a natural gas fired facility.

v. A list of all needed federal, state and local approvals related to the facility and site, identified by title and the nature of the needed approval is listed in <u>Schedule 2-3</u> attached hereto. The same exhibit includes a copy of such approvals as has been obtained, or a report on the current status of the approvals. There will be <u>no</u> application related to an application for eligible facility status or exempt wholesale generator status pursuant to Section 32 of the Public Utility Holding Company Act of 1935

(PUHCA), as amended by the Energy Policy Act of 1992, including attachments and subsequent amendments as necessary.

The proposed facility will interconnect with the Dominion Transmission system via a new three breaker ring bus switching station connecting to the Elmont-Greenwood DP 115 KV line #59. This new switching station will be adjacent to the Dominion transmission line on land Bethel NC 11 Solar has acquired for this generating facility. The generator collector substation will be adjacent to the new Dominion switching station.

Schedule 2-1

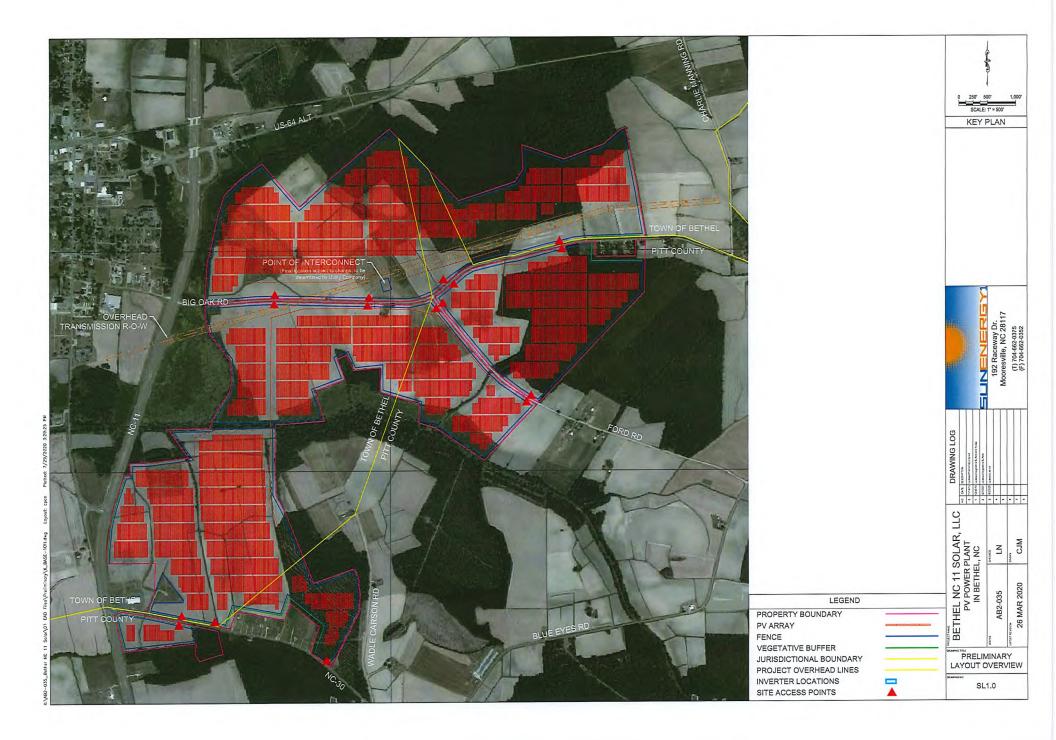
CONFIDENTIAL

SEE CONFIDENTIAL EXHIBITS SUBMITTED WITH APPLICATION

Estimated Construction Costs

Schedule 2-2

Bethel Site Map



Schedule 2-3

Required List of Permits or Certificates

	Title	Status	Copy
Federal			
USACOE	Wetland Delineation	In Process	
FERC	Market Base Rate Authorization	Forthcoming	
FERC	EQR	Forthcoming	
State			
CPCN	Generation CPCN-NCUC	Application	
NC-DOT	Driveway Permits	Forthcoming	
NCDEQ	Erosion and Sedimentation Control Permi	t In Process	
Local			
	Zoning Compliance	Obtained	Υ
	Conditional Use Permit	Forthcoming	
	Building/Electrical Permit	Forthcoming	

TOWN OF BETHEL. CERTIFICATE OF COMPLIANCE WITH MUNICIAL ZONING AND LAND DEVELOPMENT REGULATIONS

This Zoning Compl 11, Solar facility.	iance is bei	ng sought i	for the purpo	se of: Cons	truction of Bet	nel NC
Date: 2/3/20	Time: 12	:00pmAppli	cation #:	Parcel #:	Dlease see the	attached document
Location; Please see	the attache	d documen	t	arcer ".	i mase see the	manica document
Subdivision: 1	V/A	Lot:	N/A	Block #:	N/A	
City Limits: Inside	of:O	utside of:_	Zon	ing designat		at attached documents
Owner/agent:_Bethe	NC 11Sola	r. LLC	Address: 19	2 Raceway D	rive Mooresville,	NC 28117
Builder: SunEnergy			Address: 19	2 Raceway D	rive Mooresville,	NC 28117
Contractor Lic. #:	71359		Telephone:	704-662-03	75	
Utility Suppliers:	Water:	N/A	Gas			
	Sewer:	N/A	Elec	tricity: N/	A	
Health Dept. Pe	rmit No.:	A/N			**	
sealed by a Professions about the 100 year floo Fire District: Are there municipal ear	d level, must Bethel Rural	accompany th Fire	is application. _Rescue Distric			
Setbacks from the prop	erty line:				100 FT setbac	k from all adjoining
Front: 50 ft	And the second s	50.ft	Side: 50	ft O	ther residential pr	operties
NOTE: If no setbacks a	re specified, t	he Pitt Count	y Inspection Of	dinance shall	govern.	
A				conerty? ye	·s	
Are there other munici them: Some portions of t	pai regulation the pracels are	s governing t n Pitt County I	ne use of this particular distribution in the contraction of the contr	see the attached	II yes, ut	escribe
A copy of the plans for					EQUIRED) Pleas	se see the attached
A plot plan showing t	he lot perim	eter, existing	structures, an	d the propose		
setbacks is hereby subm	nitted: (REQU	IRED) Pleas	see the attached	locuments		
Based on the informatio				REQUIRED, a	a plumbing permi	t
I h eby attest that I h	ave been pro	vided with a	copy of Bethe	l's Zoning Ord	linance, I further	attest
that I have read this an	d that I know	of no featur	e of the propose	ed construction	n that will conflic	t with
its content. I have bee						
fact regarding the natur					be deemed void	and all
permits resulting from i	t snan be rev	oked or consi				
Part I	A Comment		Date	PISIES		
Witness:	de		Date	2/3/20		

hereby certify that all the municipal regularity ected by this application have been set or	lations governing the use of the property
ected by this application have been set or	it in this certificate and that the Town of
ethel relieves the County of Pitt of all resp	onsibility for enforcing regulations unless
s, t out hereon, except that the	enforce the North Carolina State Building
within the of Manager	
Piomatury	213420 3-4-20
Signatur e & Title	Date

The undersign reby acknowledges by his signature below that the dersigned has been ed of the following:

(1) That any b uilding or structure built within the Town of Bethel or within its one mile erritorial jurisdiction must be located upon the property and constructed in compliance with the Zoning Ordinance of the Town of Bethel, in addition to any requirements or regulations of the County Inspection Department; and

(2) That no foundation for any building or structure shall be poured, dug or otherwise prepared until the location of the proposed foundation has been marked on the ground, inspected and approved by the Zoning Enforcement Officer of the Town of Bethel for compliance with the Bethel Zoning Ordinance, and the undersigned has received a certificate of zoning compliance for foundation construction signed by the zoning enforcement officer or his designated agent; and

(3) That no construction of any building or structure shall commence until the completed foundation for the same shall have been inspected and approved by the Zoning Enforcement Officer of the Town of Bethel for the compliance with the Bethel Zoning Ordinance and the undersigned has received a certificate of zoning compliance for completed foundation from the Zoning Enforcement Officer or his designated agent; and

(4) It shall be the responsibility of the undersigned or his contractor to contact the Zoning Enforcement Officer, show the Officer the correct location of the owner's property lines on the ground which are consistent with the description of said property as set forth in owner's deed or other title instrument, and request inspection and zoning approval by the Zoning Enforcement Officer of the proposed foundation marked upon the ground and also the subsequent completed foundation prior to commencing the construction of any building or structure upon said property. The accuracy of the location of the aforesaid property lines, foundation, and building or structure shall be the sole responsibility of the owner.

I, the undersigned, do hereby acknowledge that I have read, understand, and will fully comply with the aforesaid requirements.

Dated this_	3	day of_	Feburary	,20_20_	
			1	KHOD	
				Signature	

DESCRIPTION OF THE NEED FOR THE FACILITY EXHIBIT 3

Forecasts of the quantities of renewable power to be purchased within the PJM market over the next several years, and elsewhere in the southeastern United States, reflect a strong public need for additional utility-scale solar power production. The proposed facility will interconnect with Dominion's transmission grid, providing direct access to all load-serving suppliers participating in PJM, a Regional Transmission Organization ("RTO") in which Dominion participates. PJM coordinates the movement of electricity through all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia.

The Applicant believes strong market conditions in the PJM market will create sustainable off-take for its renewable power production and the associated Renewable Energy Certificates ("RECs"). Demand for renewable energy is expected to increase in the southeast over the expected lifetime of the proposed facility. For example, Schedule 3-1 discusses a Request For Proposals demonstrating that Dominion Energy has committed to increasing its use of renewable power, and seeking proposals that would permit it to generate or purchase 5,000 MW of renewable electricity by 2028. Dominion's commitment to renewable power is consistent with state-level policy set by the Virginia Assembly, which affirmed the importance of renewable energy generation in passing the Grid Transformation and Security Act of 2018 ("GTSA"), signed into law on March 9, 2018. The GTSA finds that up to an additional 5,000 MW of utility-scale electric generating facilities powered by solar and wind energy is in the public interest, along with up to an additional 500 MW of non-utility scale solar or wind generating facilities, including rooftop solar installations.

Bethel NC 11 Solar anticipates contracting for the sale of its energy, capacity, and RECs through PJM. Load growth for the PJM RTO as a whole, and more specifically for the Dominion Virginia power zone, which serves parts of Eastern North Carolina and Virginia, is expected to increase over the next ten to fifteen years as described both for winter and summer months. Summer peak load is expected to grow by 0.4% per year over the next ten years, and by 0.4% over the next fifteen years. (2018 PJM Load Forecast Report (Jan. 2018), available at. https://www.pjm.com/-/media/library/reports-notices/load-forecast/2019-rpm-load-forecast.ashx?la=en) For the Dominion Virginia Power zone, summer peak load growth is expected to grow by 0.8% per year over the next ten years, and 0.8% per year over the next fifteen years. *Id.* at 59-60. The anticipated ten-year summer peak load growth in the Dominion Virginia Power zone represents 2.6% growth over the equivalent forecasts from the January 2017 load forecast report. *Id.* at 54.

Wind peak load growth in PJM is expected to average 0.4% per year over the next ten-year period, and 0.4% over the next fifteen years. *Id.* at 2. Winter peak load growth in the Dominion Virginia Power zone is expected to grow by 0.9% per year over the next ten years, and 0.9% per year over the next nine to fifteen years. *Id.* at 63-64. The anticipated ten-year winter peak load growth in the Dominion Virginia Power zone represents 3.9% growth over the January 2017 load forecast report. *Id.* at 54.

The area of North Carolina within the footprint of the transmission operated by Dominion Virginia Power has a slightly higher projected load growth than Virginia. North Carolina is expected to average between 0.8% and 0.9% per year over the next ten years, in contrast to the PJM RTO load growth projections of 0.4% over the next ten years.

Finally, the Applicant is currenting negotiating with a load-serving entity about the prospect of entering into a long-term purchase power agreement ("PPA") with that entity for the output of the proposed facility and the associated RECs. If those negotiations lead to consummation of a PPA before commercial operation of the proposed facility, the Applicant will advise the Commission through amendments of this testimony or its construction progress reports.

Schedule 3-1

Dominion RFP Solar and Wind

Solar, Onshore Wind and Energy Storage Proposals



Dominion Energy Virginia is seeking bids for up to 1,000 megawatts (MW) of solar and onshore wind generation and up to 250 MW of energy storage in the Commonwealth. This is the largest solicitation in the Company's history for renewable energy in a calendar year and will promote its efforts toward a clean energy future.

The RFP is soliciting bids for development assets for new solar or onshore wind power generation facilities or mechanically complete solar facilities under asset purchase agreements. The RFP is also seeking power purchase agreement bids where the Company will enter into an agreement for the energy, capacity, ancillary services, and environmental attributes including Renewable Energy Certificates from the facility. Additionally, the Company is seeking bids for new energy storage projects that may be paired with new solar or onshore wind facilities or that will be connected to the power grid as a stand-alone facility. The new facilities must be at least 5 MW (ac) in size, located in Virginia and commercially operational by the end of 2023 to be considered.

The RFP outlines the exact proposal requirements, including the power and asset purchase agreement terms as well as the price and non-price evaluation criteria. Among several criteria, the Company will favorably consider each proposal's use of labor, materials and other resources within Virginia and from Virginia businesses.

Notices of Intent to Bid and Confidentiality Agreements are due by May 18, 2020 with final asset purchase and power purchase proposals due September 1, 2020 and March 1, 2021, respectively.

Customers and developers interested in learning more about the company's renewable energy expansion plans may contact us via email: 2020SolarWindRFP@dominionenergy.com

RFPs for Solar, Onshore Wind and Energy Storage

ANNOUNCEMENTS

· RFP Press Release

INTENT TO BID DOCUMENTS

- · Intent to Bid Form
- Confidentiality Agreement Revised May 6, 2020

RFP BID DOCUMENTS

- · 2020 Solar and Onshore Wind RFP Document
- 2020 Solar and Onshore Wind RFP Information Form
- · 2020 RFP Checklist Acquisition- Solar
- 2020 RFP Checklist Acquisition Onshore Wind
- 2020 RFP Checklist Acquisition Solar Mechanical Completion
- 2020 RFP Checklist Acquisition Solar Plus Energy Storage
- 2020 RFP Checklist Acquisition Stand-Alone Energy Storage
- 2020 RFP Checklist Acquisition Wind Plus Energy Storage
- 2020 RFP Checklist Power Purchase Agreement Solar
- 2020 RFP Checklist Power Purchase Agreement Onshore Wind
- 2020 RFP Checklist Power Purchase Agreement Solar Plus Energy Storage
- 2020 RFP Checklist Power Purchase Agreement Stand-Alone Energy Storage
- 2020 RFP Checklist Power Purchase Agreement Wind Plus Energy Storage

2019 RFP Documents and Information >

ANNOUNCEMENTS

RFP Press Release

INTENT TO BID DOCUMENTS

- Intent to Bid Form
- Confidentiality Agreement (Revised August 8, 2019)

RFP BID DOCUMENTS

- Questions & Answers
- 2019 Solar and Onshore Wind RFP Document
- · 2019 Solar and Onshore Wind RFP Information Form
- 2019 RFP Checklist Acquisition, Solar
- 2019 RFP Checklist Acquisition, Wind
- 2019 RFP Checklist Power Purchase Agreement, Solar
- 2019 RFP Checklist Power Purchase Agreement, Wind

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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION RALEIGH, NORTH CAROLINA

BETHEL NC 11 SOLAR, LLC

DOCKET NO. EMP-102, SUB 1

PRE-FILED DIRECT TESTIMONY

OF

LINDA NWADIKE

August, 2020

1		INTRODUCTION
2	Q.	PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.
3	A.	My name is Linda Nwadike. I am the Director of Permitting and Community Relations for
4		SunEnergy1, LLC ("SunEnergy1" or the "Company"), the parent and an affiliate of the
5		Applicant Bethel NC 11 Solar, LLC ("Bethel NC 11 Solar" or "Applicant"). Bethel NC 11
6		Solar is a North Carolina limited liability company that was formed on August 17, 2016.
7		My business address is 192 Raceway Drive, Mooresville, North Carolina 28117.
8	Q.	PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.
9	Α.	I obtained a Bachelor of Science degree in Chemical Engineering with a concentration in
10		Biological Technology, and I am a licensed project manager professional.
11		Prior to joining SunEnergy1, I worked in the nuclear energy industry as a project
12		manager and an instrumentation and controls engineer. I worked with many large-scale
13		utility providers, including Duke Energy Progress, LLC, Duke Energy Carolinas, LLC, Virginia
14		Electric and Power Company d/b/a Dominion Energy North Carolina ("Dominion"), Florida
15		Power & Light Company, and NextEra Energy, Inc. on various projects. I have also
16		conducted or overseen material procurement and logistics on various oil and gas
17		projects.
18		At SunEnergy1, I conduct project development and oversee permitting activities
19		for utility-scale solar renewable energy facilities. I often am the liaison between
20		SunEnergy1 and local community and government officials. I present information about
21		projects to local government officials at guasi judicial public hearings and to adjacen

property owners at community meetings. I obtain federal, state, and local permits

22

1		necessary for the solar facilities, and I coordinate and lead the SunEnergy1's project
2		development team and sub-contractors in relation to achieving project goals.
3	Q.	PLEASE SUMMARIZE YOUR CURRENT RESPONSIBILITIES WITH SUNENERGY1.
4 5	A.	My current employment responsibilities are as follows:
6 7		 Conduct and oversee project development and permitting activities on utility-scale solar renewable energy facilities.
8		 Lobby and act as the liaison between SunEnergy1 and local community and government officials.
10 11		 Present SunEnergy1 projects at quasi-judicial public hearings and community meetings.
12 13		 Communicate and perform required activities needed to obtain federal, state, and local permits.
14 15		 Work with federal, state, and local governmental agencies, including mayors, county managers, boards of commissioners, and planning boards on solar projects.
16 17		 Coordinate and lead internal project development team and sub-contractors across broad technical, financial, and business disciplines to achieve project goals.
18 19 20		 Focus team on project objectives, and track progress against objectives to ensure project milestones are completed on time, on budget, and with the desired outcome. Anticipate and manage changes effectively in a rapidly evolving business
21 22		 environment. Report and escalate issues to upper management and stakeholders as needed.
23	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?
24	A.	Yes, I provided testimony in support of the application for a Certificate of Public
25		Convenience and Necessity ("CPCN") for Merchant Plant and filed construction Progress
26		Reports for the applicant for that project, Albemarle Beach Solar, LLC (NCUC Docket EMP-
27		103).
28	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?
29	Α.	To satisfy the requirements of Commission Rule R8-63 under which this Application for a
30		Certificate of Public Convenience and Necessity ("CPCN") for a proposed merchant plant
31		is being requested.

1	Q.	PLEASE IDENTIFY THE PARENT COMPANY OF THE APPLICANT.
2	A.	SunEnergy1 is the parent company of the Applicant, Bethel NC 11 Solar, LLC.
3		COMPANY BACKGROUND AND PROJECT FINANCE
4	Q.	PLEASE DESCRIBE THE COMPANY'S PERSONNEL, TECHNICAL EXPERIENCE, AND
5		FINANCIAL CAPABILITY TO OWN AND OPERATE THE PROJECT.
6	Α.	SunEnergy1 is a top five U.S. solar developer, owner, and operator of utility-scale solar
7		projects, with over 1 GW of installed solar power. SunEnergy1 has pioneered large-scale
8		solar power on the East Coast for nearly a decade and has developed numerous record-
9		breaking solar projects in the Southeast region. SunEnergy1 is vertically integrated and
10		controls all stages of development in-house.
11		SunEnergy1's professional team works closely with manufacturers, utilities, and
12		industry groups to ensure the safety, performance, and cost efficiency of its projects.
13		The Company's employees work closely with sponsors of the National Electric Code
14		(NEC), members of the National Fire Protection Association (NFPA) 70E, and with
15		pertinent government agencies to ensure that safety standards and compliance activities
16		used in the solar industry continue to improve.
17		Kenny Habul, SunEnergy1's CEO and President, has been involved in the
18		development of photovoltaic ("PV") solar and solar thermal technology since 1996, and
19		has established himself as a leader in the field of sustainable construction technologies.
20		Prior to forming SunEnergy1, Mr. Habul was a partner in Habul Brothers Luxury Home
21		Construction, one of the most prominent and innovative builders in Queensland,

Australia. Mr. Habul has vast experience in commercial and residential construction and

22

has a passion for sustainable construction practices and solar energy. He holds a Bachelor of Laws degree from Bond University in Australia.

Bradley Fite is SunEnergy1's Chief Operations Officer. He holds an Unlimited/Master Electrical License in multiple states. He is certified through the Underwriter's Laboratory (UL) as a professional PV installer and holds several certifications through the North American Board of Certified Energy Practitioners (NABCEP). He is an active member of the Institute of Electrical and Electronics Engineers Association (IEEE) and NFPA, and he works closely with utilities and manufacturers to stay on the leading edge of the PV industry. Mr. Fite is directly involved with all aspects of the Company and oversees projects from the initial development through construction, operations and maintenance. He has over 20 years of construction experience and has built more than 500 MW AC of solar PV projects.

Kevin Chen is SunEnergy1's Chief Commercial Officer. Prior to joining
SunEnergy1, he had several leadership positions in the power industry. He has worked in
the business leading global technology and equipment supply provision, large utility
transmission and distribution operations, and generation project development. His solar
development experience has grown from 250 MW of DG portfolio, to community solar
projects and utility-scale projects. Mr. Chen received his master's degree in electric
power from Iowa State University and his MBA from the University of California at Los
Angeles.

Brian Kennedy is SunEnergy1's Chief Development Officer. He brings over 25 years of energy industry experience to SunEnergy1. Prior to joining the Company, Mr. Kennedy initiated and established the solar enterprise for the largest utility company in

the country. As such, he was directly responsible for the development of dozens of utility-scale solar projects across the country, totaling nearly 1 GW of installed capacity, and representing over \$1 billion worth of investment. Mr. Kennedy holds an MBA from Xavier University.

A.

A.

SITE AND FACILITY DESCRIPTION

Q. WHERE IS THE PROJECT THAT IS THE SUBJECT OF THE APPLICATION LOCATED?

The project is located East of NC 11 South and North of NC 30 in the Town of Bethel, Pitt County, North Carolina. I herewith reference and incorporate the Application and its exhibits, as well as all other materials supplied by Applicant, in support of the Application for a CPCN for a merchant plant.

12 Q. WHAT IS THE CURRENT LAND USE AND ANTICIPATED USE?

The project will be located on several parcels in Pitt County and Town of Bethel, North Carolina as shown on layout map attached to the Application as Schedule 2-2. The site is comprised of rural land, some of which is utilized for agricultural purposes. SunEnergy1's affiliate, Group Three Holdings, LLC, owns a portion of the site; additionally, Christopher & Georgia James, Country Farms, LLC, The Bunting Farms, Inc., Charlie & Elizabeth Manning, Patsy White & Carrie Gurganus and Wallace & Jeffrey James, each own or claim to own some or all of the other portions of the site for the project. The above-mentioned landowners have provided Bethel NC 11 Solar with the right to develop and use the property for solar energy purposes, including the installation of solar panels, inverters, transformers, and other elements of the facility described in the Application.

Q. WHAT IS THE FACILITY'S ANTICIPATED ELECTRICITY PRODUCTION CAPACITY?

1	Α.	The maximum gross power production capacity of the facility will be 150 MW.
2	Q.	PLEASE DESCRIBE THE BASIC COMPONENTS OF THE FACILITY.
3	A.	Bethel NC 11 is a 150-MW PV array, and the sole source of its power is solar energy. The
4		facility will be a single-axis tracking, ground-mounted solar PV system, and the facility will
5		be comprised of solar arrays, inverters, generator step-up ("GSU") transformers, racking,
6		posts, wiring, utility poles, communication poles, security camera, collector station, and
7		accessories. A color map showing the proposed site boundary, layout with all major
8		equipment, roads, and, and electric facilities is attached to Exhibit 2 of the Application as
9		Schedule 2-2.
10	Q.	PLEASE DESCRIBE THE TRANSMISSION FACILITIES TO WHICH THE FACILITY WILL
11		INTERCONNECT AND HOW THE PROJECT WILL BE INTERCONNECTED TO THE GRID?
12	A.	The Bethel NC 11 Solar facility will interconnect with the Dominion Transmission system
13		via a new three breaker ring bus switching station connecting to the Elmont-Greenwood
14		DP 115 KV line #59. This new switching station will be adjacent to the Dominion
15		transmission line on land Bethel NC 11 Solar has acquired for this generating facility. The
16		generator collector substation will be adjacent to the new Dominion switching station.
17		A diagram showing the point of interconnection and the location of the collector station
18		is attached to the application as <u>Schedule 2-2</u> .
19		
20		
21		NEED FOR THE FACILITY
22	Q.	PLEASE EXPLAIN THE NEED FOR THE FACILITY.

Bethel NC 11 Solar will interconnect with the Dominion Energy transmission grid, providing the merchant plant with direct access to PJM, a Regional Transmission Organization ("RTO") in which Dominion participates. PJM coordinates the movement of electricity through all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the District of Columbia.

A.

Bethel NC 11 Solar believes that there are strong market conditions in the PJM market that will create sustainable off-take for its power production. Demand for renewable energy is expected to increase in the southeast over the expected lifetime of the project. Also, Dominion Energy has committed to increasing its use of renewable power to generate 5,000 MW of electricity by 2028. Dominion's commitment to renewable power is consistent with state-level policy set by the Virginia Assembly, which affirmed the importance of renewable energy generation in passing the Grid Transformation and Security Act of 2018 ("GTSA"), signed into law on March 9, 2018. The GTSA finds that up to an additional 5,000 MW of utility-scale electric generating facilities powered by solar and wind energy is in the public interest, along with up to an additional 500 MW of non-utility scale solar or wind generating facilities, including rooftop solar installations.

Bethel NC 11 Solar anticipates contracting for the sale of its energy, capacity, and Renewable Energy Credits ("RECs") through PJM. Load growth for the PJM RTO as a whole, and more specifically for the Dominion Virginia power zone, which serves parts of Eastern North Carolina and Virginia, is expected to increase over the next ten to fifteen years as described both for winter and summer months. Summer peak load is expected

to grow by 0.4% per year over the next ten years, and by 0.4% over the next fifteen years. (2018 PJM Load Forecast Report (Jan. 2018), available at.https://www.pjm.com/-/media/library/reports-notices/load-forecast/2019-rpm-load-forecast.ashx?la=en) For the Dominion Virginia Power zone, summer peak load growth is expected to grow by 0.8% per year over the next ten years, and 0.8% per year over the next fifteen years. *Id.* at 59-60. The anticipated ten-year summer peak load growth in the Dominion Virginia Power zone represents 2.6% growth over the January 2017 load forecast report. *Id.* at 54.

Wind peak load growth in PJM is expected to average 0.4% per year over the next ten-year period, and 0.4% over the next fifteen years. *Id.* at 2. Winter peak load growth in the Dominion Virginia Power zone is expected to grow by 0.9% per year over the next ten years, and 0.9% per year over the next nine to fifteen years. *Id.* at 63-64. The anticipated ten-year winter peak load growth in the Dominion Virginia Power zone represents 3.9% growth over the January 2017 load forecast report. *Id.* at 54.

North Carolina is expected to average between 0.8% and 0.9% per year over the next ten years, in contrast to the PJM RTO load growth projections of 0.4% over the next ten years.

Q. DESCRIBE THE OFF-TAKE PLANS FOR THE PROJECT.

A.

As mentioned above, the expectations of SunEnergy1 with respect to forecasts of the purchases of renewable power within the PJM market and elsewhere in the southeastern United States are strong. Furthermore, Bethel NC 11 Solar, is currenting negotiating to enter into a long-term purchase power agreement ("PPA") with an entity.

REGULATORY APPROVALS AND PERMITS

Q. DOES PITT COUNTY OR THE TOWN OF BETHEL HAVE A SOLAR ENERGY ORDINANCE?

1	Α.	Yes. Pitt County has a Solar Energy facility portion (Section EEEE) of its planning &
2		development services ordinance No. 14. The Solar Development Ordinance was adopted
3		by the Pitt County Board of Commissioners pursuant to the authority and provisions of
4		N.C. Gen. Stat. § 153A-121 (general ordinance-making power), N.C. Gen. Stat. § 153A-340
5		(grant of power), and other applicable law, provided nothing shall be interpreted to
6		conflict with or supersede any provision of N.C. Gen. Stat. § 153A-144 (limitations on
7		regulating solar collectors).
8	Q.	DESCRIBE THE PERMITS AND APPROVALS YOU ANTICIPATE WILL BE NECESSARY TO
9		COMMENCE CONSTRUCTION OF THE FACILITY.
10	A.	Bethel NC 11 Solar has obtained the Zoning Compliance from the Town of Bethel and is
11		working towards obtaining the Conditional Use Permit from Pitt County as required by
12		the Town of Bethel and Pitt County zoning requirements. The Town of Bethel and Pitt
13		County Board of Commissioners have final authority to approve Zoning Permit and
14		Conditional Use Permit respectively. A copy of the approved Zoning Compliance from the
15		Town of Bethel is attached and included in Schedule 2-3. In addition to the Conditional
16		Use Permit, Bethel NC 11 Solar will also have to obtain a Building Permit from Pitt
17		County.
18		From the State of North Carolina, the facility will require driveway permit(s) from
19		the North Carolina Department of Transportation, and approval of an erosion and
20		sedimentation control plan from the NC Department of Environmental Quality
21		("NCDEQ"). The project also will require a Certificate of Public Convenience and Necessity
22		for its construction.

In regard to federal permits and approvals, a wetland delineation for the entire site will be submitted to the US Army Corps of Engineers ("USACE"). Additionally, Bethel NC 11 Solar may apply for a Market-Based Rate Authorization from the Federal Energy Regulatory Commission ("FERC"), pursuant to Sections 205 and 206 of the Federal Power Act. The facility will also be registered as a Generator-Owner with the North American Electric Reliability Corporation ("NERC").

PLEASE DESCRIBE THE ANTICIPATED BENEFITS OF THE FACILITY TO THE LOCAL COMMUNITY.

Q.

A. The Bethel NC 11 Solar facility brings a variety of financial benefits to Pitt County and the Town of Bethel. Bethel NC 11 Solar anticipates that the County will realize property and real estate tax revenues from the project. Aside from these financial benefits, Bethel NC 11 Solar will also create community benefits. Bethel NC 11 Solar will enhance the County's reputation as an attractive and friendly environment for advance manufacturing, technology, and related jobs. Local contractors and businesses engaged in installation, fencing, landscaping, and machine rental companies, will receive sales opportunities during the facility 's construction, and also during its post-construction operations. During the approximately year-long construction process, the facility will offer full-time construction jobs. Bethel NC 11 Solar expects to hire up to 1,000 workers for the duration of the construction phases. Increased economic activity in the area is expected to increase revenue for local hotels, restaurants, service stores, and other vendors.

23 Q. WHAT ARE THE EXPECTED ENVIRONMENTAL IMPACTS OF THE FACILITY?

1	A.	By design and by its nature as a solar PV facility, the facility will provide clean renewable
2		power with minimal environmental impacts. The facility will create no air or water
3		emissions and no environmental contamination. There will be no noise impact outside of
4		the fence line. At the end of the facility's useful life, materials can be recycled or sold for
5		scrap, and the land can be returned to agricultural use.
6		OFF-TAKE PLANS
7	Q.	WHAT ARE THE LONG-TERM PLANS FOR OWNERSHIP OF THE PROJECT?
8	A.	Currently, Bethel NC 11 Solar is expected to own 100% of the power from this merchant
9		plant. It intends to sell the output into the PJM market. In the event of any change in
10		ownership interests or intended changes in uses of the output, the Applicant will notify
11		the Commission.
12		
13	Q.	DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
14	Α.	Yes.
15		

STATE OF NORTH CAROLINA COUNTY OF IREDELL **VERIFICATION** I, Linda Nwadike, being first duly sworn, depose and say that I am duly authorized to act on behalf of Bethel NC 11 Solar, LLC as Director of Permitting and Community Relations for SunEnergy1, LLC, the parent and an affiliate of the Petitioner; that I have read the foregoing Pre-Filed Direct Testimony and that the same is true and accurate to my personal knowledge and belief except where otherwise indicated, and in those instances, I believe my answers to be true. This 7day of August, 2020. Linda Nwadike SunEnergy1, LLC Sworn to and subscribed to before me day of August, 2020. My Commission Expires: 3/27/23

CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing <u>Bethel NC 11 Solar, LLC's</u>

<u>Application For a Certificate of Public Convenience and Necessity For</u>

<u>Merchant Plant</u> was served upon the following by electronic mail:

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This the day of August, 2020.

Joseph W. Eason