

**AGREEMENT FOR THE SALE
OF ELECTRICAL OUTPUT TO
VIRGINIA ELECTRIC AND POWER COMPANY**

THIS AGREEMENT, effective this 28th day of February, 2015, (the "Effective Date") by and between VIRGINIA ELECTRIC AND POWER COMPANY, a Virginia public service company with its principal office in Richmond, Virginia, doing business in Virginia as Dominion Virginia Power, and in North Carolina as Dominion North Carolina Power, hereinafter called "Dominion North Carolina Power" or "Company", and Northern Cardinal Solar LLC, a North Carolina limited liability company, with its principal office in Charlotte, North Carolina, hereinafter called "Operator", operator of the Northern Cardinal Solar Facility, hereinafter called the "Facility":

RECITALS

WHEREAS, the North Carolina Utilities Commission has adopted a rate schedule described in this Agreement below as **Schedule 19-FP** applicable to Qualifying Facilities (or "QF" as that term is defined in 18 C.F.R. § 292) which can provide Contracted Capacity (a) up to 5000 kW from a hydroelectric generating facility, (b) up to 5000 kW from a generating facility fueled by trash or methane derived from landfills, hog waste, poultry waste, solar, wind or non-animal forms of biomass, or (c) up to 3000 kW for all other QFs; and

WHEREAS, the parties hereto wish to contract for the sale of electrical output from such a QF to be operated by Operator,

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties hereto contract and agree with each other as follows:

Article 1: Parties' Purchase and Sale Obligations

Dominion North Carolina Power or its agent, assignee, or successor will purchase from Operator all of the electrical output (energy and Contracted Capacity) made available for sale from the Facility on an excess sale arrangement. In addition, Operator has elected to contract under the FP Method for determining the Company's avoided cost as described more fully in Exhibit C. Operator elects to operate the Facility in the Mode of Operation as specified in Section IV.C Firm Mode of Operation of Schedule 19-FP. The Facility is located in Dominion North Carolina Power's retail service area in Halifax County, North Carolina.

Article 2: Term and Commercial Operations Date

This Agreement shall commence on the Effective Date and shall continue in effect for a period of 15 years from the Commercial Operations Date ("COD"). The COD shall be the first date that all of the following conditions have been satisfied:

- a) The Facility has been permanently constructed, synchronized with and has delivered electrical output to the

Dominion North Carolina Power system and such action has been witnessed by an authorized Dominion North Carolina Power employee;

- b) After completion of item a) above, Dominion North Carolina Power has received written notice from Operator specifying the Commercial Operations Date and certifying that the Facility is ready to begin commercial operations as a Qualifying Facility;
- c) Operator and Dominion North Carolina Power (or the PJM Interconnection, LLC or other operator of the Dominion North Carolina Power transmission system, as applicable) have executed an Interconnection Agreement to be included herewith as Exhibit A;
- d) Operator has provided to Dominion North Carolina Power Qualifying Facility Certification to be included herewith as Exhibit E; and
- e) Operator either has received from the North Carolina Utilities Commission a Certificate of Public Convenience and Necessity or has filed the notice required by G.S. 62-110.1(g) and Commission Rule 8-65 and is not legally required to obtain such a certificate for the construction and operation of the Facility.

For contract terms of 10 years or more, this Agreement may be renewed at the option of Dominion North Carolina Power on substantially the same terms and conditions and at a rate either (1) mutually agreed upon by the parties negotiating in good faith and taking into consideration Dominion North Carolina Power's then avoided cost rates and other relevant factors or (2) set by arbitration.

Article 3: Contracted Capacity

The Facility, consisting of PV solar generators, will have a combined nameplate rating of approximately 2000 kW ac. The Facility's Contracted Capacity shall be 2000 kW ac net to Company.

Article 4: Attachments

The following documents are attached hereto and are made a part hereof:

- Exhibit A: Executed Interconnection Agreement (attached for information but not as a part of this Agreement)

- Exhibit B: General Terms and Conditions
- Exhibit C: Schedule 19-FP, Power Purchases from Cogeneration and Small Power Production Qualifying Facilities and applicable to the QF who chooses the FP Method (effective March 28, 2014 (as revised on October 30, 2014), sometimes referred to as "Schedule 19-FP" herein)
- Exhibit D: Map and related written description identifying the specific location of the Facility in the City or County designated in ARTICLE 1
- Exhibit E: "Qualifying Facility" Certification (if Facility is less than 1 MW, Owner submission that the Facility qualifies as a Qualifying Facility (QF) under federal law)
- Exhibit F: Certificate of Public Convenience and Necessity or evidence that no such certificate was required under North Carolina law in the form of a report of proposed construction to the Commission pursuant to Commission Rule 8-65.

Article 5: Price

Payments for all energy and Contracted Capacity purchased hereunder shall be determined by the provisions for payments in Schedule 19-FP included herewith as Exhibit C and pursuant to Operator elections within such Schedule 19-FP, if any, as stated in Article 1 hereof. Payments for all energy and Contracted Capacity purchased hereunder shall be on a cents per kilowatt-hour basis.

If Operator elects the Firm Mode of Operation, then for the term of this Agreement Operator shall be paid for firm energy, in accordance with Schedule 19 – FP, effective for usage on March 28, 2014 (as revised on October 30, 2014), the 15-year Fixed Long-Term Rate as provided for at Section VI.B of Schedule 19-FP. Payments for firm energy will begin on the Commercial Operations Date. All energy delivered per hour above the Contracted Capacity up to 105% of the Contracted Capacity shall be considered non-firm and be paid for at the applicable non-firm rate pursuant to Section V of Schedule 19-FP. No payment shall be made for energy delivered above 105% of the Contracted Capacity. All energy delivered prior to the Commercial Operations Date shall be considered non-firm and paid at the non-firm energy rate. In all cases, such non-firm energy rates will be those in the Schedule 19-FP in effect at the time such energy is delivered.

If Operator elects the Firm Mode of Operation, specified in Section IV.C of Schedule 19-FP, Operator shall be paid for Contracted Capacity on a cents per kilowatt-hour basis as specified in Schedule 19-FP, Section VII. Operator shall not be paid for capacity above the Contracted Capacity level in any hour during which the generation exceeds the Contracted Capacity level specified in Article 3.

Article 6: Reserved

Article 7: Operator's Pre-COD Obligations

After execution of this Agreement and until the Commercial Operations Date, Operator shall prepare a quarterly status report for Dominion North Carolina Power showing the current progress on completing the project. This status report shall be delivered to Dominion North Carolina Power on or before the following dates each year, January 15, April 15, July 15, and October 15. Such status report shall discuss the progress of the project in a format which is acceptable to Dominion North Carolina Power.

The Facility will be considered to have commenced construction on the first day upon which all of the following have occurred: (1) the issuance by Operator to its construction contractor for the Facility of a written unconditional Notice-to-Proceed; (2) the mobilization of major construction equipment and construction facilities on the Facility site; and (3) the commencement of major structural excavation and structural concrete work relating to a major component of the Facility such as the power island consistent with having commenced a continuous process of construction relating to the Facility. Dominion North Carolina Power shall have no obligation to accept a declaration of Commercial Operations prior to April 1, 2015. The anticipated Commercial Operations Date is October 1, 2015.

Article 8: Default and Early Termination

Operator and Dominion North Carolina Power agree that any of the following will be a material breach by the Operator of this Agreement and shall result in Dominion North Carolina Power having the right to immediate cancellation, without a cure period, of this Agreement: (i) failure to commence construction of the Facility, as defined in Article 7 above, by February 21, 2016 and provide Dominion North Carolina Power with written notice thereof, (ii) failure to achieve Commercial Operations Date within thirty months of February 21, 2014; provided, however, an Operator may be allowed additional time to begin deliveries of power to the Company if the QF facilities in question are nearly complete at the end of such thirty month period and the QF is able to demonstrate that it is making a good faith effort to complete its project in a timely manner, (iii) failure to provide two (2) consecutive status reports pursuant to Article 7 above, (iv) delivery or supply of electrical output to any entity other than Dominion North Carolina Power or its agent, assignee or successor, (v) failure to meet those requirements necessary to maintain Qualifying Facility status, (vi) failure at any time following COD to have in effect a valid Interconnection Agreement with Dominion North Carolina Power (or its successor as operator of the Dominion North Carolina transmission system), (vii) failure to generate and deliver power from the Facility to Dominion North Carolina Power for more than 180 consecutive days, at any time after the Commercial Operations Date, or (viii) failure to maintain QF certification. In the event Operator fails to perform in any way, materially or non-materially, any other obligations not specifically listed above, Operator shall be given notice and

performance. Notwithstanding any cure period, Dominion North Carolina Power shall not be obligated to purchase any energy or Contract Capacity under this Agreement while any such breach remains uncured. If Operator fails to cure its non-performance within thirty (30) days of Dominion North Carolina Power's notice, Dominion North Carolina Power shall have the right to cancel this Agreement. Operator agrees that if this Agreement is canceled by Dominion North Carolina Power for Operator's non-performance prior to the end of the initial term of this Agreement, then, Dominion North Carolina Power shall have all rights and remedies available at law or in equity.

Article 9: Representations and Warranties

Operator represents and warrants that it has the right to operate the Facility in accordance with the terms of this Agreement. Operator further represents and warrants that all permits, approvals, and/or licenses necessary for the operation of the Facility will be obtained prior to the Commercial Operations Date and shall be maintained throughout the Term of this Agreement. Operator shall, provide such documentation and evidence of such right, permits, approvals and/or licenses as Dominion North Carolina Power may reasonably request, including without limitation air permits, leases and/or purchase agreements.

Article 10: Notices and Payments

All correspondence and payments concerning this Agreement shall be to the addresses below. Either Party may change the address by providing written notice to the other Party.

<p>OPERATOR:</p> <p>Northern Cardinal Solar LLC 7804-C Fairview Rd #257 Charlotte, NC 28226 Interconnection@geenexsolar.com</p>	<p>DOMINION NORTH CAROLINA POWER:</p> <p>Virginia Electric and Power Company Power Contracts (3SE) 5000 Dominion Boulevard Glen Allen, Virginia 23060-6711</p>
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Article 11: Integration of Entirety of Agreement

This Agreement is intended by the Parties as the final expression of their Agreement and is intended also as a complete and exclusive statement of the terms of their Agreement with respect to the purchase and sale of electrical output generated by the Facility. All prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement are hereby abrogated and withdrawn.

IN WITNESS WHEREOF, the Parties hereto have caused their names to appear below, signed by authorized representatives as of the date first shown above.

Northern Cardinal Solar LLC

By: *G. Veit*

Title: ~~ana er~~ *Manager*

Date: ~~e r ar~~, 201 *28 / 2 / 15*

VIRGINIA ELECTRIC AND POWER COMPANY

By: *William D. Huppel*

Title: *Dir - Power Gen Reg Ops*

Date: *3/30/15*

EXHIBIT A
GENERATOR INTERCONNECTION GUIDANCE AND AGREEMENT

Dominion North Carolina Power's procedures for generator interconnection are available through the Internet at the Company's website with draft interconnection agreements for non-FERC jurisdictional generators (as approved by the NCUC included as Attachments 1, 2 and 3 thereto). For FERC jurisdictional generators interconnection shall be in accordance with FERC and PJM requirements.

The specific Internet address for these procedures is <https://www.dom.com/dominion-north-carolina-power/customer-service/rates-and-tariffs/pdf/term24.pdf>. The Internet site contains links to the Generator Interconnection Procedures along with the Generator Interconnection Request Form. Once an Interconnection Agreement is executed it will be included herewith as part of this Exhibit A.

EXHIBIT B
General Terms and Conditions

I - Assignments

Operator agrees not to assign this Agreement without the prior written consent of Dominion North Carolina Power. Dominion North Carolina Power may withhold such consent if it determines, in its sole discretion, that such assignment would not be in the best interests of Dominion North Carolina Power or its customers. Any attempted assignment that Dominion North Carolina Power has not approved in writing shall be null and void and ineffective for all purposes. In the event of assignment by Operator, Operator shall pay Company within thirty (30) days of the effective date of the assignment an amount equal to the actual costs incurred by Company in connection with such assignment up to a maximum amount of \$10,000 per assignment; provided, however, assignment of this Agreement by Operator in connection with an initial financing arrangement which is finalized and for which consent of Company is requested within nine months of the Effective Date of this Agreement shall not be subject to the payment requirement provided herein.

II - Indemnity

Operator shall indemnify and save harmless and, if requested by Dominion North Carolina Power, defend Dominion North Carolina Power, its officers, directors and employees from and against any and all losses and claims or demands for damages to real property or tangible personal property (including the property of Dominion North Carolina Power) and injury or death to persons arising out of, resulting from, or in any manner caused by the presence, operation or maintenance of any part of Operator's Facility; provided, however, that nothing herein shall be construed as requiring Operator to indemnify Dominion North Carolina Power for any injuries, deaths or damages caused by the sole negligence of Dominion North Carolina Power. Operator agrees to provide Dominion North Carolina Power written evidence of liability insurance coverage, which is specifically and solely for the Facility, prior to the operation of the Facility. Operator agrees to have Dominion North Carolina Power named as an additional insured, and shall keep such coverage current throughout the term of this Agreement.

III - QF Certification

Operator represents and warrants that its Facility meets the Qualifying Facility requirements established as of the Effective Date of this Agreement by the Federal Energy Regulatory Commission's rules (18 Code of Federal Regulations Part 292), and that it will continue to meet those requirements necessary to remain a Qualifying Facility throughout the term of this Agreement. [Dominion North Carolina Power may require "FERC" QF Certification by adding the following: "Operator agrees to obtain, at Operator's expense, a certification as a "QF" from the Federal Energy Regulatory Commission, in accordance with 18 C.F.R. § 292.207 (b)."] Operator agrees to provide copies, at the time of submittal, of all correspondence and filings with the Federal Energy Regulatory Commission relating to obtaining certification of the Facility as a

"QF". Operator will submit prior to delivery of electrical output from the Facility to Dominion North Carolina Power evidence of Qualifying Facility certification. After the Commercial Operations Date, if requested by Dominion North Carolina Power prior to March 1 of any year, Operator agrees to provide July 1 of the same year to Dominion North Carolina Power for the preceding year sufficient for Dominion North Carolina Power to determine the Operator's continuing compliance with its QF requirements, including but not limited to:

- (a) All information required by FERC Form 556.
- (b) Copy of the Facility's QF Certification and any subsequent revisions or amendments,
- (c) Provide a copy of any contract executed with a thermal host.
- (d) Identification of the amount of each type of fuel used per month and average heating value for each type of fuel, which will be used to determine the Total Energy Input. These values should be verifiable by auditing supporting documentation.
- (e) Identification of each of the QF's useful thermal output(s) for each month, including temperature, pressure, amount of thermal output delivered, temperature and amount of condensate returned (if applicable) and the conversion to Btus. These values should be verifiable by auditing supporting documentation.
- (f) Identification of the QF's useful power output for each month. These values should be verifiable by auditing supporting documentation.
- (g) Provide drawings, heat balance diagrams and a sufficiently detailed narrative describing the delivery of useful thermal output including the location, description, and calibration data for all metering equipment used for QF calculations.
- (h) Provide any other information which the QF believes will facilitate Dominion North Carolina Power's monitoring of the QF requirements.
- (i) Dominion North Carolina Power may request additional information, as needed, to monitor the QF requirements.

IV - Consequential Damages

In no event shall either Party be liable to the other for any special, indirect, incidental or consequential damages whatsoever, except that the foregoing shall not apply to any promises of indemnity or obligations to reimburse the Parties expressly set forth in this Agreement.

V - Amendments, Waivers, Severability and Headings

This Agreement, including the appendices thereto, can be amended only by agreement between the Parties in writing. The failure of either Party to insist in any one or more instances upon strict performance of any provisions of this Agreement, or to take advantage of any of its rights hereunder, shall not be construed as a waiver of any such provisions or the relinquishment of any such right or any other right hereunder. In the event any provision of this Agreement, or any part or portion thereof, shall be held to be invalid, void or otherwise unenforceable, the obligations of the Parties shall be deemed to be reduced only as much as may be required to remove the impediment. The headings contained in this Agreement are used solely for convenience and do not constitute a part of the Agreement between the Parties hereto, nor should they be used to aid in any manner in the construction of this Agreement.

VI - Compliance with Laws

Operator covenants that it shall comply with all applicable provisions of Executive Order 11246, as amended; § 503 of the Rehabilitation Act of 1973, as amended; § 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974, as amended; and implementing regulations set forth in 41 C.F.R. §§ 60.1, 60-250, and 60-741 and the applicable provisions relating to the utilization of small minority business concerns as set forth in 15 U.S.C. § 637, as amended. Operator agrees that the equal opportunity clause set forth in 41 C.F.R. § 60-1.4 and the equal opportunity clauses set forth in 41 C.F.R. § 250.5 and 41 C.F.R. 60-§741.5 and the clauses relating to the utilization of small and minority business concerns set forth in 15 U.S.C. § 637(d)(3) and 48 C.F.R. § 52-219.9 are hereby incorporated by reference and made a part of this Agreement. If this Agreement has a value of more than \$500,000, Operator shall adopt and comply with a small business and small disadvantaged business subcontracting plan which shall conform to the requirements set forth in 15 U.S.C. § 637(d)(6). The provisions of this section shall apply to Operator only to the extent that:

- (a) such provisions are required of Operator under existing law,
- (b) Operator is not otherwise exempt from said provisions and
- (c) Compliance with said provisions is consistent with and not violative of 42 U.S.C. § 2000 et seq., 42 U.S.C. § 1981 et seq., or other acts of Congress.

VII - Interconnection and Operation

Operator shall be responsible for the design, installation, and operation of its Facility. Operator shall be responsible for obtaining an Interconnection Agreement. Interconnection guidelines and agreement requirements are set forth in Exhibit A of this Agreement.

Operator shall: (a) maintain the Facility and the Interconnection Facilities on Operator's side of the Interconnection Point, except Dominion North Carolina Power-owned Interconnection Facilities, in conformance with all applicable laws and regulations and in accordance with operating procedures; (b) obtain any governmental authorizations and permits required for the

construction and operation thereof and keep all such permits and authorizations current and in effect; and (c) manage the Facility in a safe and prudent manner. If at any time Operator does not hold such authorizations and permits, Dominion North Carolina Power may refuse to accept deliveries of power hereunder.

Dominion North Carolina Power may enter Operator's premises (a) to inspect Operator's protective devices at any reasonable time; (b) to read or test meters and metering equipment; and (c) to disconnect, without notice, the Facility if, in Dominion North Carolina Power's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, or Dominion North Carolina Power facilities or other customers' facilities from damage or interference caused by Operator's Facility or lack of properly operating protective devices. Dominion North Carolina Power will endeavor to notify Operator as quickly as practicable if disconnection occurs as provided in (c) above. Any inspection of Operator's protective devices shall not impose on Dominion North Carolina Power any liabilities with respect to the operation, safety or maintenance of such devices.

Operator shall not operate the Facility in parallel with Dominion North Carolina Power's system prior to (a) an inspection of the installed Interconnection Facilities by an authorized Dominion North Carolina Power representative and (b) receiving written authorization from an authorized Dominion North Carolina Power representative to begin parallel operation.

VIII - Metering

Dominion North Carolina Power will meter all electrical output delivered from the Facility on the high voltage side of the step up transformer.

Operator agrees to pay an administrative charge to Dominion North Carolina Power to reflect all reasonable costs incurred by Dominion North Carolina Power for meter reading and billing, also referred to as metering charges. The monthly meter reading and billing charge shall change from time to time when the NCUC approves a different charge in Schedule 19-FP.

In addition, Operator agrees to pay any fees required to provide and maintain leased telephone lines required for meter reading by Dominion North Carolina Power.

IX - Billing and Payment

Dominion North Carolina Power shall read the meter in accordance with its normal meter reading schedule. Within twenty-eight (28) days thereafter, Dominion North Carolina Power shall send Operator payment for energy and Contracted Capacity delivered. At Dominion North Carolina Power's option, (i) Dominion North Carolina Power may make such payments net of the monthly metering charges, Interconnection Facilities charges, and charges for sales of electricity to the Operator, or (ii) Dominion North Carolina Power may invoice Operator for such charges separately. Payment by Dominion North Carolina Power shall include verification showing the billing month's ending meter reading, on-peak and off-peak kWh, and the amount paid. If in any month the monthly metering and Interconnection Facilities charges are in excess of any payments due Operator, Dominion North Carolina Power shall bill Operator for the difference and Operator

shall make such payment within 28 days of the invoice date. Failure by Operator to make such payments may result in disconnection of the Facility. In no event shall such disconnection relieve Operator of its obligation to pay monthly metering charges and Interconnection Facilities charges under this Agreement.

In the event that any data required for billing purposes hereunder are unavailable when required for such billing, the unavailable data shall be estimated by Dominion North Carolina Power, based upon historical data. Such billing shall be subject to any required adjustment in a subsequent billing month.

Operator agrees that Dominion North Carolina Power shall be entitled to withhold sufficient amounts due pursuant to this Agreement to offset (a) any damages to Dominion North Carolina Power resulting from any breach of this Agreement by Operator, and (b) any other amounts Operator owes Dominion North Carolina Power, including amounts arising from sales of electricity by Dominion North Carolina Power to Operator, metering charges and Interconnection Facilities charges.

In no event shall Dominion North Carolina Power be liable to Operator for any Contracted Capacity payments in excess of the amounts contracted for herein, regardless of the ultimate length of this Agreement or revisions to Schedule 19-FP or successor schedules. Operator hereby agrees to accept the Contracted Capacity payments as set forth herein as its sole and complete compensation for delivery of Contracted Capacity to Dominion North Carolina Power.

X - Force Majeure

Neither Party shall be considered in default under this Agreement or responsible to the other Party in tort, strict liability, contract or other legal theory for damages of any description for any interruption or failure of service or deficiency in the quality or quantity of service or any other failure to perform any of its obligations hereunder to the extent such failure occurs without fault or negligence on the part of that Party and is caused by factors beyond that Party's reasonable control, which by the exercise of reasonable diligence that Party is unable to prevent, avoid, mitigate or overcome, including without limitation storm, flood, lightning, earthquake, explosion, equipment failure, civil disturbance, labor dispute, act of God or public enemy, action or inaction of a court or public authority, fire, sabotage, war, explosion, curtailments, unscheduled withdrawal of facilities from operation for maintenance or repair or any other cause of similar nature beyond the reasonable control of that Party (any such event, "Force Majeure"). Solely economic hardship of either Party shall not constitute Force Majeure under this Agreement. Nor shall anything contained in this paragraph or elsewhere in this Agreement excuse Operator or Dominion North Carolina Power from strict compliance with the obligation of the Parties to comply with the terms of Article IX of this Exhibit B relating to timely payments.

Each Party shall have the obligation to operate in accordance with Good Utility Practice (as defined below) at all times and to use due diligence to overcome and remove any cause of failure to perform.

If a Party relies on the occurrence of an event of Force Majeure described above as a basis for being excused from performance of its obligations under this Agreement, then the Party relying on the Force Majeure event shall:

a) Provide within forty-eight (48) hours written notice of such Force Majeure event or potential Force Majeure to the other Party, giving an estimate of its expected duration and the probable impact on the performance of its obligations hereunder;

b) Exercise all reasonable efforts to continue to perform its obligations under this Agreement;

c) Expeditiously take action to correct or cure the Force Majeure event excusing performance; provided, however, that settlement of strikes or other labor disputes will be completely within the sole discretion of the Party affected by such strike or labor dispute;

d) Exercise all reasonable efforts to mitigate or limit damages to the other Party; and

e) Provide prompt notice to the other Party of the cessation of the Force Majeure event giving rise to its excuse from performance. All performance obligations hereunder shall be extended by a period equal to the term of the resultant delay.

If a Party responding to a Force Majeure event has the ability to obtain, for additional expenditures, expedited material deliveries or labor production which would allow a response to the event in a manner that is above and beyond Good Utility Practice, and such a response could shorten the duration of the Force Majeure event, the Party responding to the event may, at its discretion, present the other Party with the option of funding the expenditures for expediting material deliveries or labor production in an effort to reduce the duration of the event and economic hardship. Each such opportunity will be negotiated on a case-by-case basis by the Parties.

For purposes of this Agreement, "Good Utility Practice" shall mean any of the applicable practices, methods, standards, guides or acts: required by any governmental authority, regional or national reliability council, or national trade organization, including NERC, SERC, or the successor of any of them, as they may be amended from time to time whether or not the Party whose conduct is at issue is a member thereof; otherwise engaged in or approved by a significant portion of the electric utility industry during the relevant time period which in the exercise of reasonable judgment in light of the facts known or that should have been known at the time a decision was made, could have been expected to accomplish the desired result in a manner consistent with law, regulation, good business practices, generation, transmission and distribution reliability, safety, environmental protection, economy and expediency. Good Utility Practice is intended to be acceptable practices, methods, or acts generally accepted in the region, or any other acts or practices as are reasonably necessary to maintain the reliability of the Transmission System (as defined in the Interconnection Agreement), or of the Facility, and is not intended to be limited to the optimum practices, methods, or acts to the exclusion of all others.

EXHIBIT C

Exhibit C is a copy of Schedule 19-FP.

Schedule 19 - FP
POWER PURCHASES FROM
COGENERATION AND SMALL POWER PRODUCTION
QUALIFYING FACILITIES

I. APPLICABILITY AND AVAILABILITY

This schedule is applicable to any qualifying Cogenerator or Small Power Producer (Qualifying Facility) which desires to deliver all of its net electrical output to the Company, has either (1) generating facilities designated as new capacity as defined by 18 C.F.R. § 292.304(b)(1), or (2) hydroelectric generating facilities that meet the criteria of being owned or operated by a small power producer as defined in G.S. 62-3(27a), and enters into an agreement for the sale of net electrical output to the Company (Agreement).

Unless otherwise provided by a Commission order setting forth different availability dates, this schedule is available to any Qualifying Facility (otherwise eligible pursuant to the terms hereof) that by November 1, 2014 or the date upon which proposed rates are filed in Docket No. E-100 Sub 140, if later than November 1, 2014, (a) has obtained a certificate of public convenience and necessity for its facility from the Commission or filed a report of proposed construction with the Commission pursuant to Commission Rule 8-65, and (b) has indicated to the Company in writing that it is committed to selling the output of the facility to the Company pursuant to the terms of this schedule.

Where the Qualifying Facility (QF) elects to be compensated for firm deliveries in accordance with this schedule, the amount of capacity under contract and the initial term of contract shall be limited as follows:

- A. Where the QF operates hydroelectric generating facilities that meet the criteria of being owned or operated by a small power producer as defined in G.S. 62-3(27a), or where the QF operates non-hydroelectric QFs fueled by trash or methane derived from landfills, hog waste, poultry waste, solar, wind, and non-animal forms of biomass, the amount of capacity subject to compensation shall be no greater than 5,000 kW, and the amount of energy purchased during a given hour at rates applicable to firm deliveries shall be no greater than 5,000 kWh. The initial term of contract for such a QF shall be for a period of 5, 10, or 15 years, at the option of the QF.
- B. Where the QF is not defined under Paragraph I.A., the amount of capacity subject to compensation shall be no greater than 3,000 kW, and the amount of energy purchased during a given hour at rates applicable to firm deliveries shall be no greater than 3,000 kWh. The initial term of contract for such a QF shall be for a period of 5 years.

(Continued)

Filed 10-30-14
Electric-North Carolina

Amending Filing Effective For Usage On and After
03-28-14. This Filing Effective For Usage On and
After 03-28-14.

Virginia Electric and Power Company

Schedule 19 - FP
POWER PURCHASES FROM
COGENERATION AND SMALL POWER PRODUCTION
QUALIFYING FACILITIES

(Continued)

I. APPLICABILITY AND AVAILABILITY (Continued)

Where the QF elects to be compensated for firm or non-firm deliveries in accordance with this schedule, the QF must begin deliveries to the Company within thirty months of February 21, 2014 to retain eligibility for the rates contained in this schedule; provided, however, a QF may be allowed additional time to begin deliveries of power to the Company if the QF facilities in question are nearly complete at the end of such thirty month period and the QF is able to demonstrate that it is making a good faith effort to complete its project in a timely manner. Where the QF elects an initial contract term of 10 or more years, such contract may be renewed for subsequent term(s), at the Company's option, based on substantially the same terms and provisions and at a rate either (1) mutually agreed upon by the parties negotiating in good faith and taking into consideration the Company's then avoided cost rates and other relevant factors or (2) set by arbitration.

This schedule is not applicable to a QF owned by a developer, or affiliate of a developer, who sells power to the Company from another facility located within one-half mile unless: (1) each facility provides thermal energy to different, unaffiliated hosts; (2) each facility provides thermal energy to the same host, and the host has multiple operations with distinctly different or separate thermal needs; or (3) each facility utilizes a renewable resource which may be subject to geographic siting limitations, such as hydroelectric, solar, or wind power facilities.

II. MONTHLY BILLING TO THE QF

All sales to the QF will be in accordance with any applicable filed rate schedule. In addition, where the QF contracts for sales to the Company, the QF will be billed a monthly charge equal to one of the following to cover the cost of meter reading and processing:

(Continued)

Filed 10-30-14
Electric-North Carolina

Amending Filing Effective For Usage On and After
03-28-14. This Filing Effective For Usage On and
After 03-28-14.

Docket No. E-100, Sub 136

Oct 30 2014 OFFICIAL COPY
Mar 30 2016 OFFICIAL COPY

Virginia Electric and Power Company

Schedule 19 - FP
POWER PURCHASES FROM
COGENERATION AND SMALL POWER PRODUCTION
QUALIFYING FACILITIES

(Continued)

II. MONTHLY BILLING TO THE QF (Continued)

<u>Metering required</u>	<u>Charge</u>
One non-time-differentiated meter	\$17.24
One time-differentiated meter	\$35.55
Two time-differentiated meters	\$41.16

III. DEFINITION OF ON- AND OFF-PEAK HOURS

A. For Option A Rates the On-Peak Hours are:

Summer

- (i) For the periods beginning at 12:00 midnight March 31 and ending at 12:00 midnight September 30:

The on-peak hours are defined as the hours between 10:00 am and 10:00 pm., Monday through Friday, excluding holidays considered as off-peak.

Non-Summer

- (ii) For the periods beginning at 12:00 midnight September 30 and ending at 12:00 midnight March 31:

The on-peak hours are defined as those hours between 6:00 am and 1:00 pm., plus 4:00 p.m. through 9:00 p.m., Monday through Friday, excluding holidays considered as off-peak.

(Continued)

Filed 10-30-14
Electric-North Carolina

Amending Filing Effective For Usage On and After
03-28-14. This Filing Effective For Usage On and
After 03-28-14.

Docket No. E-100, Sub 136

Oct 30 2014 OFFICIAL COPY
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Virginia Electric and Power Company

Schedule 19 - FP
POWER PURCHASES FROM
COGENERATION AND SMALL POWER PRODUCTION
QUALIFYING FACILITIES

(Continued)

III. DEFINITION OF ON- AND OFF-PEAK HOURS (Continued)

B. For Option B Rates the On-Peak Hours are:

Summer

- (i) For the periods beginning at 12:00 midnight May 31 and ending at 12:00 midnight September 30:

The on-peak hours are defined as the hours between 1:00 pm and 9:00 pm., Monday through Friday, excluding holidays considered as off-peak.

Non-Summer

- (ii) For the periods beginning at 12:00 midnight September 30 and ending at 12:00 midnight May 31:

The on-peak hours are defined as those hours between 6:00 am and 1:00 pm. Monday through Friday, excluding holidays considered as off-peak.

C. Off-Peak Hours:

The off-peak hours in any month are defined as all hours not specified above as on-peak hours. All hours for the following holidays will be considered as off-peak: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day after Thanksgiving, and Christmas Day. When one of the above holidays falls on a Saturday, the Friday before the holiday will be considered off-peak; when the holiday falls on a Sunday, the following Monday will be considered off-peak.

(Continued)

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**Schedule 19 - FP
POWER PURCHASES FROM
COGENERATION AND SMALL POWER PRODUCTION
QUALIFYING FACILITIES**

(Continued)

IV. CONTRACT OPTIONS FOR DESIGNATING MODE OF OPERATION

The QF shall designate under contract its Mode of Operation from the following options, each of which determines the Company's method of payment.

- A. The QF may contract for the delivery of energy to the Company without reimbursement, designated as the Non-reimbursement Mode of Operation; or,
- B. The QF may contract for the delivery of non-firm energy to the Company (no payment for capacity). This option includes QFs that elect to contract to deliver non-firm energy to the Company on an as-available basis. Where the QF's generation facilities have an aggregate nameplate rating of 100 kW or less the QF may designate the Non-firm, Non-time-differentiated Mode of Operation. Regardless of nameplate rating the QF may designate the Non-firm, Time-differentiated Mode of Operation.
- C. The QF may contract for the delivery of firm energy and capacity to the Company. The level of capacity which the QF contracts to sell to the Company shall not exceed 5,000 kW, where the QF is defined under Paragraph I.A., or 3,000 kW otherwise. This capacity level, in kW, shall be referred to as the Contracted Capacity. When the QF elects to sell firm energy and capacity, the QF shall designate the Firm Mode of Operation.

V. PAYMENT FOR COMPANY PURCHASES OF NON-FIRM ENERGY

The QF may contract to receive payment for energy at rates to be determined with each revision of this schedule. These rates will be based upon the QF's Mode of Operation as described below. There are no capacity payments for the QFs that contract for non-firm energy.

(Continued)

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POWER PURCHASES FROM
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QUALIFYING FACILITIES

(Continued)

V. PAYMENT FOR COMPANY PURCHASES OF NON-FIRM ENERGY
(Continued)

- A. Non-reimbursement Mode of Operation. Where the QF designates the Non-Reimbursement Mode of Operation, no payment will be made for energy delivered.
- B. Non-time-differentiated Mode of Operation. Where the QF's generation facilities have an aggregate nameplate rating of 100 kW or less and the QF designates the Non-Firm, Non-time-differentiated Mode of Operation, the following rates in cents per kWh are applicable:

3.843

- C. Time-differentiated Mode of Operation. Where the QF designates the Time-differentiated Mode of Operation, the following On- and Off-peak rates in cents per kWh are applicable:

On-peak	4.541
Off-peak	3.455

All energy purchase rates will be further increased by 3.0% to account for line losses avoided by the Company, except that upon the effective date of any Schedule 19 that is subsequently amended and approved by the Commission, the line loss percentage applied shall be the percentage stated in the then-current Schedule 19. In lieu of 3.0% or the line loss percentage stated in the then-current Schedule 19, the QF may request that a site specific line loss percentage be determined with the QF bearing the cost of the study required.

(Continued)

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POWER PURCHASES FROM
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QUALIFYING FACILITIES

(Continued)

VI. PAYMENT FOR COMPANY PURCHASES OF FIRM ENERGY

QFs designating the Firm Mode of Operation will be eligible to receive purchase payments for the delivery of firm energy by the QF to the Company. The QF may contract to receive payments for firm energy based on A or B, below. Contract terms for 10 or 15 years are available only where the QF is defined under Paragraph I.A.

The QF may contract to receive payment for firm time-differentiated energy at rates to be determined with each revision of this schedule (Variable Rate). These rates in cents per kWh, which reflect the Company's estimated avoided energy cost for delivery of firm energy during 2013 or 2014, are as shown in the price tables below:

- A. Option A: The QF may contract to receive energy purchase payments for the delivery of firm energy based upon fixed prices, as shown below in cents per kWh:

		<u>Fixed Long-Term Rate</u>		
	<u>Variable Rate</u>	<u>5-Year</u>	<u>10-Year</u>	<u>15-Year</u>
On-Peak (¢/kWh)	4.541	5.055	5.526	5.813
Off-Peak (¢/kWh)	3.455	3.964	4.388	4.661

- B. Option B: The QF may contract to receive energy purchase payments for the delivery of firm energy based upon fixed prices, as shown below in cents per kWh:

(Continued)

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(Continued)

VI. PAYMENT FOR COMPANY PURCHASES OF FIRM ENERGY (Continued)

		<u>Fixed Long-Term Rate</u>		
	<u>Variable Rate</u>	<u>5-Year</u>	<u>10-Year</u>	<u>15-Year</u>
On-Peak (¢/kWh)	4.663	5.194	5.675	5.962
Off-Peak (¢/kWh)	3.614	4.119	4.549	4.824

Any energy delivered above 100% up to 105% of QF's Contracted Capacity in any hour will be purchased at the then applicable non-firm energy rates under Schedule 19-FP. There will be no reimbursement for any energy delivered above 105% of QF's Contracted Capacity.

All energy purchase rates will be further increased by 3.0% to account for line losses avoided by the Company, except upon the effective date of any Schedule 19 that is subsequently amended and approved by the Commission, the line loss percentage applied shall be the percentage stated in the then-current Schedule 19. In lieu of 3.0% or the line loss percentage stated in the then-current Schedule 19, the QF may request that a site specific line loss percentage be determined with the QF bearing the cost of the study required.

VII. PAYMENT FOR COMPANY PURCHASES OF CAPACITY

Company purchases of capacity are applicable only where the QF elects the Firm Mode of Operation. Capacity payments are applicable during on-peak hours only. Such QFs shall receive capacity purchase payments based on the applicable levelized capacity purchase price below, in cents per kWh, corresponding to the contract length in years. Contract terms for 10 or 15 years are available only where the QF is defined under Paragraph I.A.

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(Continued)

VII. PAYMENT FOR COMPANY PURCHASES OF CAPACITY (Continued)

Option A:

For hydroelectric facilities with no storage capability and no other type of generation:

	Capacity Price		
	5-Year	10-Year	15-Year
On-Peak (¢/kWh) Summer	5.895	6.095	6.263
On-Peak (¢/kWh) Non-summer	3.930	4.063	4.175

For all other facilities:

	Capacity Price		
	5-Year	10-Year	15-Year
On-Peak (¢/kWh) Summer	3.537	3.657	3.758
On-Peak (¢/kWh) Non-summer	2.358	2.438	2.505

Option B:

For hydroelectric facilities with no storage capability and no other type of generation:

	Capacity Price		
	5-Year	10-Year	15-Year
On-Peak (¢/kWh) Summer	13.524	13.982	14.368
On-Peak (¢/kWh) Non-summer	5.214	5.390	5.539

For all other facilities:

	Capacity Price		
	5-Year	10-Year	15-Year
On-Peak (¢/kWh) Summer	8.115	8.389	8.621
On-Peak (¢/kWh) Non-summer	3.128	3.234	3.323

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(Continued)

VII. PAYMENT FOR COMPANY PURCHASES OF CAPACITY (Continued)

Payments will be made to the QF by applying the appropriate levelized capacity purchase price above to all kWh delivered to the Company during each on-peak hour, up to the 100% of the Contracted Capacity in such hour. There will be no compensation for capacity in excess of the QF's Contracted Capacity in an hour. This capacity price will be in accordance with the length of rate term for capacity sales so established in the contract.

VIII. PROVISIONS FOR COMPANY PURCHASE OF THE QF GENERATION

- A. The QF shall own and be fully responsible for the costs and performance of the QF's:
 - 1. Generating facility in accordance with all applicable laws and governmental agencies having jurisdiction;
 - 2. Control and protective devices as required by the Company on the QF's side of the meter.
- B. The sale of power to the Company by a QF at avoided cost rates pursuant to this Schedule 19-FP does not convey ownership to the Company of the renewable energy credits or green tags associated with the QF facility.
- C. Upon request by the Company, the Cogenerator or Small Power Producer must demonstrate that the facility is a Qualifying Facility as defined by PURPA.
- D. Interconnection procedures for the QF's generation interconnection are provided through the Internet at the Company's website;
<http://www.dom.com/dominion-north-carolina-power/customer-service/rates-and-tariffs/pdf/term24.pdf>.

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(Continued)

IX. MODIFICATION OF RATES AND OTHER PROVISIONS HEREUNDER

The provisions of this schedule, including the rates for purchase of energy and Contracted Capacity by the Company, are subject to modification at any time in the manner prescribed by law, and when so modified, shall supersede the rates and provisions hereof. However, payments to QFs with contracts for a specified term at payments established at the time the obligation is incurred shall remain at the payment levels established in their contract with the exception of the line loss percentage applied which shall be the percentage stated in the then-current Schedule 19.

If the QF terminates its contract to provide Contracted Capacity and energy to the Company prior to the expiration of the contract term, the QF shall, in addition to other liabilities, be liable to the Company for excess capacity and energy payments.

Such excess payments will be calculated by taking the difference between (1) the total capacity and energy payments already made by the Company to the QF and (2) capacity and energy payments calculated based on the levelized capacity and energy purchase price found in Paragraph VI and VII corresponding to the highest term option completed by the QF. These excess payments shall also include interest, from the time such excess payments were made, compounded annually at the rate equal to the Company's most current issue of long-term debt at the time of the contract's effective date.

X. TERM OF CONTRACT

The term of contract shall be such as may be mutually agreed upon but for not less than one year.

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EXHIBIT D

Exhibit D is a map and written description identifying the specific location of the Facility and is provided by the Operator.



GEENEX
german
engineering
experience

Exhibit A



EXHIBIT E

Exhibit E is the "Qualifying Facility" Certification to be provided by the Operator.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control# 1902-0075
Expiration 05/31/2016

Form 556

Certification of Qualifying Facility (QF) Status for a Small Power
Production or Cogeneration Facility

General

Questions about completing this form should be sent to Form556@ferc.gov. Information about the Commission's QF program, answers to frequently asked questions about QF requirements or completing this form, and contact information for QF program staff are available at the Commission's QF website, www.ferc.gov/QF. The Commission's QF website also provides links to the Commission's QF regulations (18 C.F.R. § 131.80 and Part 292), as well as other statutes and orders pertaining to the Commission's QF program.

Who Must File

Any applicant seeking QF status or recertification of QF status for a generating facility with a net power production capacity (as determined in lines 7a through 7g below) greater than 1000 kW must file a self-certification or an application for Commission certification of QF status, which includes a properly completed Form 556. Any applicant seeking QF status for a generating facility with a net power production capacity 1000 kW or less is exempt from the certification requirement, and is therefore not required to complete or file a Form 556. See 18 C.F.R. § 292.203.

How to Complete the Form 556

This form is intended to be completed by responding to the items in the order they are presented, according to the instructions given. If you need to back-track, you may need to clear certain responses before you will be allowed to change other responses made previously in the form. If you experience problems, click on the nearest help button () for assistance, or contact Commission staff at Form556@ferc.gov.

Certain lines in this form will be automatically calculated based on responses to previous lines, with the relevant formulas shown. You must respond to all of the previous lines within a section before the results of an automatically calculated field will be displayed. If you disagree with the results of any automatic calculation on this form, contact Commission staff at Form556@ferc.gov to discuss the discrepancy before filing.

You must complete all lines in this form unless instructed otherwise. Do not alter this form or save this form in a different format. Incomplete or altered forms, or forms saved in formats other than PDF, will be rejected.

How to File a Completed Form 556

Applicants are required to file their Form 556 electronically through the Commission's eFiling website (see instructions on page 2). By filing electronically, you will reduce your filing burden, save paper resources, save postage or courier charges, help keep Commission expenses to a minimum, and receive a much faster confirmation (via an email containing the docket number assigned to your facility) that the Commission has received your filing.

If you are simultaneously filing both a waiver request and a Form 556 as part of an application for Commission certification, see the "Waiver Requests" section on page 3 for more information on how to file.

Paperwork Reduction Act Notice

This form is approved by the Office of Management and Budget. Compliance with the information requirements established by the FERC Form No. 556 is required to obtain or maintain status as a QF. See 18 C.F.R. § 131.80 and Part 292. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The estimated burden for completing the FERC Form No. 556, including gathering and reporting information, is as follows: 3 hours for self-certification of a small power production facility, 8 hours for self-certifications of a cogeneration facility, 6 hours for an application for Commission certification of a small power production facility, and 50 hours for an application for Commission certification of a cogeneration facility. Send comments regarding this burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the following: Information Clearance Officer, Office of the Executive Director (ED-32), Federal Energy Regulatory Commission, 888 First Street N.E., Washington, DC 20426 (DataClearance@ferc.gov); and Desk Officer for FERC, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 (aira_submission@omb.eop.gov). Include the Control No. 1902-0075 in any correspondence.

Electronic Filing (eFiling)

To electronically file your Form 556, visit the Commission's QF website at www.ferc.gov/QF and click the eFiling link.

If you are eFiling your first document, you will need to register with your name, email address, mailing address, and phone number. If you are registering on behalf of an employer, then you will also need to provide the employer name, alternate contact name, alternate contact phone number and alternate contact email.

Once you are registered, log in to eFiling with your registered email address and the password that you created at registration. Follow the instructions. When prompted, select one of the following QF-related filing types, as appropriate, from the Electric or General filing category.

Filing category	Filing Type as listed in eFiling	Description
Electric	(Fee) Application for Commission Cert. as Cogeneration QF	Use to submit an application for Commission certification or Commission recertification of a cogeneration facility as a QF.
	(Fee) Application for Commission Cert. as Small Power QF	Use to submit an application for Commission certification or Commission recertification of a small power production facility as a QF.
	Self-Certification Notice (QF, EG, FC)	Use to submit a notice of self-certification of your facility (cogeneration or small power production) as a QF.
	Self-Recertification of Qualifying Facility (QF)	Use to submit a notice of self-recertification of your facility (cogeneration or small power production) as a QF.
	Supplemental Information or Request	Use to correct or supplement a Form 556 that was submitted with errors or omissions, or for which Commission staff has requested additional information. <i>Do not</i> use this filing type to report new changes to a facility or its ownership; rather, use a self-recertification or Commission recertification to report such changes.
General	(Fee) Petition for Declaratory Order (not under FPA Part 1)	Use to submit a petition for declaratory order granting a waiver of Commission QF regulations pursuant to 18 C.F.R. §§ 292.204(a) (3) and/or 292.205(c). A Form 556 is not required for a petition for declaratory order unless Commission recertification is being requested as part of the petition.

You will be prompted to submit your filing fee, if applicable, during the electronic submission process. Filing fees can be paid via electronic bank account debit or credit card.

During the eFiling process, you will be prompted to select your file(s) for upload from your computer.

Filing Fee

No filing fee is required if you are submitting a self-certification or self-recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(a).

A filing fee is required if you are filing either of the following:

- (1) an application for Commission certification or recertification of your facility as a QF pursuant to 18 C.F.R. § 292.207(b), or
- (2) a petition for declaratory order granting waiver pursuant to 18 C.F.R. §§ 292.204(a)(3) and/or 292.205(c).

The current fees for applications for Commission certifications and petitions for declaratory order can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Fee Schedule link.

You will be prompted to submit your filing fee, if applicable, during the electronic filing process described on page 2.

Required Notice to Utilities and State Regulatory Authorities

Pursuant to 18 C.F.R. § 292.207(a)(ii), you must provide a copy of your self-certification or request for Commission certification to the utilities with which the facility will interconnect and/or transact, as well as to the State regulatory authorities of the states in which your facility and those utilities reside. Links to information about the regulatory authorities in various states can be found by visiting the Commission's QF website at www.ferc.gov/QF and clicking the Notice Requirements link.

What to Expect From the Commission After You File

An applicant filing a Form 556 electronically will receive an email message acknowledging receipt of the filing and showing the docket number assigned to the filing. Such email is typically sent within one business day, but may be delayed pending confirmation by the Secretary of the Commission of the contents of the filing.

An applicant submitting a self-certification of QF status should expect to receive no documents from the Commission, other than the electronic acknowledgement of receipt described above. Consistent with its name, a self-certification is a certification *by the applicant itself* that the facility meets the relevant requirements for QF status, and does not involve a determination by the Commission as to the status of the facility. An acknowledgement of receipt of a self-certification, in particular, does not represent a determination by the Commission with regard to the QF status of the facility. An applicant self-certifying may, however, receive a rejection, revocation or deficiency letter if its application is found, during periodic compliance reviews, not to comply with the relevant requirements.

An applicant submitting a request for Commission certification will receive an order either granting or denying certification of QF status, or a letter requesting additional information or rejecting the application. Pursuant to 18 C.F.R. § 292.207(b)(3), the Commission must act on an application for Commission certification within 90 days of the later of the filing date of the application or the filing date of a supplement, amendment or other change to the application.

Waiver Requests

18 C.F.R. § 292.204(a)(3) allows an applicant to request a waiver to modify the method of calculation pursuant to 18 C.F.R. § 292.204(a)(2) to determine if two facilities are considered to be located at the same site, for good cause. 18 C.F.R. § 292.205(c) allows an applicant to request waiver of the requirements of 18 C.F.R. §§ 292.205(a) and (b) for operating and efficiency upon a showing that the facility will produce significant energy savings. A request for waiver of these requirements must be submitted as a petition for declaratory order, with the appropriate filing fee for a petition for declaratory order. Applicants requesting Commission recertification as part of a request for waiver of one of these requirements should electronically submit their completed Form 556 along with their petition for declaratory order, rather than filing their Form 556 as a separate request for Commission recertification. Only the filing fee for the petition for declaratory order must be paid to cover both the waiver request and the request for recertification *if such requests are made simultaneously*.

18 C.F.R. § 292.203(d)(2) allows an applicant to request a waiver of the Form 556 filing requirements, for good cause. Applicants filing a petition for declaratory order requesting a waiver under 18 C.F.R. § 292.203(d)(2) do not need to complete or submit a Form 556 with their petition.

Geographic Coordinates

If a street address does not exist for your facility, then line 3c of the Form 556 requires you to report your facility's geographic coordinates (latitude and longitude). Geographic coordinates may be obtained from several different sources. You can find links to online services that show latitude and longitude coordinates on online maps by visiting the Commission's QF webpage at www.ferc.gov/QF and clicking the Geographic Coordinates link. You may also be able to obtain your geographic coordinates from a GPS device, Google Earth (available free at <http://earth.google.com>), a property survey, various engineering or construction drawings, a property deed, or a municipal or county map showing property lines.

Filing Privileged Data or Critical Energy Infrastructure Information in a Form 556

The Commission's regulations provide procedures for applicants to either (1) request that any information submitted with a Form 556 be given privileged treatment because the information is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. § 552, and should be withheld from public disclosure; or (2) identify any documents containing critical energy infrastructure information (CEII) as defined in 18 C.F.R. § 388.113 that should not be made public.

If you are seeking privileged treatment or CEII status for any data in your Form 556, then you must follow the procedures in 18 C.F.R. § 388.112. See www.ferc.gov/help/filing-guide/file-ceii.asp for more information.

Among other things (see 18 C.F.R. § 388.112 for other requirements), applicants seeking privileged treatment or CEII status for data submitted in a Form 556 must prepare and file both (1) a complete version of the Form 556 (containing the privileged and/or CEII data), and (2) a public version of the Form 556 (with the privileged and/or CEII data redacted). Applicants preparing and filing these different versions of their Form 556 must indicate below the security designation of this version of their document. If you are *not* seeking privileged treatment or CEII status for any of your Form 556 data, then you should not respond to any of the items on this page.

<p>Non-Public: Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This non-public version of the applicant's Form 556 contains all data, including the data that is redacted in the (separate) public version of the applicant's Form 556.</p>
<p>Public (redacted): Applicant is seeking privileged treatment and/or CEII status for data contained in the Form 556 lines <input type="checkbox"/> indicated below. This public version of the applicant's Form 556 contains all data <u>except</u> for data from the lines indicated below, which has been redacted.</p>
<p>Privileged: Indicate below which lines of your form contain data for which you are seeking privileged treatment</p>
<p>Critical Energy Infrastructure Information (CEII): Indicate below which lines of your form contain data for which you are seeking CEII status</p>

The eFiling process described on page 2 will allow you to identify which versions of the electronic documents you submit are public, privileged and/or CEII. The filenames for such documents should begin with "Public", "Priv", or "CEII", as applicable, to clearly indicate the security designation of the file. Both versions of the Form 556 should be unaltered PDF copies of the Form 556, as available for download from www.ferc.gov/QF. To redact data from the public copy of the submittal, simply omit the relevant data from the Form. For numerical fields, leave the redacted fields blank. For text fields, complete as much of the field as possible, and replace the redacted portions of the field with the word "REDACTED" in brackets. Be sure to identify above all fields which contain data for which you are seeking non-public status.

The Commission is not responsible for detecting or correcting filer errors, including those errors related to security designation. If your documents contain sensitive information, make sure they are filed using the proper security designation.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC

OMB Control # 1902-0075
Expiration 5/31/2013

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power
Production or Cogeneration Facility

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Jan 13 2015
Mar 30 2016

Application Information

1a Full name of applicant (legal entity on whose behalf qualifying facility status is sought for this facility) Northern Cardinal Solar, LLC		
1b Applicant street address 7804 - C Fairview Rd. #257		
1c City Charlotte	1d State/province NC	
1e Postal code 28226	1f Country (if not United States)	1g Telephone number (408) 353-0010
1h Has the instant facility ever previously been certified as a QF? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
1i If yes, provide the docket number of the last known QF filing pertaining to this facility: QF - -		
1j Under which certification process is the applicant making this filing? <input checked="" type="checkbox"/> Notice of self-certification (see note below) <input type="checkbox"/> Application for Commission certification (requires filing fee; see "Filing Fee" section on page 3) Note: a notice of self-certification is a notice by the applicant itself that its facility complies with the requirements for QF status. A notice of self-certification does not establish a proceeding, and the Commission does not review a notice of self-certification to verify compliance. See the "What to Expect From the Commission After You File" section on page 3 for more information.		
1k What type(s) of QF status is the applicant seeking for its facility? (check all that apply) <input checked="" type="checkbox"/> Qualifying small power production facility status <input type="checkbox"/> Qualifying cogeneration facility status		
1l What is the purpose and expected effective date(s) of this filing? <input checked="" type="checkbox"/> Original certification; facility expected to be installed by <u>11/1/15</u> and to begin operation on <u>11/1/15</u> <input type="checkbox"/> Change(s) to a previously certified facility to be effective on _____ (identify type(s) of change(s) below, and describe change(s) in the Miscellaneous section starting on page 19) <input type="checkbox"/> Name change and/or other administrative change(s) <input type="checkbox"/> Change in ownership <input type="checkbox"/> Change(s) affecting plant equipment, fuel use, power production capacity and/or cogeneration thermal output <input type="checkbox"/> Supplement or correction to a previous filing submitted on _____ (describe the supplement or correction in the Miscellaneous section starting on page 19)		
1m If any of the following three statements is true, check the box(es) that describe your situation and complete the form to the extent possible, explaining any special circumstances in the Miscellaneous section starting on page 19. <input type="checkbox"/> The instant facility complies with the Commission's QF requirements by virtue of a waiver of certain regulations previously granted by the Commission in an order dated _____ (specify any other relevant waiver orders in the Miscellaneous section starting on page 19) <input type="checkbox"/> The instant facility would comply with the Commission's QF requirements if a petition for waiver submitted concurrently with this application is granted <input type="checkbox"/> The instant facility complies with the Commission's regulations, but has special circumstances, such as the employment of unique or innovative technologies not contemplated by the structure of this form, that make the demonstration of compliance via this form difficult or impossible (describe in Misc. section starting on p. 19)		

Ownership and Operation

5a Direct ownership as of effective date or operation date: Identify all direct owners of the facility holding at least 10 percent equity interest. For each identified owner, also (1) indicate whether that owner is an electric utility, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding company, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) for owners which are electric utilities or holding companies, provide the percentage of equity interest in the facility held by that owner. If no direct owners hold at least 10 percent equity interest in the facility, then provide the required information for the two direct owners with the largest equity interest in the facility.

	Full legal names of direct owners	Electric utility or holding company	If Yes, % equity interest
1)	Geenex LLC	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	_____ %
2)	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
3)	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
4)	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
5)	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
6)	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
7)	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
8)	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
9)	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %
10)		Yes <input type="checkbox"/> No <input type="checkbox"/>	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5b Upstream (i.e., indirect) ownership as of effective date or operation date: Identify all upstream (i.e., indirect) owners of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2) are electric utilities, as defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding companies, as defined in section 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also provide the percentage of equity interest in the facility held by such owners. (Note that, because upstream owners may be subsidiaries of one another, total percent equity interest reported may exceed 100 percent.)

Check here if no such upstream owners exist.

	Full legal names of electric utility or holding company upstream owners	% equity interest
1)	_____	_____ %
2)	_____	_____ %
3)	_____	_____ %
4)	_____	_____ %
5)	_____	_____ %
6)	_____	_____ %
7)	_____	_____ %
8)	_____	_____ %
9)	_____	_____ %
10)	_____	_____ %

Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

5c Identify the facility operator

Geenex LLC

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Energy Input

6a Describe the primary energy input: (check one main category and, if applicable, one subcategory)

<input type="checkbox"/> Biomass (specify)	<input checked="" type="checkbox"/> Renewable resources (specify)	<input type="checkbox"/> Geothermal
<input type="checkbox"/> Landfill gas	<input type="checkbox"/> Hydro power - river	<input type="checkbox"/> Fossil fuel (specify)
<input type="checkbox"/> Manure digester gas	<input type="checkbox"/> Hydro power - tidal	<input type="checkbox"/> Coal (not waste)
<input type="checkbox"/> Municipal solid waste	<input type="checkbox"/> Hydro power - wave	<input type="checkbox"/> Fuel oil/diesel
<input type="checkbox"/> Sewage digester gas	<input checked="" type="checkbox"/> Solar - photovoltaic	<input type="checkbox"/> Natural gas (not waste)
<input type="checkbox"/> Wood	<input type="checkbox"/> Solar - thermal	<input type="checkbox"/> Other fossil fuel (describe on page 19)
<input type="checkbox"/> Other biomass (describe on page 19)	<input type="checkbox"/> Wind	<input type="checkbox"/> Other (describe on page 19)
<input type="checkbox"/> Waste (specify type below in line 6b)	<input type="checkbox"/> Other renewable resource (describe on page 19)	

6b If you specified "waste" as the primary energy input in line 6a, indicate the type of waste fuel used: (check one)

Waste fuel listed in 18 C.F.R. § 292.202(b) (specify one of the following)

- Anthracite culm produced prior to July 23, 1985
- Anthracite refuse that has an average heat content of 6,000 Btu or less per pound and has an average ash content of 45 percent or more
- Bituminous coal refuse that has an average heat content of 9,500 Btu per pound or less and has an average ash content of 25 percent or more
- Top or bottom subbituminous coal produced on Federal lands or on Indian lands that has been determined to be waste by the United States Department of the Interior's Bureau of Land Management (BLM) or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that the applicant shows that the latter coal is an extension of that determined by BLM to be waste
- Coal refuse produced on Federal lands or on Indian lands that has been determined to be waste by the BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, provided that applicant shows that the latter is an extension of that determined by BLM to be waste
- Lignite produced in association with the production of montan wax and lignite that becomes exposed as a result of such a mining operation
- Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)
- Waste natural gas from gas or oil wells (describe on page 19 how the gas meets the requirements of 18 C.F.R. § 2.400 for waste natural gas; include with your filing any materials necessary to demonstrate compliance with 18 C.F.R. § 2.400)
- Materials that a government agency has certified for disposal by combustion (describe on page 19)
- Heat from exothermic reactions (describe on page 19)
- Residual heat (describe on page 19)
- Used rubber tires
- Plastic materials
- Refinery off-gas
- Petroleum coke

Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 19; include a discussion of the fuel's lack of commercial value and existence in the absence of the qualifying facility industry)

6c Provide the average energy input, calculated on a calendar year basis, in terms of Btu/h for the following fossil fuel energy inputs, and provide the related percentage of the total average annual energy input to the facility (18 C.F.R. § 292.202(j)). For any oil or natural gas fuel, use lower heating value (18 C.F.R. § 292.202(m)).

Fuel	Annual average energy input for specified fuel	Percentage of total annual energy input
Natural gas	0 Btu/h	0 %
Oil-based fuels	0 Btu/h	0 %
Coal	0 Btu/h	0 %

Technical Facility Information	Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.	
	7a The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	2,879 kW
	7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	0 kW
	7c Electrical losses in interconnection transformers	102 kW
	7d Electrical losses in AC/DC conversion equipment, if any	782 kW
	7e Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection with the utility	0 kW
	7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e	884.0 kW
	7g Maximum net power production capacity = 7a - 7f	1,995.0 kW
	7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.	
	This is a ground mount solar photo-voltaic system comprised of the following components:	
Approximately: 9,288 x 310W Modules OR equivalent 86 x 24 kW Inverters OR equivalent Pile driven, ground mounted racking structure		

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Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

Certification of Compliance with Size Limitations	<p>Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) <i>as amended by</i> Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8e below (as applicable).</p>																
	<p>8a Identify any facilities with electrical generating equipment located within 1 mile of the electrical generating equipment of the instant facility, and for which any of the entities identified in lines 5a or 5b, or their affiliates, holds at least a 5 percent equity interest.</p> <p>Check here if no such facilities exist. <input checked="" type="checkbox"/></p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 30%;">Facility location (city or county, state)</th> <th style="width: 20%;">Root docket # (if any)</th> <th style="width: 40%;">Common owner(s)</th> <th style="width: 10%;">Maximum net power production capacity</th> </tr> </thead> <tbody> <tr> <td>1)</td> <td>QF -</td> <td>.....</td> <td style="text-align: right;">kW</td> </tr> <tr> <td>2)</td> <td>QF -</td> <td>.....</td> <td style="text-align: right;">kW</td> </tr> <tr> <td>3)</td> <td>QF -</td> <td>.....</td> <td style="text-align: right;">kW</td> </tr> </tbody> </table> <p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity	1)	QF -	kW	2)	QF -	kW	3)	QF -	kW
	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity													
	1)	QF -	kW													
	2)	QF -	kW													
3)	QF -	kW														
<p>8b The Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Incentives Act) provides exemption from the size limitations in 18 C.F.R. § 292.204(a) for certain facilities that were certified prior to 1995. Are you seeking exemption from the size limitations in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?</p> <p><input type="checkbox"/> Yes (continue at line 8c below) <input checked="" type="checkbox"/> No (skip lines 8c through 8e)</p>																	
<p>8c Was the original notice of self-certification or application for Commission certification of the facility filed on or before December 31, 1994? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																	
<p>8d Did construction of the facility commence on or before December 31, 1999? Yes <input type="checkbox"/> No <input type="checkbox"/></p>																	
<p>8e If you answered No in line 8d, indicate whether reasonable diligence was exercised toward the completion of the facility, taking into account all factors relevant to construction? Yes <input type="checkbox"/> No <input type="checkbox"/> If you answered Yes, provide a brief narrative explanation in the Miscellaneous section starting on page 19 of the construction timeline (in particular, describe why construction started so long after the facility was certified) and the diligence exercised toward completion of the facility.</p>																	
Certification of Compliance with Fuel Use Requirements	<p>Pursuant to 18 C.F.R. § 292.204(b), qualifying small power production facilities may use fossil fuels, in minimal amounts, for only the following purposes: ignition; start-up; testing; flame stabilization; control use; alleviation or prevention of unanticipated equipment outages; and alleviation or prevention of emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. The amount of fossil fuels used for these purposes may not exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																
	<p>9a Certification of compliance with 18 C.F.R. § 292.204(b) with respect to uses of fossil fuel:</p> <p><input checked="" type="checkbox"/> Applicant certifies that the facility will use fossil fuels <i>exclusively</i> for the purposes listed above.</p>																
	<p>9b Certification of compliance with 18 C.F.R. § 292.204(b) with respect to amount of fossil fuel used annually:</p> <p><input checked="" type="checkbox"/> Applicant certifies that the amount of fossil fuel used at the facility will not, in aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy or any calendar year thereafter.</p>																

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Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

General Cogeneration Information	Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.																			
	10a What type(s) of cogeneration technology does the facility represent? (check all that apply) <input type="checkbox"/> Topping-cycle cogeneration <input type="checkbox"/> Bottoming-cycle cogeneration																			
	10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements. <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%; text-align: center; border-bottom: 1px solid black;">Check to certify compliance with indicated requirement</th> <th style="text-align: center; border-bottom: 1px solid black;">Requirement</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify average gross electric output in kW or MW for each generator.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*°R) or 4.195 kJ/(kg*K).</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Diagram must specify working fluid flow conditions at make-up water inputs.</td> </tr> </tbody> </table>	Check to certify compliance with indicated requirement	Requirement	<input type="checkbox"/>	Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.	<input type="checkbox"/>	Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.	<input type="checkbox"/>	Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.	<input type="checkbox"/>	Diagram must specify average gross electric output in kW or MW for each generator.	<input type="checkbox"/>	Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.	<input type="checkbox"/>	At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*°R) or 4.195 kJ/(kg*K).	<input type="checkbox"/>	Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.	<input type="checkbox"/>	Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.	<input type="checkbox"/>
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<input type="checkbox"/>	Diagram must specify working fluid flow conditions at make-up water inputs.																			

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EPA Act 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities

EPA Act 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPA Act 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.

11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes No

11b Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes No

If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.

11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?

Yes (continue at line 11d below)

No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.

11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?

Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.

No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

Yes. The facility is an EPA Act 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.

No. Applicant certifies that energy will *not* be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) *before* selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.

11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?

Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.

No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.

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EPA Act 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPA Act 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPA Act 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPA Act 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j *even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2)*.

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial, commercial, residential or institutional purposes and not sold to an electric utility	MWh
11h Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g / (11g + 11h)	%

11j Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPA Act 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the relevant annual standard, taking into account expected variations in production conditions.

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Usefulness of Topping-Cycle Thermal Output	<p>The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying topping-cycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.</p>		
	<p>12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use <i>in separate rows</i>.</p>		
		<p>Name of entity (thermal host) taking thermal output</p>	<p>Thermal host's relationship to facility; Thermal host's use of thermal output</p>
	1)	<p>Select thermal host's relationship to facility</p> <hr/> <p>Select thermal host's use of thermal output</p>	<p>Average annual rate of thermal output attributable to use (net of heat contained in process return or make-up water)</p> <hr/> <p>Btu/h</p>
	2)	<p>Select thermal host's relationship to facility</p> <hr/> <p>Select thermal host's use of thermal output</p>	<p>Btu/h</p>
	3)	<p>Select thermal host's relationship to facility</p> <hr/> <p>Select thermal host's use of thermal output</p>	<p>Btu/h</p>
	4)	<p>Select thermal host's relationship to facility</p> <hr/> <p>Select thermal host's use of thermal output</p>	<p>Btu/h</p>
	5)	<p>Select thermal host's relationship to facility</p> <hr/> <p>Select thermal host's use of thermal output</p>	<p>Btu/h</p>
	6)	<p>Select thermal host's relationship to facility</p> <hr/> <p>Select thermal host's use of thermal output</p>	<p>Btu/h</p>
	<p><input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed</p>		
<p>12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.</p>			

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Mar 30 2016

Topping-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

13a	Indicate the annual average rate of useful thermal energy output made available to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b	Indicate the annual average rate of net electrical energy output	kW
13c	Multiply line 13b by 3,412 to convert from kW to Btu/h	0 Btu/h
13d	Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
13e	Multiply line 13d by 2,544 to convert from hp to Btu/h	0 Btu/h
13f	Indicate the annual average rate of energy input from natural gas and oil	Btu/h
13g	Topping-cycle operating value = $100 * 13a / (13a + 13c + 13e)$	0 %
13h	Topping-cycle efficiency value = $100 * (0.5 * 13a + 13c + 13e) / 13f$	0 %

13i Compliance with operating standard: Is the operating value shown in line 13g greater than or equal to 5%?
 Yes (complies with operating standard) No (does not comply with operating standard)

13j Did installation of the facility in its current form commence on or after March 13, 1980?
 Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.205(a)(2). Demonstrate compliance with the efficiency requirement by responding to line 13k or 13l, as applicable, below.
 No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:
 Yes (complies with efficiency standard) No (does not comply with efficiency standard)

13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or equal to 42.5%:
 Yes (complies with efficiency standard) No (does not comply with efficiency standard)

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Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

Usefulness of Bottoming-Cycle Thermal Output	The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292.202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottoming-cycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below.		
	14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process in separate rows.		
		Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production	Thermal host's relationship to facility; Thermal host's process type
			Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 19)
	1)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>
	2)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>
	3)	Select thermal host's relationship to facility Select thermal host's process type	Yes <input type="checkbox"/> No <input type="checkbox"/>
	<input type="checkbox"/> Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed		
	14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.		

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Bottoming-Cycle Operating and Efficiency Value Calculation

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion of the cogeneration system (topping or bottoming).

<p>15a Did installation of the facility in its current form commence on or after March 13, 1980?</p> <p><input type="checkbox"/> Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance with the efficiency requirement by responding to lines 15b through 15h below.</p> <p><input type="checkbox"/> No. Your facility is exempt from the efficiency standard. Skip the rest of page 17.</p>	
<p>15b Indicate the annual average rate of net electrical energy output</p>	kW
<p>15c Multiply line 15b by 3,412 to convert from kW to Btu/h</p>	0 Btu/h
<p>15d Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)</p>	hp
<p>15e Multiply line 15d by 2,544 to convert from hp to Btu/h</p>	0 Btu/h
<p>15f Indicate the annual average rate of supplementary energy input from natural gas or oil</p>	Btu/h
<p>15g Bottoming-cycle efficiency value = $100 * (15c + 15e) / 15f$</p>	0 %
<p>15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:</p> <p><input type="checkbox"/> Yes (complies with efficiency standard) <input type="checkbox"/> No (does not comply with efficiency standard)</p>	

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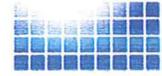
Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

EXHIBIT F

Exhibit F is the Certificate of Public Convenience and Necessity to be provided by the Operator or evidence that no such certificate is required under North Carolina law in the form of a report of proposed construction to the Commission pursuant to Commission Rule 8-65.



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Mar 30 2016

October 24, 2014

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

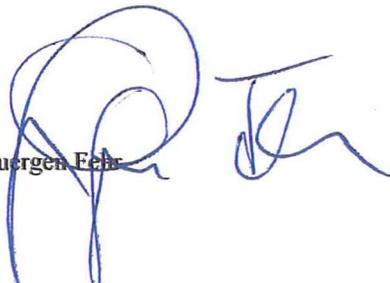
Re: Docket No. SP-_____, Sub 0
Northern Cardinal Solar, LLC – Submission of a Report of Proposed
Construction for a 2 MW AC solar photovoltaic array and Application for
Registration as a Renewable Energy Generating Facility

Dear Clerk Mount:

Enclosed for filing is Northern Cardinal Solar, LLC's Submission of a Report of Proposed Construction of a Renewable Energy Generating Facility and Application for Registration as a New Renewable Energy Facility for a 2 MW AC solar photovoltaic array. This filing is for a solar photovoltaic system with a capacity under 2 MW and is exempt from certification under G.S. 62-119.1(g). Included in this filing are the original reports and verification, plus 12 copies of each. A copy of this report will be provided to Dominion North Carolina Power.

Thank you for your time and attention. Please contact me, Juergen Fehr at juergen.fehr@geenexsolar.com for anything further.

Sincerely,


Juergen Fehr

CC: Dominion North Carolina Power

Enclosures



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STATE OF NORTH CAROLINA
 UTILITIES COMMISSION
 RALEIGH

DOCKET NO. SP-_____, SUB 0

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Submission of)	SUBMISSION OF A REPORT OF
Northern Cardinal Solar, LLC of a Report))	PROPOSED CONSTRUCTION AND
of Proposed Construction)	REGISTRATION AS NEW RENEWABLE
and Application for Registration)	ENERGY FACILITY
as a New Renewable Energy Facility)	

Northern Cardinal Solar, LLC ("Northern Cardinal Solar") or the "Applicant", hereby submits to the North Carolina Utilities Commission (the "Commission") pursuant to Commission Rule R8-65 a Report of Proposed Construction authorizing construction of a two-megawatt ("MW") solar facility (the "Facility") to be located in Halifax County. This report is for a nonutility-owned generating facility fueled by renewable energy resources under two megawatts in capacity and as such, is exempt from certification under G.S 62-110.1(g). This report of proposed construction includes the information prescribed in subsection (b)(1) of Rule R8-64 and is signed and verified by the owner of the electric generating facility or by an individual duly authorized to act on behalf of the owner for the purpose of the filing. The Applicant also applies for its Registration as a New Renewable Energy Facility pursuant to Commission Rule R8-66.

Submission of Report of Proposed Construction

In support of its application, Northern Cardinal Solar shows the Commission the following:



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

Northern Cardinal Solar, LLC
7804 Fairview Rd #257
Charlotte, NC 28266
Email: interconnection@geenexsolar.com
Phone: (704) 907-7163

2. Applicant.

Northern Cardinal Solar is a North Carolina limited liability company with its principal place of business in North Carolina. The Articles of Incorporation were filed on May 15, 2013. Juergen Fehr is an individual duly authorized to act as a corporate agent for the purpose of this application. Correspondence, documents, and filings pursuant to this application should be sent as follows:

Northern Cardinal Solar, LLC
7804 Fairview Rd. # 257
Charlotte, NC 28266
Email: interconnection@geenexsolar.com
Phone: (704) 907-7163

3. Nature of the generating facility, including the type and source of its power or fuel.

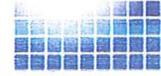
The Facility will be a 2 MW AC photovoltaic (PV) array. The source of its power is solar energy.

4. Address or location of generating facility set forth in terms of local highways, streets, river, streams, or other generally known landmarks together with a map such as a county road map with the location indicated on the map.

The site is located on a 14.014 acre property located on the north western side of the intersection between Sam Powell Dairy Road and Rhea Smith Road, in Roanoke Rapids, NC 27870. The coordinate for the property are: Latitude: 36°26'0.83"N, Longitude: 77°43'12.62"W

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

5. Ownership of the site. If the owner is other than the applicant, state the applicant's interest in the site.



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Property Owner: Halifax County
Address: 460 Old Airport Road
Roanoke Rapids, NC 27870

Property owner and applicant's affiliate have entered into a Lease Agreement which will be assigned to applicant.

6. A description of the buildings, structures and equipment comprising the generating facility and the manner of their operation.

The facility will consist of a number of 300Wp DC photovoltaic (PV) modules (or the equivalent) that is yet to be determined. They will be affixed to ground-mounted racks, which will be supported by piles driven into the ground. The system will utilize 24 kW AC inverters (or the equivalent) that is yet to be determined.

7. The projected maximum dependable capacity of facility in megawatts.

Solar is an intermittent energy source and therefore, the maximum dependable capacity is 0 MW.

8. The projected cost of the facility

The projected cost of the Facility is being provided under seal as "Exhibit B" because it constitutes confidential and proprietary information within the scope of G.S. §132-1.2.

9. The projected date on which the facility will come on line is:

November 1, 2015 or later date as may be required for the utility to complete the interconnection facilities.

10. 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, any provisions for wheeling of the electricity, arrangements for firm, non-firm or emergency generation, the service life of the project, the projected annual sales in kilowatt hours, and 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.

Electricity generated by the Facility will be sold to Dominion North Carolina Power under a fifteen-year power purchase agreement. The service life of the equipment is expected to be a minimum of twenty years. The projected year one annual sales of the facility are filed under seal as "Exhibit C" because it constitutes confidential and proprietary information within the scope of G.S. §132-1.2. Northern Cardinal Solar will produce renewable energy certificates that are eligible for compliance with North Carolina's renewable energy and energy efficiency portfolio standard.



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11. 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. 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.

Northern Cardinal Solar will file for certification as a Qualifying Facility (QF) under the Federal Energy Regulatory Commission (FERC) Form 556. Currently Northern Cardinal Solar anticipates needing a soil erosion and control permit from the Department of Environmental and Natural Resources. Northern Cardinal Solar will file this and any additional state and/or federal licenses, permits, or exemptions obtain for the Facility once they are received. The Facility has no potable water needs.



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Exhibit A





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Exhibit B & C**8. The projected cost of the facility**

The projected cost of the Facility is being provided under seal as "*Exhibit B*" because it constitutes confidential and proprietary information within the scope of G.S. §132-1.2.

The projected cost of the facility, which is being filed separately for reasons stated above, is \$6,000,000.

10. 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, any provisions for wheeling of the electricity, arrangements for firm, non-firm or emergency generation, the service life of the project, the projected annual sales in kilowatt hours, and 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.

Electricity generated by the Facility will be sold to Dominion North Carolina Power under a 15 year power purchase agreement. The service life of the equipment is expected to be a minimum of twenty years. The projected year one annual sales of the facility are filed under seal as "*Exhibit C*" because it constitutes confidential and proprietary information within the scope of G.S. §132-1.2. Northern Cardinal Solar will produce renewable energy certificates that are eligible for compliance with North Carolina's renewable energy and energy efficiency portfolio standard.

The projected output of the system, which is being filed separately for reasons stated above, is 4,231,471 kWh/yr



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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Submission from)
Northern Cardinal Solar, LLC of a)
Report of Proposed Construction)
and Application for Registration of)
A New Renewable Energy Facility)

VERIFICATION

I, Juergen Fehr, a Registered Officer of Northern Cardinal Solar, LLC, a North Carolina limited liability company, verify that the contents of this Submission of a Report of Proposed Construction filed in this docket are true to the best of my knowledge. I am duly authorized to act on behalf of said limited liability company.

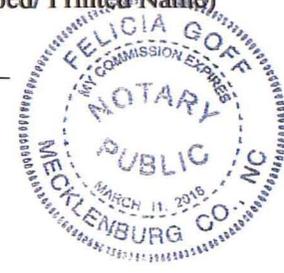
Juergen Fehr

Sworn to and subscribed before me, this the 24th day of October, 2014

Notary Public (signature)
My Commission Expires: March 11, 2018

Felicia Goff

(Typed/ Printed Name)



SP-4607, Sub 0

December 18, 2014

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

FILED
DEC 23 2014
Clerk's Office
N.C. Utilities Commission

Re: Docket No. SP-4607, Sub 0
Northern Cardinal Solar, LLC – Modification of a Report of Proposed
Construction and Registration as a New Renewable Energy Facility

Dear Clerk Mount:

On October 24, 2014, an application for a Report of Proposed Construction and Registration as a New Renewable Energy Facility was filed. We respectfully request the following modifications be made to the Report of Proposed Construction:

1. Item 1 - Change Address of Facility Owner to: 7804-C, Fairview Rd. #257, Charlotte, NC 28226.
2. Item 2 - Change Address of Facility Owner to: 7804-C, Fairview Rd. #257, Charlotte, NC 28226.
3. Item 5 - Change relationship between site owner and applicant to: Property owner and applicant have entered into a lease agreement.
4. Item 10 - Add: Applicant intends to sell power pursuant to Schedule 19 – FP.

In addition, the following similar changes should be made to the Registration as a New Renewable Energy Facility.

1. Change business address to 7804-C Fairview Rd. #257, Charlotte, NC 28226
2. Change agent's business address to 7804-C Fairview Rd. #257, Charlotte, NC 28226
3. Change the facility owner's legal interest in the site is a lease agreement.

Thank you for your time and attention. Please contact me, Juergen Fehr at juergen.fehr@geenexsolar.com for anything further.

Sincerely,

Juergen Fehr

Juergen Fehr

Digitally signed by Juergen Fehr
DN: cn=Juergen Fehr, o, ou,
email=Juergen.Fehr@geenexsol
ar.com, c=US
Date: 2014.12.23 08:47:19 -05'00'

CC: Dominion North Carolina Power
Enclosures

Dec 23 2014
Mar 30 2016
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BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Submission from)
Northern Cardinal Solar, LLC of a)
Report of Proposed Construction) VERIFICATION
and Application for Registration of)
A New Renewable Energy Facility)

I, Juergen Fehr, a Registered Officer of Northern Cardinal Solar, LLC, a North Carolina limited liability company, verify that the contents of this Submission of a Report of Proposed Construction filed in this docket are true to the best of my knowledge. I am duly authorized to act on behalf of said limited liability company.

Juergen Fehr

Sworn to and subscribed before me, this the 18th day of December, 2014.

Kimberly B. Deal
Notary Public (signature)

Kimberly B. Deal
(Typed/ Printed Name)

My Commission Expires: May 27 2024

SP-4607, Sub 0

January 15, 2015

BY ELECTRONIC FILING

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

Re: Docket No. SP- 4607, Sub 0
Northern Cardinal Solar, LLC – Amendment of a Report of Proposed
Construction and Application for Registration as a Renewable Energy Generating
Facility

Dear Clerk Mount:

The Report of Proposed Construction (“ROPC”) and Application for Registration as a
New Renewable Energy Facility (“Application”) for the above captioned project should be
amended as follows:

The total capacity in item three of the ROPC and Nameplate capacity in the Application is
changed to 1.99 MW.

Thank you for your time and attention. Please contact me, Juergen Fehr at
juergen.fehr@geenexsolar.com for anything further.

Sincerely,



Juergen Fehr

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In the Matter of Submission from)
Northern Cardinal Solar, LLC of an)
amended)
Report of Proposed Construction)
and Application for Registration of)
A New Renewable Energy Facility)

VERIFICATION

I, Juergen Fehr, a Registered Officer of Northern Cardinal Solar, LLC, a North Carolina limited liability company, verify that the contents of this Submission of a Report of Proposed Construction filed in this docket are true to the best of my knowledge. I am duly authorized to act on behalf of said limited liability company.

Juergen Fehr

Juergen Fehr

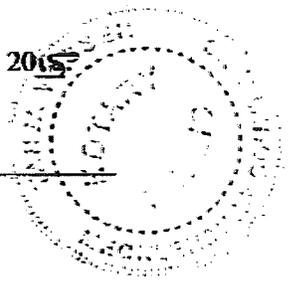
Sworn to and subscribed before me, this the 16 day of January, 2015

Tanja Vossen

Notary Public (signature)

Tanja Vossen

(Typed/Printed Name)



My Commission Expires: 1/8/2020

