



Sussex Rural Electric Cooperative, Inc.

64 County Route 639
Sussex, NJ 07461

A Touchstone Energy® Cooperative 

INTERCONNECTION OVERVIEW AND APPLICATION PACKET

Sussex Rural Electric Cooperative (SREC) strives to provide the highest possible quality of service at the lowest possible cost. If any of our Members become interested in installing their own renewable electric power generation equipment, including but not limited to solar, wind, and biomass, SREC provides all the necessary documentation in this packet to ensure that your generation equipment is installed in a proper and safe manner, and in accordance with all applicable codes, standards, regulations, laws, and insurance requirements. You will also need to coordinate the installation and approval of your electric power generator with the local code inspection authority (township or municipality). We encourage our Members considering these systems to carefully evaluate the economics and possible alternatives to ensure they receive the greatest benefit from their efforts.

When installing a renewable power generator and planning to interconnect with the distribution system, all plans must be reviewed to ensure that personnel safety and system reliability will not be compromised. Your installation must meet our requirements for interconnection and all equipment used must be approved as a device for interconnection. A program is in place for the purchase of excess power from Members. However, this agreement is between our power supplier, Allegheny Electric Cooperative, and you, the Member. If your proposed renewable power installation is 20 kW or less and no power will be exported, you only need to complete Part 1 of the application. If your generator is more than 20 kW, you must complete Parts 1 and 2. All applications must include completed Interconnection Agreement, Schedule A – Installation Description, Line Drawings & Control Panel Schematics, REAP documentation, and application fee. Systems of less than 20 kW require a \$100.00 application fee and systems between 20 & 100 kW require a \$250.00 application fee.

Once we receive your completed application, we will review your proposed renewable generator installation. As part of our application review process, we will examine the ability of the Cooperative electric distribution system to accept your new power generation unit. The Member

agrees to pay for extension of Cooperative's facilities and other interconnection costs as may be necessary for his or her interconnection. An estimate shall be provided to the Member if any extension or other costs are required upon Member's submission of his or her application or design plans. The Cooperative reserves the right to require additional safety, reliability and/or operational equipment, and/or measures where its engineering study determines that such equipment and/or operational measures are required. In such cases, the Member shall be responsible for the cost of such equipment and/or operational measures. The Member will also be asked to sign a system upgrade contract that obligates you to reimburse us for the additional expense incurred on your behalf.

To process your application properly and promptly for interconnection, the following documents are required:

- ☑ Sussex Rural Electric Cooperative Solar Application
- ☑ Interconnection Power Purchase Agreement & Schedule A
- ☑ Power requirement calculation showing how system size was calculated. A PV Watts serves this purpose. *The system cannot generate more than the estimated annual consumption.*
- ☑ Renewable Energy Assistance Program Form
- ☑ Site Plan showing aerial view of system design and clearly marked and accessible AC disconnect switch
- ☑ One-line drawing of the system and its interconnection design
- ☑ Technical specification cut sheets of equipment being used

All documentation must be completed and sent by email to solar@sussexrec.com or mailed to: Sussex Rural Electric Cooperative, Attention Solar, 64 County Road 639, Sussex, NJ 07461 along with the appropriate application fee in a check made payable to **Sussex Rural Electric Cooperative** as detailed in our Tariff. The homeowner must sign, date, and have the agreements witnessed (attest) on all documents where indicated.

Note: The system cannot be greater than the estimated annual consumption.

Systems of less than 20 kW require a \$100.00 application fee and systems between 20 & 100 kW require a \$250.00 application fee.

SOLAR PROCESS

Sussex Rural Electric Cooperative

Member or solar company must complete the following steps to install solar.

- DESIGN & SIZING OF SYSTEM**
 - Check your town ordinances on solar
 - Does it have to be rooftop?
 - Can I have ground mount solar?
 - What kind of permits do I need?
 - Work with contractor to determine the appropriate sizing and equipment

System size cannot exceed 100% of your yearly usage
- COMPLETE & RETURN REQUIRED DOCUMENTS**
 - SREC Solar Application for Service
 - Interconnection Power Purchase Agreement and Schedule A
 - PV Watts calculation showing system size
 - Renewable Energy Assistance Program Member Section
 - One-Line drawing of the system and its interconnection design
 - Site Plan
 - Technical specification cut sheets of equipment being used
 - Send appropriate application fee in a check made payable to Sussex Rural Electric Cooperative
- UPON RECEIPT OF COMPLETED DOCUMENTATION & APPLICATION FEE**
 - Documentation will be reviewed to confirm all information is included
 - Documentation will be reviewed by the engineering department of SREC
 - When approved, SREC will contact applicant via email, giving permission to install the system
- ONCE SOLAR IS INSTALLED & SREC RECEIVES THE CUT-IN CARD FROM LOCAL MUNICIPALITY**
 - A field test of the interconnecting system disconnection will be scheduled
 - Upon successful field test, a net meter will be installed
 - A permission to operate (PTO) letter will be issued to the applicant

The primary concern for our cooperative is the safe operation of the system. One key element is the availability of a manual AC disconnect where our crews can lock out the system if they are working nearby. The lock out on the inverter is acceptable as long as it is accessible at all times. This means it cannot be in a garage or behind a locked gate. Designs without this feature will not be approved for construction.

System size cannot exceed 100% of your yearly usage

Interconnection Application Process Overview

1. Upon receipt of the aforementioned documents and the application fee, Sussex REC will make sure all required information has been provided and all signatures have been made and attested to, etc.
2. When payment is received, all documentation will be reviewed by Engineering for approval.
3. Once approved, SREC will contact applicant, via email, giving permission to install the system.
4. Upon receipt of the cut-in card from the local municipality code officials, SREC will schedule a field test.
5. Following a successful field test (we make sure the interconnecting system disconnects from our system in an outage), we will install a net meter.
6. Upon successful field test and installation of net meter, SREC will issue the Permission to Operate letter.

The Cooperative's review process and any inspections are intended as a means to safeguard the Cooperative's facilities and personnel. One key element is the availability of a manual AC disconnect outside where our crews can lock out the system if they are working nearby. The lock out on the inverter is acceptable as long as it is accessible at all times. This means it cannot be in a garage or behind a locked gate. Designs without this feature will not be approved for construction. The Member acknowledges and agrees that any review or acceptance of such plans, specifications, and other information by the Cooperative shall not impose any liability on the Cooperative and does not guarantee the adequacy of the Member's equipment to perform its intended function. The Cooperative disclaims any expertise or special knowledge relating to the design or performance of generating installations and does not warrant the efficiency, cost-effectiveness, safety, durability, or reliability of such installations. Sussex REC's engineering department will review panel placement. Panels can be placed on multiple structures but solar panels installed on a metered structure must be connected to that specific structure's meter and not to any other nearby structure's electric meter.

Net Metering Process

The basic concept behind our net metering process is to accurately determine both power consumed and power produced. Based on these values, Sussex REC will calculate the monthly bill amount. At a minimum, the member's monthly bill will be the applicable System Connection Fee as defined by our tariff and further revised as per your specific situation. On a monthly basis the Net Energy will be calculated by subtracting the Received Energy from the Delivered Energy. Excess energy is "banked" and is purchased on an annual basis by Allegheny Electric Power according to your contract with them. The following illustrates how our net metering process works.

System data inputs:

Consumption from the premise net meter

Production from the premise net meter

Sussex REC tariffs

Calculation: When Production > Consumption, the difference goes to the Bank.

When Consumption > Production, the difference comes out of the Bank.

The minimum monthly bill is the applicable System Connection Fee (SCF)

In any month where Consumption > Production + Bank balance, the bill is the SCF + (Consumption - (Production + Bank))

Month	Consumption	Production	Bank	Bill Component
Jan	100	90	0	SCF + 10
Feb	100	105	5	SCF
Mar	65	85	25	SCF
Apr	65	60	20	SCF
May	75	50	0	SCF + 5
Jun	65	80	15	SCF
Jul	125	110	0	SCF
Aug	145	110	0	SCF +35
Sep	115	110	0	SCF +5
Oct	95	105	10	SCF
Nov	90	75	0	SCF +5
Dec	105	95	0	SCF +10
Total			0	Net energy to be purchased



Sussex Rural Electric Cooperative, Inc.

A Touchstone Energy® Cooperative



Application for Residential Operation of Member-Owned Renewable Generation

This application should be completed as soon as possible and returned to the Cooperative in order to begin processing the request. This application must be accompanied with the applicable application fee (Systems of less than 20 kW require a \$100.00 application fee, systems between 20 & 100 kW, a \$250.00 application fee).



PART 1 MEMBER GENERATOR INFORMATION

Name: _____ Account #: _____

Mailing Address: _____

City: _____ County: _____ State: _____ Zip Code: _____

Phone Number: _____ Email: _____

PROJECT DESIGN / ENGINEERING (ARCHITECT (as applicable))

Company: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Primary Contact: _____

Phone Number: _____ Email: _____

ELECTRICAL CONTRACTOR / SOLAR COMPANY (as applicable)

Company: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Primary Contact: _____

Phone Number: _____ Email: _____

It is important that accurate and direct contact information be provided. Should there be any questions at the time of review we may need to communicate with someone from the solar company directly.



**Application for Operation of Member-
Owned Renewable Generation**

DESCRIPTION OF INSTALLED ELECTRIC GENERATING FACILITIES

The following information will be used to help properly design the Cooperative Member interconnection. This information is not intended as a commitment or contract for billing purposes. Please include all power information in Alternating Current (AC).

Nameplate Rating of AEGS (kW) [AC]: _____ Annual Estimated Generation (kWh): _____

Generator Rating (kW) [AC] _____

TYPE OF GENERATOR (as applicable) Manufacturer: _____

Photovoltaic: _____ Other: _____

GENERATOR MODE OF OPERATION

Isolated _____ Paralleling _____ Power Export _____

BATTERY INFORMATION (AS APPLICABLE)

Will this system include batteries? Yes _____ No _____

If yes: Size of Battery _____

Describe under what condition(s) the battery will be used, including how and when the batteries are expected to be discharged on Cooperative's system and or/member's residential electric service.

PART 2 Complete all applicable items. Copy this page as required for additional generators. Inclusion of manufacturer cut and specification sheets for the system components is recommended and will speed the review process.

INVERTER DATA (as applicable)

Manufacturer: _____ Model: _____

Rated Power Factor (%): _____ Rated Voltage (Volts): _____ Rated Amperes: _____

Inverter Type (ferroresonant, step, pulse-width modulation, etc): _____

Type commutation: Forced _____ Line _____

Harmonic Distortion: Maximum Single Harmonic (%) _____ Maximum Total Harmonic (%) _____

Note: Attach all available calculations, test reports, and oscillographic prints showing inverter output voltage and current waveforms.

POWER CIRCUIT BREAKER (as applicable)

Manufacturer: _____ Model: _____

Rated Voltage (kilovolts): _____ Rated Ampacity (Amperes): _____



Application for Operation of Member-Owned Renewable Generation

Interrupting rating (Amperes): _____ BIL Rating: _____

Interrupting medium / insulating medium (ex. Vacuum, gas, oil) _____ / _____

Control Voltage (Closing): _____ (Volts) AC DC

Control Voltage (Tripping): _____ (Volts) AC DC Battery Charged Capacitor

Close energy: Spring Motor Hydraulic Pneumatic Other: _____

Trip energy: Spring Motor Hydraulic Pneumatic Other: _____

Bushing Current Transformers: _____ (Max. Ratio) Relay Accuracy Class: _____

Multi Ratio? No _____ Yes _____ If yes, available taps: _____

IMPORTANT ADDITIONAL INFORMATION

In addition to the items listed above, please attach a detailed site plan which includes an external disconnect, a one-line diagram of the proposed facility, all applicable elementary diagrams, major equipment (generators, transformers, inverters, circuit breakers, protective relays, etc.) specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper design of the interconnection. Also describe the project's planned operating mode (e.g., combined heat and power, peak shaving, etc.), and its address or grid coordinates.

NOTE: Also include the applicable application fee as described in the Member Guidelines.

The Member agrees to provide the Cooperative with any additional information required to complete the interconnection. The Member shall operate his equipment within the guidelines set forth by the cooperative. The Member further asserts that, by signing this application, this installation has or will receive all necessary local inspections and approvals.

MEMBER GENERATOR

DATE

SUSSEX RURAL ELECTRIC COOPERATIVE CONTACT FOR APPLICATION SUBMISSION AND FOR MORE INFORMATION:

Cooperative contact:
Engineering & Operations Department
Sussex Rural Electric Cooperative

Address: 64 County Route 639
Sussex, NJ 07461
Phone: 973.875.5101
Fax: 973.875.4114
e-mail: info@sussexrec.com

Nameplate Capacity kW	Delivery Point
Engineering Approval	

Signature: _____

Date: _____

INTERCONNECTION AND POWER PURCHASE AGREEMENT

THIS INTERCONNECTION AND POWER PURCHASE AGREEMENT (“Agreement”) is made and entered into this ___ day of _____ 20__ (“Effective Date”), by and among _____ (“Cooperative”), _____ (the “Generator”), and Allegheny Electric Cooperative (“Allegheny”) (each individually a “Party” and collectively the “Parties).

W I T N E S S E T H

WHEREAS, the Generator is a member in good standing of Cooperative and has indicated a desire to install and/or operate electric generating facilities described on the attached Schedule A on the property located at the address set forth in Schedule A within the service territory of Cooperative;

WHEREAS, the subject generating facilities will meet the qualification standards for (1) Qualifying Facilities (“QF”) under the Public Utility Regulatory Policies Act of 1978, as may be amended (“PURPA”), and the regulations established by the Federal Energy Regulatory Commission (“FERC”) at 18 C.F.R. Part 292, as may be amended; or (2) Alternative Energy Systems (“AES”) established by the Pennsylvania Alternative Energy Portfolio Standards Act of 2004, as may be amended (QF and AES collectively referred to herein as “AES/QF”);

WHEREAS, Allegheny is required to purchase power from QFs that interconnect with the Cooperative, subject to certain waivers obtained from FERC;

WHEREAS, Allegheny is permitted, but not required, to take actions, including purchasing power, with respect to electric generating facilities that do not constitute QFs under PURPA or that are QFs but fall within the class of QFs for which FERC has granted Allegheny waivers;

WHEREAS, Allegheny is willing to purchase, and the Generator wishes to sell, as applicable, some or all of the electric energy generated by the AES/QF; and

WHEREAS, Cooperative and Allegheny, consistent with their policies of encouraging innovation in the energy field, are willing to interconnect and operate in parallel with the said AES/QF and, if required, to furnish parallel electric service to the Generator for the operation of its AES/QF and/or other uses;

NOW THEREFORE, Cooperative, Allegheny, and the Generator agree as follows:

1. Incorporation of Recitals and Attachments. The recitals above, schedules, exhibits, addenda, and attachments to this Agreement are hereby incorporated into this Agreement and made a part hereof.
2. Interconnection and Power Purchase Rules and Policies. The respective rules, policies, procedures, technical requirements, and rate schedules established by Cooperative and Allegheny (collectively, the “Interconnection/Purchase Rules”) shall govern the interconnection and operation of the AES/QF and the purchase of excess energy from the AES/QF. The Parties agree that Cooperative and

Allegheny shall have the right to amend, change, modify, supplement, or replace such Interconnection/Purchase Rules from time to time in the course of each of their respective operations and in each's sole discretion. The Interconnection/Purchase Rules, including any future amendments, changes, modifications, supplements, and/or replacements, are incorporated herein and made a part of this Agreement by this reference. The Generator acknowledges it has received a copy of the current version of Interconnection/Purchase Rules and agrees to comply with and be bound by the terms of the Interconnection/Purchase Rules, including any subsequent amendments, changes, modifications, supplements, and/or replacements. Cooperative shall provide the Generator with prompt notice of any subsequent amendments, changes, modifications, supplements, or replacements of the Interconnection/Purchase Rules that are material in nature.

3. Retail Electric Service. Cooperative shall furnish electric service and supply the energy requirements of the Generator and the AES/QF in accordance with the rules and rate schedules applicable to the Generator's class of service as a member of Cooperative, as may be modified or revised from time to time by Cooperative in its sole discretion.

4. Self-Supply of Retail Power.

A. If permitted by Cooperative and subject to its Interconnection/Purchase Rules, the Generator may elect that Cooperative credit the Generator for each kilowatt-hour produced by an AES/QF installed on the Generator's side of the electric meter not to exceed the retail load requirements of the Generator. For purposes of this Agreement, "retail load requirements" shall mean the Generator's load to be served by the Cooperative including that of the AES/QF.

B. If permitted by Cooperative and subject to its Interconnection/Purchase Rules, the Generator may elect that Cooperative implement virtual meter aggregation or virtual billing aggregation.

C. The provisions, terms, and conditions of this Section 4 are subject to availability as determined by the Cooperative, which availability is not guaranteed, and the Generator understands that Cooperative may modify or discontinue its alternative energy program at any time.

5. Purchase of Power and Energy by Allegheny.

A. Allegheny shall purchase, and Generator shall sell, electric energy generated by the AES/QF made available for purchase as set forth below. All purchases and sales under this Section 5 shall be made pursuant to the rates, terms, and conditions set forth in Allegheny's Interconnection/Purchase Rules. For purposes of this Agreement, the energy to be purchased by Allegheny shall be defined by Cooperative's Interconnection/Purchase Rules.

i. If the Generator has elected to generate electric energy for self-supply pursuant to Section 4, Allegheny shall purchase, and the Generator shall sell, all energy generated by the AES/QF and delivered into Cooperative's electric system by the Generator in excess of the Generator's retail load requirements (and, if applicable, any such energy that may be credited by Cooperative for virtual meter or billing aggregation).

ii. Otherwise, Allegheny shall purchase, and the Generator shall sell, all

energy generated by the AES/QF and delivered into Cooperative's electric system by the Generator that Generator makes available for purchase.

B. Purchases of energy and capacity by Allegheny shall be subject to the orders issued May 20, 2022 by FERC at Docket Nos. EL22-49-000 and QM22-9-000, relieving Allegheny of the obligation to purchase electric energy or capacity from facilities that are either a small power production QF with a net capacity greater than 5 megawatts ("MW") or a cogeneration QF with a net capacity greater than 20 MW. Purchases by Allegheny from an AES/QF for which Allegheny has no obligation to purchase energy or capacity, if any, shall be subject to Allegheny's discretion and subject to negotiation between Allegheny and the Generator and would be memorialized in a separate agreement.

C. The Generator shall receive payment for all energy purchased by Allegheny. Payment for purchases shall be coordinated by and between Cooperative and Allegheny and made in accordance with the Interconnection/Purchase Rules of Cooperative and Allegheny.

6. Installation, Operation, and Maintenance of AES/QF. The Generator shall install, operate, maintain, and repair the AES/QF in accordance with this Agreement; the Interconnection/Purchase Rules; all applicable federal, state, and local laws, regulations, ordinances, and codes; all applicable requirements and limitations of any adjoining utility(ies) or regional transmission organization(s) (each such utility or regional transmission organization, including but not limited to Allegheny and PJM Interconnection, LLC, an "Adjoining Utility"); and all applicable safety and electrical codes, including but not limited to the National Electrical Safety Code. All maintenance shall be performed in accordance with the applicable manufacturers' recommended maintenance schedules and Good Utility Practice.

7. Facility Design, Plans, and Studies; System Work.

A. Prior to the installation of the AES/QF, the Generator shall submit its plans and specifications for the AES/QF to Cooperative for review to assure compliance with Cooperative's and Allegheny's respective Interconnection/Purchase Rules and the standards identified in Section 6 above. Such review shall not be construed as permission to operate the facilities without written authorization from Cooperative after inspection of the completed facilities as hereinafter provided.

B. Before interconnecting (directly or indirectly) the AES/QF to Cooperative's and/or any Adjoining Utility's systems, there may be additions, modifications, alterations, studies, or other work necessary (collectively "System Work") to Cooperative's system, equipment, facilities, or infrastructure, and/or the system, equipment, facilities, or infrastructure of any Adjoining Utility. Cooperative, in its sole discretion and, if applicable, in consultation with Allegheny and any Adjoining Utility(ies), shall identify and determine the System Work needed to interconnect the AES/QF and prepare a timeline for completion of the System Work. Cooperative and Allegheny shall have no liability or responsibility for any delay in the estimated timeline regardless of cause. System Work on any system, equipment, facilities or infrastructure of an Adjoining Utility is not the responsibility or within the control of Cooperative or Allegheny, and any Adjoining Utility is not a party to this Agreement.

C. The Generator shall promptly notify Cooperative of any proposed alteration, modification, or addition to the design of the AES/QF and provide all information required by Cooperative

to review such proposal, including any change in generation capacity of the AES/QF and any alterations applicable to interconnection equipment. Cooperative reserves the right to require a new application for interconnection, additional studies, and/or additional System Work, all at the sole cost and expense of the Generator, to accommodate any such alterations, modifications, or additions. The Generator shall not alter, modify, or add to the AES/QF without receiving prior written consent of Cooperative.

D. Interconnection of the AES/QF shall be subject to, and the Generator agrees to abide by, all applicable requirements and limitations established by any Adjoining Utility(ies), including but not limited to the performance and completion of all required studies or analyses. Study and analysis times are not the responsibility or within the control of Cooperative or Allegheny.

8. Metering. The metering equipment and requirements used to meter and record electrical energy delivered from the AES/QF shall be in accordance with the Interconnection/Purchase Rules. Cooperative personnel shall have the right to enter upon the Generator's property for the purpose of installing and testing the necessary metering and communications devices to effectuate this Agreement.

9. Inspection. Prior to interconnection of the AES/QF, Cooperative shall inspect the facilities for compliance with Interconnection/Purchase Rules, Cooperative's bylaws and other governing documents, and the standards identified in Section 6 above. Cooperative may inspect and test the operation of the AES/QF to assure the safety of Cooperative's personnel, as well as the satisfactory operation of the AES/QF in parallel with Cooperative's system, before authorizing the operation of the AES/QF. Such inspection by Cooperative shall not relieve the Generator from its responsibility to install, operate, maintain, and repair the AES/QF in a safe and satisfactory manner. The above-described inspection does not impose any obligation upon Cooperative or Allegheny to warrant or ensure in any manner the AES/QF's safety or compliance with this Agreement. Further, Cooperative and Allegheny make no representations concerning, and expressly disclaim any expertise or specialized knowledge relating to, the particular type of generation employed by the Generator or the equipment associated with such generation.

10. Costs. The Generator shall be responsible for and pay (or, if applicable, reimburse Cooperative, Allegheny, and any Adjoining Utility(ies) for) all costs associated with the AES/QF, including all costs of design, installation, operation, maintenance, repair, and inspection. For any System Work required, Cooperative shall provide the Generator with a written estimate of costs and expenses. Payment shall be due within thirty (30) days of receipt of such estimate from Cooperative, Allegheny, and/or any Adjoining Utility(ies). Said payment shall be received prior to physical interconnection of the AES/QF with Cooperative's facilities. Cooperative and/or Allegheny may refuse or delay physical interconnection and/or commencement of System Work until such payment is received in full. Within one hundred twenty (120) days following completion of such physical interconnection work and/or System Work, Cooperative shall provide to the Generator a true-up of estimated costs to account for actual costs. If the estimated costs paid by the Generator exceed the actual costs identified in the true-up, the true-up will be accompanied by a refund for the excess. If the actual costs exceed the funds paid by the Generator, the true-up will be accompanied by an invoice for the excess, which the Generator shall pay within thirty

(30) days of receipt.

11. Safety and Operational Modifications. Cooperative or Allegheny may at any time install or modify its equipment as it deems necessary to ensure the safety of its personnel, the satisfactory operation of its system, and/or the accuracy of its meter(s) as a result of the operation of the AES/QF. The Generator shall reimburse Cooperative or Allegheny for the total cost of such installation or modification within 30 days of receipt of a statement thereof from Cooperative or Allegheny.

12. Right of Access. Cooperative or Allegheny personnel shall have the right to enter upon the Generator's property at any time for the purpose of inspecting the AES/QF and making additional tests to ensure the continued safe operation of the AES/QF and the accuracy of the meter. Such inspections shall not relieve the Generator from its obligation to install, operate, maintain, and repair the AES/QF in a safe and satisfactory manner.

13. Disconnection.

A. The Generator shall disconnect the AES/QF, at its sole cost, upon the effective date of termination of this Agreement, as described in Section 18 below. If the Generator refuses to disconnect the AES/QF, Cooperative or Allegheny may enter the premises of the Generator for the purpose of disconnecting the AES/QF, with such disconnection to be performed at the sole expense of the Generator.

B. If, in the judgment of Cooperative or Allegheny, the Generator has failed to maintain the AES/QF in satisfactory operating condition, Cooperative or Allegheny may direct the Generator to disconnect the AES/QF, at the Generator's sole cost, from Cooperative's system. If the Generator fails to immediately comply with such directive, Cooperative may discontinue service to the Generator until the AES/QF is disconnected or restored to a satisfactory operating condition.

C. Cooperative and/or Allegheny, as applicable, may interrupt interconnection service, curtail output of the AES/QF, or temporarily disconnect service from Cooperative's or, if applicable, an Adjoining Utility's system when necessary for maintenance, repair, inspection, or construction on such system. Cooperative and/or Allegheny shall use reasonable efforts to provide reasonable prior written notice and coordination related to any such interruption, curtailment, or disconnection of the AES/QF.

14. Safety/Protection of Facility. The Generator shall have the sole responsibility for the safety and electrical protection of its AES/QF, without regard to the condition of Cooperative's or Allegheny's facilities.

15. Limitations of Liability. Neither Cooperative nor Allegheny shall be liable to the Generator for any punitive, incidental, indirect, special, or consequential damages, including for loss of business opportunity or profits, resulting from or arising from Cooperative's or Allegheny's performance or non-performance of its obligations under this Agreement. In addition, notwithstanding any other provision of this Agreement, Cooperative's liability to the Generator under this Agreement shall be further limited as set forth in Cooperative's bylaws and governing documents, policies, rules, rate schedules, and terms and conditions for electric service, which limitations are incorporated herein by this reference.

16. Indemnification. The Generator shall indemnify and hold harmless Cooperative and Allegheny, and their respective directors, officers, employees, members, owners, subsidiaries, successors, and assigns, from and against any and all claims, demands, damages, losses, causes of action, liability, personal injuries (including death), costs, and expenses (including reasonable attorneys' fees and court costs) of any kind, type, or nature (collectively, "Claims") that arise out of or result from (i) the existence, construction, maintenance, or operation of the Generator's AES/QF, or (ii) the Generator's breach, default, performance, or non-performance of its obligations under this Agreement. The Generator's obligations to indemnify and hold harmless shall apply regardless of whether the Claims arise or occur on Cooperative's, Allegheny's, and/or the Generator's side of the interconnection point, and regardless of whether such Claims are known or unknown or foreseen or unforeseen.

17. Insurance. [Except for residential rate class consumer-members,] the Generator shall procure and maintain the following liability insurance in the amounts stated: (i) bodily injury in the amount of \$1,000,000 or greater per occurrence; and (ii) property damage in the amount of \$1,000,000 or greater per occurrence. All insurance shall be written on an "occurrence" basis and not a "claims-made" basis and shall be maintained for a minimum period of two (2) years after the termination of this Agreement. Cooperative and Allegheny shall be listed as additional named insureds on the policy, and all insurance coverage must respond at the time of loss as primary and non-contributory. The Generator shall furnish certificate(s) of insurance to Cooperative and Allegheny at least twenty (20) days before work on the construction and interconnection of the AES/QF commences, and annually thereafter. Cooperative and Allegheny shall be given a minimum of twenty (20) days advance notice of cancellation or non-renewal of the policy.

[Residential consumer-members that are AES/QF owners are strongly advised to maintain a current liability insurance policy adequate in amount to cover all forms of liability that may arise from the operation of the AES/QF interconnected to Cooperative's electrical system. The policy should list Cooperative and Allegheny as additional named insureds.]

18. Termination. This Agreement shall become effective immediately upon the Effective Date and shall continue in effect until terminated as set forth below. Termination shall require permanent disconnection of the AES/QF.

A. Any Party may terminate this Agreement at any time upon sixty (60) days' written notice to the other Parties.

B. Cooperative or Allegheny may terminate this Agreement immediately upon written notice in the event of a breach or default by Generator of any of the terms and conditions of this Agreement or the respective Interconnection/Purchase Rules of Cooperative and Allegheny.

C. Cooperative may terminate this Agreement upon thirty (30) days' written notice if the Generator for any reason ceases to be a member in good standing with Cooperative, so long as the notice explains what is necessary for the Generator to return to good standing and the Generator has not returned itself to status of a member in good standing within thirty (30) days of being so notified.

D. Cooperative or Allegheny may terminate this Agreement immediately without

notice if the Generator ceases to be a member of Cooperative; dies; is liquidated or otherwise ceases to exist; or sells, transfers, or otherwise ceases to own the property at which the AES/QF is located.

19. Default; Remedies. The Generator shall be in default under this Agreement if the Generator fails to comply with, observe, or perform, or defaults in performance of, any covenant or obligation under this Agreement and fails to cure the default within thirty (30) days' after receipt of written notice from Cooperative or Allegheny identifying the basis of the default. In such case, Cooperative or Allegheny shall have the right to terminate this Agreement pursuant to Section 18.B. above, effecting an automatic disconnection pursuant to Section 13.A. above. Cooperative and Allegheny shall be relieved of any further obligations under this Agreement and shall be entitled to pursue all other damages and remedies available under this Agreement or at law or in equity.

20. Notices. All notices under this Agreement are deemed to be duly delivered if hand delivered, sent by U.S. certified mail, return receipt request, postage prepaid, or sent by email, to:

If to Generator: _____

If to Cooperative: _____

If to Allegheny: Allegheny Electric Cooperative, Inc.
Attention: Manager – Power Supply
212 Locust Street
Harrisburg, PA 17101
Email: Power_Purchases@ccsenergy.com
with a copy to: interconnections@ccsenergy.com

21. No Wavier. The failure of a Party to insist, on any occasion, upon strict performance of any provision of this Agreement shall not be considered to waive the obligations, rights, or duties imposed upon the Parties.

22. Assignment. The Generator shall not assign, transfer, or pledge this Agreement or any of its rights or obligations hereunder without the prior express written consent of Cooperative and Allegheny.

23. Severability. If any provision of this Agreement, in whole or part, is declared invalid or unenforceable by a court of competent jurisdiction, such provision shall be deemed separate and independent, and the remainder of this Agreement shall remain in full force and effect.

24. Entire Agreement. This Agreement, including the Interconnection/Purchase Rules and all schedules, exhibits, addenda, and attachments hereto (which are expressly made a part hereof for all purposes), constitutes the entire agreement and understanding between the Parties concerning the subject

matter of this Agreement. The Parties are not bound by or liable for any statement, representation, promise, understanding, or undertaking of any kind or nature, whether written or oral, concerning the subject matter hereof which is not set forth or provided for herein. It is expressly acknowledged that the Parties may have other agreements covering other services not expressly provided for in this Agreement, which agreements are unaffected by this Agreement.

25. Amendment. Except as specifically provided in this Agreement, this Agreement may be amended only upon mutual agreement of the Parties, which amendment shall not be effective until reduced to writing and executed by the Parties. The respective Interconnection/Purchase Rules of Cooperative and Allegheny, which may be amended, changed, modified, supplemented, or replaced from time to time in the course of Cooperative's and Allegheny's respective operations and in each's sole discretion, as more fully described in Section 2 of this Agreement, are all excepted from this Section 25 and do not require a written amendment to this Agreement.

26. Governing Law. This Agreement and the rights and obligations of the Parties hereunder shall be construed in accordance with and shall be governed by the laws of the Commonwealth of Pennsylvania without giving effect to conflict of law principles.

27. Counterparts. This Agreement may be executed in any number of identical counterparts with the same binding effect as if the signatures were on one instrument. Original, electronic, or faxed signatures are binding.

[Signature page follows]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the day and year first above written.

COOPERATIVE

Attest: _____

By: _____

Print Name: _____

Title: _____

GENERATOR:

Attest: _____

By: _____

Print Name: _____

Title: _____

Address: _____

Telephone No.: _____

ALLEGHENY

Attest: _____

By: _____

Print Name: _____

Title: _____

[Signature Page to Agreement]

SCHEDULE A.

**Interconnection and Power Purchase Agreement
(Description of Installed Electric Generating Facilities)**

The _____ (name of project) consists of a _____ kW, _____ (inverter or generator; if generator please denote whether it is an induction or synchronous generator) utilizing _____ (type of technology*) technology and fueled by _____ (type or source of fuel**). The _____ (inverter or generator) _____ is installed at _____ (physical location of inverter/generator on property) and has an output of _____ volts, which is stepped up/stepped down to _____ volts by a _____ (type/size) transformer and fed into the Generator's service panel. The control panel was designed and built by _____ (brand). The design drawings are as follows: (1) one line drawing _____ (reference number) and; (2) control panel detail _____ (reference number), issued _____ (date). These drawings are included with the attached Interconnection and Power Purchase Agreement.

Will the interconnected system include batteries? YES ___ NO ___ (check one). If YES, size of battery: ___ kW, and describe under what conditions the batteries will be used, including how and when the batteries are expected to be discharged on Cooperative's system and/or the member's residential electric service: _____

_____.

The AES/QF site is located in _____ Township, _____ County, at Cooperative's customer map location number _____. The mailing address and telephone number for the member/owner and operator of the generation facility is:

Member Owner Name: _____

Street Address: _____

P.O. Box: _____

City/State/Zip Code: _____

Telephone Number: _____

Operator Name: _____

Street Address: _____

P.O. Box: _____

City/State/Zip Code: _____

Telephone Number: _____

_____ (*name/title of cooperative staff*) witnessed
the final acceptance tests of the generation system on _____, 20__ (*date*).
_____ (*Cooperative's name*) will have access to the generation site at all times.

* Types of Technology: solar/photovoltaic, hydroelectric, wind, fuel cell, anaerobic digestion or other.

** Types of Fuels: Solar, wind, water, natural gas, bio-gas, methane, propane, waste coal or other.

**PENNSYLVANIA/NEW JERSEY RURAL ELECTRIC COOPERATIVES
Renewable Energy Assistance Program (REAP)**

I. MEMBER SECTION

(To be Completed by Electric Cooperative Member)

Member Name: _____

Address: _____

Telephone: (____) _____ - _____

E-Mail Address: _____

Account Number(s): _____

Type Application: *(Check Appropriate Choice)*:

Residential Premise; Farm Premise; Commercial; Industrial; Other _____

Type of Alternative Energy Generation System (AEGS):

(Check Appropriate Choice or Complete)

Wind Turbine; Anaerobic Digester; Small Hydroelectric; Solar;

Other: _____

Nameplate Rating of AEGS (kW): _____ kW

I am the: *(Check All That Apply)*

Owner ____ (Yes/No); Operator ____ (Yes/No); Lessee ____ (Yes/No); or

Otherwise Have Exclusive Control of AEGS ____ (Yes/No).

I, Mr./Mrs. _____ Acknowledge and Attest That the
Statements/Information Provided Above Are True/Correct to the Best of My Knowledge.

(Member Must Complete)

(Signature of Member Applicant for REAP Funds)

(Date)

STANDARD TERMS AND CONDITIONS

16 - General Interconnection Requirements

- 16.01 The following requirements and standards for connection of generating facilities located on Member's premises to the Cooperative system shall be met to assure the integrity and safe operation of the Cooperative system with no deterioration to the quality and reliability of service to other Members. The operation of the generation facility should be done in a competent manner, such that the Cooperative system as a whole is protected.
- 16.02 All small power producers (including renewable energy systems) or cogenerators shall make application to the Cooperative for approval to interconnect their facilities with the Cooperative system.
- 16.03 The Cooperative shall require the following as part of the application, properly completed, signed and attested as necessary:
- (a) Application for service.
 - (b) Application fee as determined from the current applicable tariff.
 - (c) Interconnection Power Purchase Agreement.
 - (d) SREC AEC Schedule A.
 - (e) Renewable Energy Assistance Program Member Section.
 - (f) One line drawing of the system and its interconnection design.

Additional requirements for application may include:

- (g) Completion of a system impact engineering study by an engineering firm of the Cooperative's choosing, cost to be borne by the Member.
 - (h) Evidence of insurance satisfactory to the Cooperative.
 - (i) An agreement to indemnify and hold harmless the Cooperative from any and all liability or claim thereof for damage to property, including property of the Cooperative and injury or death to persons resulting from or caused by the presence, operation, maintenance or removal of such installation.
- 16.04 The Cooperative shall within 30 days from the receipt of all required data from the Applicant either approve or reject in writing the application for connection to the Cooperative system. Rejection of an application shall state with specificity the reasons for such rejection. Connection to the Cooperative system will be permitted only upon obtaining the formal approval of the Cooperative in the form of an approval to operate letter.

Date Issued: September 22, 2012

Effective: October 1, 2012

Issued By: Jack S. Haggerty, Jr., Chairman
Sussex Rural Electric Cooperative
64 County Route 639
Sussex, NJ 07461

STANDARD TERMS AND CONDITIONS

- 16.05 The installation of the generation facilities must be in compliance with the requirements of the National Electrical Code and all applicable local, State and federal codes or regulations. The installation shall be undertaken and completed in a workmanlike manner, and shall meet or exceed industry acceptance standards of good practice. The provisions of the National Electrical Safety Code and the standards of the Institute of Electrical and Electronics Engineers, National Electrical Manufacturers Association and the American National Standards Institute shall be observed to the extent that they are applicable. Prior to connection, the Cooperative must be provided with evidence that electrical inspection by an authorized inspection agency has been completed.
- 16.06 The generation facility shall have the following characteristics:
- (a) Interconnection voltage shall be compatible and consistent with the system to which the Cooperative determines the generation facility is to be connected.
 - (b) The generation facility shall produce 60 Hertz sinusoidal output compatible with the Cooperative system to which the facility is to be connected.
 - (c) The generation facility must provide and maintain automatic synchronization with the Cooperative system to which it is to be connected.
 - (d) The break point between the generation facilities producing single-phase or three-phase output shall be in accordance with existing Cooperative motor specifications or as otherwise specified by the Cooperative.
 - (e) At no time shall the operation of the facility result in excessive harmonic distortion of the Cooperative wave form. Total harmonic distortion greater than 5% shall be deemed excessive and shall result in disconnection of the facility from the Cooperative system.
 - (f) The installation of power factor correction ("PFC") capacitors at the facility may be required under conditions to be determined by the Cooperative when necessary to assure the quality and reliability of service to other Members. The cost of PFC capacitors shall be borne by the Member.
 - (g) The cost of supplying and installing 15-minute integrated generation output metering, and any other special facilities or devices occasioned by the generation facility which the Cooperative may deem necessary on its system, such as telemetry and control equipment, shall be borne by the Member.
 - (h) All upgrades required of the Cooperative's system to which the generator will be interconnected as determined by the system impact study (Section 3.g) will be borne by the Member. The Cooperative will provide a good faith estimate of said costs to assist with planning but the Member will bear the actual cost.

Date Issued: September 22, 2012

Effective: October 1, 2012

Issued By: Jack S. Haggerty, Jr., Chairman
Sussex Rural Electric Cooperative
64 County Route 639
Sussex, NJ 07461

STANDARD TERMS AND CONDITIONS

16.07 The Member shall provide automatic disconnecting devices with appropriate control devices which will isolate the facility from the Cooperative system within a time period specified by the Cooperative for, but not necessarily limited to, the following conditions:

- (a) A fault on the Member's equipment.
- (b) A fault on the Cooperative system.
- (c) A de-energized Cooperative line to which the Member is connected.
- (d) An abnormal operating voltage or frequency.
- (e) Failure of automatic synchronization with the Cooperative system.
- (f) Loss of a phase or improper phase sequence.
- (g) Total harmonic content in excess of 5%.
- (h) Abnormal power factor.

The devices shall be so designed and constructed to prevent reconnection of the facility to the Cooperative system until the cause of disconnection is corrected.

16.08 The Cooperative shall reserve the right to specify settings of all isolation devices which are part of the generation facility.

16.09 The Cooperative shall require initial inspection and testing and may, at its discretion, require subsequent inspection and testing of the facility's isolation and fault protection systems at the Member's expense. Maintenance of these systems must be performed and documented by the Member at specified intervals to the satisfaction of the Cooperative. The Cooperative shall reserve the right to disconnect the Member and/or the generation equipment from the Cooperative system for failure to comply with these inspections, testing and maintenance requirements.

16.10 The Member is solely responsible for providing adequate protection for the equipment located on the Member's side of the interconnection system. This protection shall include, but not be limited to, negative phase sequence voltage on three-phase systems.

16.11 The Member shall provide a Cooperative-controlled disconnecting device providing a visible break on the Cooperative side of the interconnection system. The Cooperative shall require that this device accept a Cooperative-provided padlock. The Cooperative may also require manual operation of the device when required. The Cooperative shall require this device to be labeled "Cogeneration Disconnection Switch" and be located such that 24-hour access is possible.

Date Issued: September 22, 2012

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Issued By: Jack S. Haggerty, Jr., Chairman
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Sussex, NJ 07461

STANDARD TERMS AND CONDITIONS

- 16.12 The Member shall agree to grant access to the Cooperative's authorized representative during any reasonable hours to install, inspect and maintain the Cooperative's metering equipment.
- 16.13 The Member must satisfy, and shall be subject to, all terms and conditions of the Cooperative's Tariff for Service.
- 16.14 No wind generator, tower structure or device shall be installed at a location where, in the event of failure, it can fall in such a manner as to contact, land upon, or interfere with any Cooperative lines or equipment.
- 16.15 The Member shall maintain or cause to be maintained the generator and its associated structures, wiring and devices in a safe and proper operating condition so that the installation continues to meet all the requirements contained herein.
- 16.16 The Cooperative reserves the right to modify or replace the Member's service meter to prevent reverse registration from the Member's generation facility.

Date Issued: September 22, 2012

Effective: October 1, 2012

Issued By: Jack S. Haggerty, Jr., Chairman
Sussex Rural Electric Cooperative
64 County Route 639
Sussex, NJ 07461

GENERAL SERVICE
SCHEDULE NET METERING SERVICE
(Rate Codes 105 and 109)

AVAILABILITY

Available only to approved renewable energy system members who have completed all necessary applications, agreements and paperwork, passed the necessary engineering reviews and passed the safety test. The rate shall be limited by the availability of appropriate meters and further limited by the percentage of the Cooperative's load served by renewable energy systems and/or impact on the Cooperative's members not utilizing this rate.

This rate is not available for unoccupied properties. Seasonal use properties may have the maximum size of the system limited by a calculation of an occupied load (see system sizing). The renewable energy system shall be sized so that it does not generate more energy than is used by the member on an annualized basis.

TYPE OF SERVICE

Single phase, 60 cycles, at available secondary voltages.

APPLICATION FEES

Members wishing to use this rate shall pay the applicable fees and costs as specified below.

Application Fee	
1 - <20 kW	\$100.00
20 - <100 kW	\$250.00

SYSTEM SIZING

All systems shall be sized according to the consumption history of the property being served. This consumption shall be determined by an analysis of the property's consumption using data from our metering system. For occupied properties, we will look at the most recent twelve (12) months of history to determine a maximum consumption. For seasonal properties, we will look at history within the past twelve (12) months when the property was in use and weight it to more accurately reflect use. For new construction, the member must complete a System Requirements Summary, to be verified by the Cooperative that will determine maximum system sizing.

No system will be allowed to interconnect that exceeds the maximum allowable size as determined by the foregoing methods. No system will be allowed to interconnect that is part of an unoccupied property, even if that property is under construction or renovation.

MONTHLY RATE (All charges include Sales and Use Tax as provided in Rider SUT)

System Connection Fee	@	\$ 41.58	per month
Energy Charge	@	\$ 0.1082868	per kWh
Power Cost Adjustment (PCA)		Rider PCA	

Date Issued: **December 19, 2023**

Effective: **January 1, 2024**

Issued by: Jack Haggerty, Jr. Chairman
Sussex Rural Electric Cooperative
64 County Road 639
Sussex, NJ 07461



Facilities interconnected under this schedule are eligible for net metering. The Cooperative will install a meter capable of net metering. Each month, meter data will be used to compare consumption against production. Each kilowatt hour of energy produced will be credited with the full retail rate applicable for the class of service. In months where production exceeds consumption, the excess will be recorded in a bank. In months where consumption exceeds production, the excess consumption will be offset by the bank, if any. When consumption exceeds production plus excess bank, this excess consumption will be billed at the full retail rate applicable for the class of service.

At the end of twelve (12) months, any excess energy in the bank will be purchased by the Cooperative's power supplier at their marginal avoided cost, as determined by the power supplier, if the member has executed an agreement with the power supplier.

MINIMUM BILL

The minimum monthly charge shall under this schedule is **\$41.58**.

INTERCONNECTION REQUIREMENTS

All systems must comply with the current interconnection policies and processes of the Cooperative. Systems that have not completed the process or followed the policies will not be allowed to interconnect until they have complied with all the current requirements.

ENGINEERING IMPACT STUDY

For renewable energy systems larger than 100 kW, the Cooperative may require an independent engineering assessment of the impact on the Cooperative's facilities. This study is used to determine upgrades and enhancements that will be required on the Cooperative's facilities as a result of the interconnection of the renewable energy system. The Cooperative will provide the member with a cost for this study. Payment for the study is required in advance and is necessary for the study to begin.

CONTRIBUTION IN AID TO CONSTRUCTION

Members wishing to use this rate will receive our standard service connection which consists of one (1) span of overhead service and a service drop to the member's point of service. All additional costs associated with delivery of service to the member shall be at current costs to the Cooperative. Any changes made to the Cooperative's facilities made necessary to accommodate the member's interconnection shall be the responsibility of the member. All costs are payable before any construction involving the Cooperative's facilities begins.

LOAD CONTROL

Load management credits are not available to members being served under this schedule.

Date Issued: **December 19, 2023**

Effective: **January 1, 2024**

Issued by: Jack Haggerty, Jr. Chairman
Sussex Rural Electric Cooperative
64 County Road 639
Sussex, NJ 07461



**Rider PCA
Power Cost Adjustment**

POWER COST ADJUSTMENT

The Cooperative reserves the right to implement a Power Cost Adjustment to settle wholesale energy collections from members. The PCA is applicable to all metered kilowatt hours of energy billed under the Cooperative's electric service schedules. The PCA is applied by crediting or debiting the member's monthly bill to recover or refund the difference between estimated and actual wholesale power costs.

Power Cost Adjustment (PCA) @ 0.000000 per kWh.

Date Issued: December 19, 2023

Effective: January 1, 2024

Issued by: Jack Haggerty, Jr., Chairman
Sussex Rural Electric Cooperative
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