ORANGE AND ROCKLAND 4 Irving Place, New York, New York 10003

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July 11, 2001

Frances L. Smith
Secretary
State of New Jersey
Board of Public Utilities
Two Gateway Center
Newark, New Jersey 07102

Re: Compliance Tariff Filing
I/M/O The Electric Discount and Energy Competition Act of 1999 – Net Metering Standards, Docket No. EX99030182

Dear Secretary Smith:

Rockland Electric Company (the "Company") hereby submits for filing ten copies of the following tariff leaves proposing revisions to its Schedule for Electric Service P.U.C. No. 2 - ELECTRICITY.

1st	Revised Leaf No.	18A
3rd	Revised Leaf No.	18B
	Original Leaf No.	18B-1

These tariff leaves are issued June 11, 2001, to become effective August 1, 2001. This filing is made pursuant to the Board's Order Adopting Interim Standards, dated June 11, 2001 in the above captioned matter. The purpose of the filing is to implement net metering for wind and solar photovoltaic electric generation operated by residential and small commercial customers.

Net metering has been implemented in the Company's tariff as a Service Classification Rider entitled "Net Metering for Wind and Solar Photovoltaic Systems." This Rider replaces an expired Rider entitled "Windmill Generation."

The new Rider describes requirements for customer eligibility, metering and billing, interconnection standards and reporting.

Also included with this filing are the following documents:

- Net Metering Agreement;
- Interconnection Application for Systems 10 kW or Smaller;
- Interconnection Standards for Solar or Wind Electric Power Producing Facilities of 10 kW or Less in the State of New Jersey;
- Interconnection Application for Systems 10 kW – 100 kW; and
- Interconnection Standards for Parallel Operation of Small-Size Generating Facilities 10 – 100 KiloWatts in the State of New Jersey.

Questions regarding this filing can be directed to me at (212) 460-3308.

Very truly yours,

Enc.

TARIFF LEAVES

GENERAL INFORMATION

SERVICE CLASSIFICATION RIDER

Applicable to Service Classification Nos. 1, 2, 3 and 5

NET METERING FOR WIND AND SOLAR PHOTOVOLTAIC SYSTEMS

Eligibility:

A customer operating a qualifying wind or solar photovoltaic electric generator ("Customer-generator") located on the customer's side of the electric meter, used at the customer's residence or facility and in compliance with the provisions of this Rider is eligible for service hereunder.

The customer will be required to submit an application for service under this Rider and pay an application processing fee of $100 at the time of application.

The customer will also be required to submit a signed Net Metering Agreement to the Company and the Company's execution of such Net Metering Agreement shall constitute approval for the customer to receive service hereunder.

Customer's generator shall have a rated capacity of no more than the lesser of 100kW or the current peak electric demand of the customer's residence or facility. Interconnection with the Company's system will be at the customer's expense and in accordance with the terms and conditions set forth in the Net Metering Agreement. Interconnection costs shall be paid by the customer and shall be in addition to any line extension charge required to meet service requirements.

Metering and Billing:

Metering may be accomplished using a single meter to record the energy delivered by the Company to the customer and energy supplied by the customer to the Company. The Company shall be permitted to install a second meter, at its expense and with the customer's permission, to measure gross energy supplied by the customer's generator.

The Company will employ net energy metering to measure and charge for the net energy delivered by the Company as follows:

(1) If the amount of energy delivered by the Company exceeds the amount of energy supplied to the Company (net purchase by customer) in a billing period, the customer will be billed for such net purchase at the rates specified in the customer's applicable Service Classification.

(Continued)

GENERAL INFORMATION

SERVICE CLASSIFICATION RIDER (Continued)

NET METERING FOR WIND AND SOLAR PHOTOVOLTAIC SYSTEMS (Continued)

Metering and Billing: (Continued)

(2) If the amount of energy supplied to the Company exceeds the amount of energy delivered by the Company (net sale by customer) during a billing period, that amount will be transferred to the next billing period and added to any sales by the customer in that billing period. At the end of each twelve-month period ("Annualized Period"), any cumulative net sale by a customer shall be purchased as described below.

(a) A net sale, by a customer purchasing Basic Generation Service from the Company, will be purchased by the Company at the New York Independent System Operator's Locational Based Marginal Price for the Hudson Valley Zone, averaged over the twelve-month period. A credit voucher will be issued to the customer for the amount resulting from such net sale. This credit shall be used to offset electric bills issued to the customer following the date the credit is issued.

(b) A net sale, by a customer purchasing Competitive Energy Supply, will be purchased by the customer's Electric Generation Supplier at its avoided cost of wholesale power.

When a customer-generator switches electric suppliers, the electric power supplier or basic generation service provider with whom service is terminating shall treat the end of the service period as if it were the end of the Annualized Period.

Interconnection Standards:

(1) Customer-generators shall bear the cost of meeting all applicable safety and power quality standards including the Company's standards and standards approved by the National Electrical Code, Institute of Electrical and Electronics Engineers, and accredited testing institutions, such as Underwriters Laboratories.

(Continued)

GENERAL INFORMATION

SERVICE CLASSIFICATION RIDER (Continued)

NET METERING FOR WIND AND SOLAR PHOTOVOLTAIC SYSTEMS (Continued)

Interconnection Standards: (Continued)

(2) Customer-generator facilities rated up to and including 10 kW, except for those facilities served by network distribution systems, shall comply with the Company's Interconnection Standards for Solar or Wind Electric Power Producing Facilities of 10 kW or Less in the State of New Jersey and all applicable safety and power quality standards approved by the National Electrical Code, Institute of Electrical and Electronics Engineers, and accredited testing institutions, such as Underwriters Laboratories, and specifically IEEE Standard 929-2000.

(3) Customer-generator facilities rated above 10 kW and not more than 100 kW, and those rated 10 kW and less and served by network distribution systems, shall comply with the Company's Interconnection Standards for Parallel Operation of Small-Size Generating Facilities 10 – 100 KiloWatts in the State of New Jersey and all applicable safety and power quality standards approved by the National Electrical Code, Institute of Electrical and Electronics Engineers and accredited testing laboratories, such as Underwriters Laboratories.

(4) The Company may not require an eligible customer-generator whose system(s) meets the standards above to install additional controls, perform or pay for additional tests or purchase additional liability insurance.

Reporting:

The Company and Electric Generation Suppliers providing Competitive Energy Supply to the Company's customers shall each submit an annual report to the Board indicating the rated generating capacity owned and operated by its net metering customer-generators, the net kWh received from customer-generators and the aggregate value of net metering credits provided during the previous twelve months. Annual reports shall be due October 31st of each year for the period ending September 30th of each year.

INTERCONNECTION APPLICATION 0-10 KW

ROCKLAND ELECTRIC COMPANY

INTERCONNECTION APPLICATION FOR SYSTEMS 10 kW OR SMALLER

A. Applicant Information

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Street Address (if different from above): _____

City: _____ State: _____ Zip Code: _____

Daytime Phone: _____ Fax: _____ Email: _____

Electric Utility Name: _____

Electric Account No. (from Utility Bill): _____

Electric Energy Electric Service Provider: _____

Electric Energy Service Provider Account No.: _____

B System Information

Manufacturer Name Plate AC Power Rating: _____ kW Inverter Power Rating: _____

System Type: *Solar* *Wind* *Fuel Cell* System Location: _____

Inverter Manufacturer : _____

Inverter Model No: _____ Inverter Serial No: _____

Inverter Location: *Indoor* *Outdoor* *Self Contained* Location: _____

Outdoor Manual AC Disconnect Switch - Location: _____

C. Installation Contractor Information/Hardware and Installation Compliance

Installation Contractor (Company Name) _____

Contractor's License No.: _____ Proposed Installation Date: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Daytime Phone: _____ Fax: _____Email: _____

If PV, the proposed System hardware is in compliance with *Underwriters Laboratories (UL) 1741, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Systems*; *UL 1703, Standard for Safety*: *Flat-Plate Photovoltaic Modules and Panels;* and *IEEE 1262-1995, IEEE Recommended Practice for Qualification of Photovoltaic (PV) Modules.*

If PV, System must be installed in compliance with *IEEE Standard 929-2000, Recommended Practice for Utility Interface of Photovoltaic Systems.* All System types must be installed in compliance with applicable requirements of local electrical codes, the local electric utility and the *National Electrical Code® (NEC*) and must use a non-islanding inverter as defined under *IEEE Standard 929-2000 (section 3.1.1).*

The System must have a lockable, visible disconnect device, accessible at all times to utility personnel.

If the System is designed to provide uninterruptible power to critical loads, either through energy storage, back-up generator, or the generation source, the System will include a parallel blocking scheme for this backup source. This function may be integral to the inverter manufacturer's packaged system.

Signed (Contractor): _____ Date: _____

Name (Print): _____

Rev. July 9, 2001

ROCKLAND ELECTRIC COMPANY

INTERCONNECTION APPLICATION FOR SYSTEMS 10 kW OR SMALLER
(Continued)

D. Additional Terms and Conditions

a) Operation/Disconnection
If it appears to the utility, at any time, in the reasonable exercise of its judgment, that operation of the System is adversely affecting or may adversely affect the utility's electrical system, the utility may immediately take any and all steps it reasonably believes necessary to mitigate or cure the conditions including, without limitation, disconnecting the System from the utility's electrical system. Applicant/Owner shall at all times permit utility employees and inspectors reasonable access to inspect, test, or examine the System or metering equipment after reasonable notice by the utility. Applicant/Owner shall be liable for the costs and expenses incurred by the utility related to disconnection and reconnection of the System by the utility when disconnection is permitted under this paragraph D.

b) Liability/Indemnity
Applicant/Owner hereby covenants and agrees to assume all risk of and liability for personal injuries (including death) and damage to property arising out of or caused by the operation of the System. Applicant/owner hereby covenants and agrees to indemnify, protect, defend and save harmless the utility, its affiliates, officers, directors, employees and agents from and against any and all claims and demands for damages to property and injury or death to persons which may arise out of, or be related to, or caused by, the operation of the System or its interconnection to the utility's electrical system, except if caused solely by the gross negligence or willful misconduct of the utility as determined by a court of law.

E. Electrical Code Inspection

The System referenced above satisfies applicable electrical code requirements.

Inspector Name (Print): _____

Signed (Inspector): _____

Date: _____ Municipality: _____

F. Owner Acknowledgment

The System has been installed to my satisfaction and I have been given System warranty information, and an operation manual. Also, I have been informed as to whether my PV or Wind System is eligible for net metering, and been provided with a copy of the applicable utility's net metering tariff and liability requirements. I have also been instructed in the operation of the System by the manufacturer and/or the installer of the System.

I agree to abide by the terms of this Application /Agreement and I agree to operate and maintain the System in accordance with manufacturer's recommended practices as well as the Electric Utility's interconnection standards. Further, I agree to notify the utility 30 days prior to modification or replacement of the System's components or design. Any such modification or replacement shall require submission of a new Application to the utility.

I agree not to operate the System in parallel with the Electric Utility until this Application/Agreement is accepted by the Electric Utility.

I also agree to install a warning label provided by the utility on or near my service meter location.

Signed (Owner): _____

Date: _____

G. Utility Application Acceptance

The utility does not, by acceptance of this Application/Agreement, assume any responsibility or liability for damage to property or physical injury to persons. Further, this Application/Agreement does not constitute a dedication of the owner's System to the utility's electrical system equipment or facilities.

This Application is accepted by the Electric Utility on this _____ day of _____, 2001

Utility Representative Name (Print): _____

Signed (Utility Representative): _____

Date: _____

INTERCONNECTION APPLICATION 10-100 KW

ROCKLAND ELECTRIC COMPANY

INTERCONNECTION APPLICATION FOR SYSTEMS 10 kW – 100kW

A. Applicant Information

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Street Address (if different from above): _____

City: _____ State: _____ Zip Code: _____

Daytime Phone: _____ Fax: _____ Email: _____

Electric Utility Name: _____

Electric Account No. (from Utility Bill): _____

Electric Energy Electric Service Provider: _____

Electric Energy Service Provider Account No. _____

B. Energy Producing Equipment/Inverter Information:

Manufacturer: _____

Model No. _____ Version No. _____

( )Synchronous ( )Induction ( )Inverter ( )Other_____

Rating: _____kW Rating: _____kVA

Rated Output: VA Rated Voltage: Volts

Rate Frequency: Hertz Rated Speed: RPM

Efficiency: % Power Factor: %

Rated Current: Amps Locked Rotor Current: Amps

Synchronous Speed: RPM Winding Connection:

Min. Operating Freq./Time:

Generator Connection: ( )Delta ( )Wye ( )Wye Grounded

One Line Diagram attached: ( )Yes

Installation Test Plan attached: ( )Yes

Outdoor Manual AC Disconnect Switch - Location: _____

For Synchronous Machines:

Submit copies of the Saturation Curve and the Vee Curve

( )Salient ( )Non-Salient

Torque: _____lb-ft Rated RPM: _____

Field Amperes: _____ at rated generator voltage and current

and _____% PF over-excited

Type of Exciter: _____

Output Power of Exciter: _____

Type of Voltage Regulator: _____

Direct-axis Synchronous Reactance (Xd) _____ohms

Direct-axis Transient Reactance (X'd) _____ohms

ROCKLAND ELECTRIC COMPANY

INTERCONNECTION APPLICATION FOR SYSTEMS 10 kW – 100kW
(Continued)

Direct-axis Sub-transient Reactance (X"d) _____ohms

For Induction Machines:

Rotor Resistance (Rr)_____ohms Exciting Current ____Amps

Rotor Reactance (Xr)_____ohms Reactive Power Required:

Magnetizing Reactance (Xm)_____ohms ___VARs (No Load)

Stator Resistance (Rs)_____ohms ___VARs (Full Load)

Stator Reactance (Xs)_____ohms

Short Circuit Reactance (X"d)_____ohms Phases:

Frame Size: _____ Design Letter: ____ ( )Single

Temp. Rise: _____°C. ( )Three-Phase

For Inverters:

Manufacturer Name Plate AC Power Rating: _____ kW Inverter Power Rating: _____

System Type: *Solar* *Wind* *Fuel Cell* System Location: _____

Inverter Manufacturer : _____

Inverter Model No: _____ Inverter Serial No: _____

Inverter Location: *Indoor* *Outdoor* *Self Contained* Location _____

Type: ( )Forced Commutated ( )Line Commutated

Rated Output: Amps Volts

Efficiency: %

C. Installation Contractor Information/Hardware and Installation Compliance

Installation Contractor (Company Name) _____

Contractor's License No.: _____ Proposed Installation Date: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Daytime Phone: _____ Fax: _____Email: _____

If PV, the proposed System hardware is in compliance with *Underwriters Laboratories (UL) 1741, Standard for Static Inverters and Charge Controllers for Use in Photovoltaic Systems*; *UL 1703, Standard for Safety*: *Flat-Plate Photovoltaic Modules and Panels;* and *IEEE 1262-1995, IEEE Recommended Practice for Qualification of Photovoltaic (PV) Modules.*

If PV, System must be installed in compliance with *IEEE Standard 929-2000, Recommended Practice for Utility Interface of Photovoltaic Systems.* All System types must be installed in compliance with applicable requirements of local electrical codes, the local electric utility and the *National Electrical Code® (NEC*) and must use a non-islanding inverter as defined under *IEEE Standard 929-2000 (section 3.1.1).*

The System must have a lockable, visible disconnect device, accessible at all times to utility personnel.

If the System is designed to provide uninterruptible power to critical loads, either through energy storage, back-up generator, or the generation source, the System will include a parallel blocking scheme for this backup source.

Signed (Contractor): _____ Date: _____

Name (Print): _____

ROCKLAND ELECTRIC COMPANY

INTERCONNECTION APPLICATION FOR SYSTEMS 10 kW – 100kW
(Continued)

D. Additional Terms and Conditions

a) Operation/Disconnection
If it appears to the utility, at any time, in the reasonable exercise of its judgment, that operation of the System is adversely affecting or may adversely affect the utility's electrical system, the utility may immediately take any and all steps it reasonably believes necessary to mitigate or cure the conditions including, without limitation, disconnecting the System from the utility's electrical system. Applicant/Owner shall at all times permit utility employees and inspectors reasonable access to inspect, test, or examine the System or metering equipment after reasonable notice by the utility. Applicant/Owner shall be liable for the costs and expenses incurred by the utility related to disconnection and reconnection of the System by the utility when disconnection is permitted under this paragraph D.

b) Liability/Indemnity
Applicant/Owner hereby covenants and agrees to assume all risk of and liability for personal injuries (including death) and damage to property arising out of or caused by the operation of the System. Applicant/owner hereby covenants and agrees to indemnify, protect, defend and save harmless the utility, its affiliates, officers, directors, employees and agents from and against any and all claims and demands for damages to property and injury or death to persons which may arise out of, or be related to, or caused by, the operation of the System or its interconnection to the utility's electrical system, except if caused solely by the gross negligence or willful misconduct of the utility as determined by a court of law.

E. Electrical Code Inspection

The System referenced above satisfies applicable electrical code requirements.

Inspector Name (Print): _____

Signed (Inspector): _____

Date: _____ Municipality: _____

F. Owner Acknowledgment

The System has been installed to my satisfaction and I have been given System warranty information, and an operation manual. Also, I have been informed as to whether my PV or Wind System is eligible for net metering, and been provided with a copy of the applicable utility's net metering tariff and liability requirements. I have also been instructed in the operation of the System by the manufacturer and/or the installer of the System.

I agree to abide by the terms of this Application /Agreement and I agree to operate and maintain the System in accordance with manufacturer's recommended practices as well as the Electric Utility's interconnection standards. Further, I agree to notify the utility 30 days prior to modification or replacement of the System's components or design. Any such modification or replacement shall require submission of a new Application to the utility.

I agree not to operate the System in parallel with the Electric Utility until this Application/Agreement is accepted by the Electric Utility.

I also agree to install a warning label provided by the utility on or near my service meter location.

Signed (Owner): _____

Date: _____

G. Utility Application Acceptance

The utility does not, by acceptance of this Application/Agreement, assume any responsibility or liability for damage to property or physical injury to persons. Further, this Application/Agreement does not constitute a dedication of the owner's System to the utility's electrical system equipment or facilities.

This Application is accepted by the Electric Utility on this _____ day of _____, 2001

Utility Representative Name (Print): _____

Signed (Utility Representative): _____

Date: _____

INTERCONNECTION STANDARDS 0-10 KW

INTERCONNECTION STANDARDS
FOR
SOLAR OR WIND ELECTRIC POWER PRODUCING FACILITIES
OF 10 KW OR LESS
IN THE STATE OF NEW JERSEY

July 5, 2001

Rockland Electric Company
390 West Rt. 59
Spring Valley, NY 10977

INTERCONNECTION STANDARDS FOR SOLAR OR WIND ELECTRIC POWER-PRODUCING FACILITIES OF 10 kW OR LESS IN THE STATE OF NEW JERSEY

I. INTRODUCTION

This document describes the minimum operating, metering, and protective equipment which Rockland Electric Company (RECO) requires for operation of its electric system in parallel with a generating source or sources with total output of 10KW or less. These requirements have been established for the protection of life and property and are intended to assist owners of small-sized electric power generators (referred to hereafter as the Applicant) in evaluating their electrical generating system requirements.

A. A Project Begins With the Following:

1) When the Applicant has determined:

   a. The type of generation (induction, synchronous, or dc with inverter);
   b. The generator rating;
   c. The amount of power to be delivered to the RECO system; and
   d. The location of his facility.

2) Then, RECO will determine:

   a. The location(s) where the Applicant's facility may be connected to the RECO system; and
   b. The ability of RECO's facilities to accept the additional input of power.

Since these considerations may result in requirements other than the general requirements provided in this document, the Applicant is encouraged to discuss its project with RECO at the earliest possible date.

B. It Is the Applicant's Responsibility to:

1) Submit a completed Application for parallel operation.

2) Design, install, operate and maintain all necessary equipment for connection to the RECO system, unless otherwise stated in a written agreement between RECO and the Applicant.

3) Comply with all applicable local, state, and federal rules, regulations, and codes.

4) Submit specifications and detailed plans for the installation of the control and protective devices to RECO for review and written approval prior to their installation and preferably before purchase.

II. TECHNICAL REQUIREMENTS FOR INTERCONNECTING SOLAR OR WIND POWER-PRODUCING FACILITIES 10 KW OR LESS, SINGLE-PHASE, 600 VOLTS OR LESS, IN PARALLEL WITH A UTILITY SYSTEM.

1. Design Requirements

A. The power-producing facility shall be tested by a nationally recognized testing laboratory and conform to all applicable local, state and federal building codes and National Standards and any authorities having jurisdiction.

B. The power-producing facility shall have an automatic switching device operated by over- and under-voltage protection and over- and under-frequency protection. The trip settings shall be per IEEE 929-2000.

1) Following a power-producing facility disconnect as a result of a voltage or frequency excursion as stated above, the power-producing facility shall remain disconnected until the utility service voltage has recovered to utility-acceptable voltage and frequency limits for a minimum of five minutes.

2) The above set points shall not be changed or modified by the power-producing facility owner or representative.

3) All devices or systems used for voltage and frequency measurement and automatic disconnection shall be tested by the manufacturer for both static and dynamic performance. At the time of production, design and performance, such devices or systems must meet or exceed requirements of ANSI/IEEE Standards C37.90.1 and 929-2000. Proof of proper performance shall be in the form of a certified test report acceptable to the utility. If the power-producing facility does not comply with these requirements, utility-grade protective relays, approved by the utility, are required.

2. Manual Disconnect Device

A. The power-producing facility shall be capable of being isolated from the utility system by means of an external, manual, visible load break, disconnecting switch installed by the owner of the power-producing facility, electrically located between the power-producing facility and the utility system.

B. The disconnect switch shall be located within 10 feet of the external electric service meter.

C. The disconnect switch shall be readily accessible for operation by utility personnel at all times and be capable of being padlocked only in the open position. Operation of this switch is at the sole discretion of the utility without prior notice.

D. The disconnect switch shall be clearly marked “Generator Disconnect Switch” with permanent 3/8-inch letters or larger.

3. Dedicated Distribution Transformer

A. The connecting utility reserves the right to require that the power-producing facility connects to the utility's system through a dedicated distribution transformer if the utility decides that the transformer is necessary to ensure conformance with utility safe work practices, to enhance service restoration operations or to prevent detrimental effects to other utility customers.

4. Network Application

A. The utility reserves the right to exclude the power-producing facility from connection to secondary network utility systems.

5. Power-Producing Facility Performance

A. The electrical output of the power-producing facility shall meet the latest IEEE Standard 519 and ANSI C84.1 at the time of placement into service.

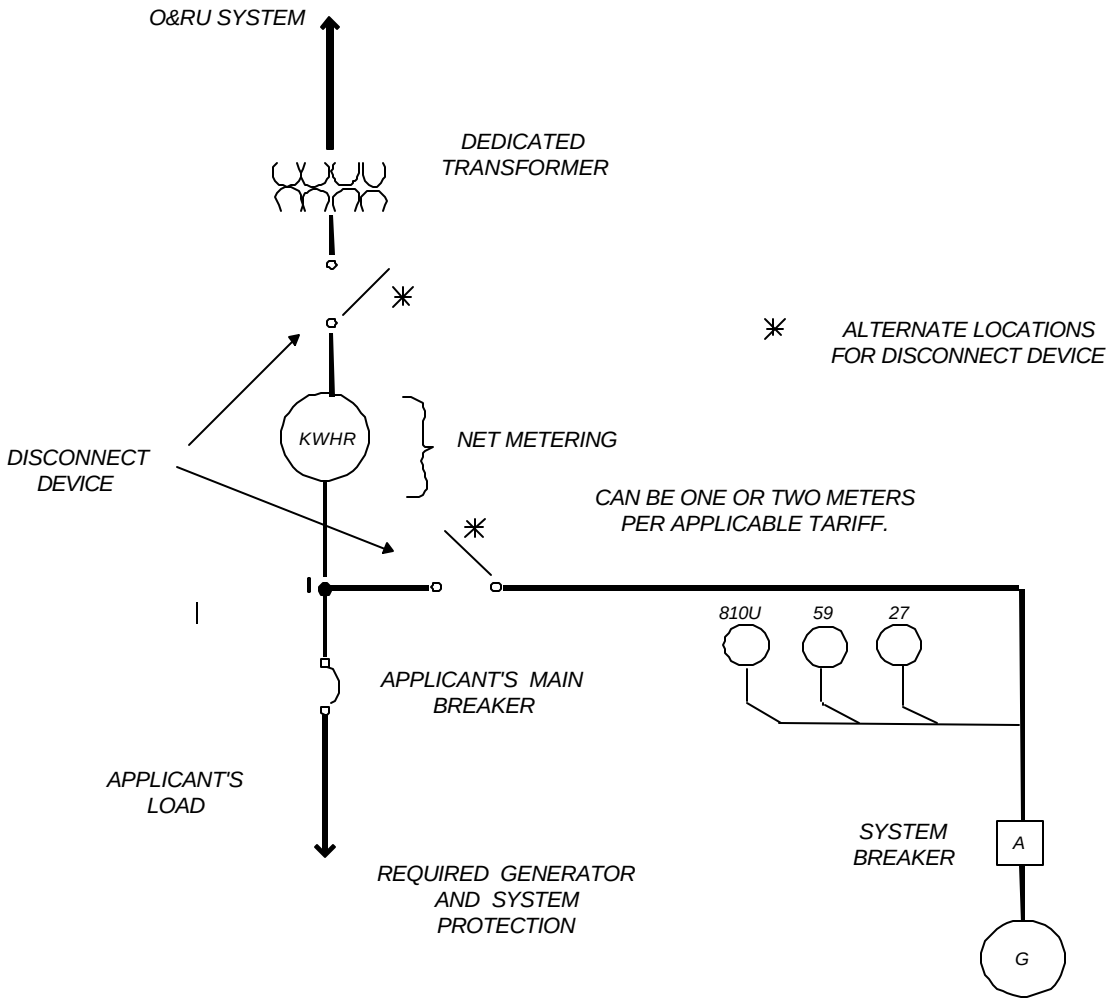
6. Testing and Maintenance

A. Upon initial parallel operation of the power-producing system, or any time a system adjustment or revision is made, a system functional test demonstrating compliance with Section (1)(B)(1-5) above is required, including written certification of compliance with all of the terms of this document by a licensed or qualified installation contractor acceptable to the utility. This test is a system acceptance test demonstrating to utility personnel that the photovoltaic system controls are operational and disconnect from the utility when the utility voltage and frequency parameters are outside of the limits described in Section (1)(B)(1-5) above. Built-in software testing routines may be used to verify, on demand, correct operation of the photovoltaic system controls. The software testing routines shall be production-verified and tested.

B. The connecting utility reserves the right to require the power-producing facility owner to operationally test the system controls. The utility will either witness the test or will require written certification by a licensed or qualified installation contractor acceptable to the utility.

FIGURE 1

TYPICAL
PROTECTION & NET METERING INSTALLATION
FOR RESIDENTIAL SOLAR ELECTRIC POWER PRODUCING FACILITIES
OF 10 KILOWATTS AND LESS



Device No.	*Function*	*Trips Breaker*
27	*UNDERVOLTAGE*	*A*
59	*OVERVOLTAGE*	*A*
810U	*OVER & UNDER FREQUENCY*	*A*

INTERCONNECTION STANDARDS 10-100 KW

INTERCONNECTION STANDARDS

FOR

PARALLEL OPERATION OF

SMALL-SIZE GENERATING FACILITIES

10 - 100 KILOWATTS

IN THE STATE OF NEW JERSEY

July 6, 2001
Rockland Electric Company
390 West Route 59
Spring Valley, NY 10977

INTERCONNECTION REQUIREMENTS
FOR
PARALLEL OPERATION OF
SMALL-SIZE GENERATING FACILITIES
10 - 100 KILOWATTS
IN THE STATE OF NEW JERSEY

I. INTRODUCTION

This document describes the minimum operating, metering, and protective equipment which Rockland Electric Company (RECO) requires for operation of its electric system in parallel with a generating source or sources with total output of 10 - 100KW. These requirements have been established for the protection of life and property and are intended to assist owners of small-sized electric power generators (referred to hereafter as the Applicant) in evaluating their electrical generating system requirements.

A. A Project Begins With the Following:

1. When the Applicant has determined:

    a. The type of generation (induction, synchronous, or dc with inverter);
    b. The generator rating;
    c. The amount of power to be delivered to the RECO system; and
    d. The location of his facility.

2. Then, RECO will determine:

    a. The location(s) where the Applicant's facility may be connected to the RECO system; and
    b. The ability of RECO's facilities to accept the additional input of power.

Since these considerations may result in requirements other than the general requirements provided in this document, the Applicant is encouraged to discuss his project with RECO at the earliest possible date.

B. It Is the Applicant's Responsibility to:

1. Submit a completed Application for parallel operation.

2. Design, install, operate and maintain all necessary equipment for connection to the RECO system, unless otherwise stated in a written agreement between RECO and the Applicant.

3. Comply with all applicable local, state, and federal rules, regulations, and codes.

4. Submit specifications and detailed plans for the installation of the control and protective devices to RECO for review and written approval prior to their installation and preferably before purchase.

C. Initial Parallel Operation Will Be Permitted Only After RECO Has:

1. Inspected the completed installation.

2. Received and reviewed signed reports for the relay and functional trip tests:

   These tests must show that the protective equipment has been field tested by applying secondary currents and/or voltages at the proper frequencies. This will indicate if the equipment will operate at the specified setting and within the tolerance given in the manufacturer's instruction bulletin.

3. Given written approval as stated in the appropriate power-purchase or paralleling agreement.

4. Given verbal approval through the designated RECO facility immediately prior to paralleling with the RECO system.

These items are required to determine that the Applicant's equipment can be safely connected to RECO's system. RECO may disconnect the facility from the RECO system at any time if it is found that the facility is unsafe or causes interference with RECO's system or its customers.

II. EQUIPMENT REQUIREMENTS:

A. Metering:

An Applicant desiring to sell power to RECO shall, subject to RECO approval, provide, install, own, and maintain all facilities necessary to accommodate RECO metering. Metering may include either standard watthour meters or time-of-delivery meters depending upon the contractual agreement. Meters may be equipped with detents to prevent reverse registration so that deliveries to and from the Applicant's equipment can be separately recorded and treated as separate transactions under the applicable rate of price schedule.

1. Metering requirements for the delivery of power to RECO fall under three general classifications, depending upon the contractual arrangements:

   a. Net Metering. The Applicant's excess generation is delivered to the RECO system after the Applicant first meets its own normal service requirements.
      Meter(s) will be required to measure the Applicant's surplus generation delivered into the RECO system. A single meter allowed to run in reverse can be used for this purpose.
   b. Simultaneous Purchase and Sale. The entire net output of the Applicant's generation facility is delivered to the RECO system while RECO simultaneously supplies all of the Applicant's normal electric service requirements.
      Meter(s) will be required to measure the net generation to the RECO system.

c. No Sale. Should the Applicant desire not to sell power to RECO but only to operate in parallel, the Applicant may do so under the terms of a special agreement. In such cases metering will not be required for the measurement of power delivered into the RECO system.

Figures 1 and 2 show typical metering for net metering and simultaneous purchase installations.

2. Metering requirements for the delivery of power to the Applicant (RECO billing) shall be in accordance with RECO's applicable electric tariffs on file with and authorized by the New Jersey Board of Public Utilities (BPU). For a simultaneous purchase and sale arrangement, auxiliary metering shall be required to measure energy supplied to the Applicant for its generator auxiliary load when its generator is not operating and during periods of generator startup and shutdown.

B. Protective and Control Devices:

The Applicant shall provide appropriate protection and control equipment, including an interrupting device that will disconnect the generation in the event that the portion of the utility system that serves the generator is de-energized for any reason or for a fault in the Applicant's system. The Applicant's protection and control equipment shall be capable of disconnecting the generation upon detection of an islanding condition and upon detection of a utility system fault.

The Applicant's protection and control scheme shall be designed to allow the generation, at steady state, to operate only within the limits specified in this document for frequency and voltage. Upon request from RECO, the Applicant shall provide documentation detailing compliance with the requirements set forth in this document.

The specific design of the protection, control and grounding schemes will depend on the size and characteristics of the Applicant's generation, as well the Applicant's load level, in addition to the characteristics of the particular portion of RECO's system where the Applicant is interconnecting.

Minimum protection requirements are necessary for safe and reliable parallel operation of both the Applicant's equipment and RECO's electric system. While most commercially available generators and inverters are equipped with some protective and control devices, additional equipment may be required to permit parallel operation with the RECO system depending on the location, type and size of the generator. See Figures 1 and 2 for typical protection schemes.

1. All generators must have:

   a. A Disconnect Device

      A disconnect device must be provided as a means of electrically isolating the RECO system from the generator and to establish working clearance for maintenance and repair work in accordance with RECO safety rules and practices. This disconnect device may be located in the main interconnection

line, or in the generator connecting line provided it is wired directly into the main interconnection line on the RECO side of the applicant's main distribution bus.

The disconnect device will be installed by RECO at the applicant's expense if it is to be located in RECO owned wiring. If the device is to be located in the Applicant's wiring, it must be furnished and installed by the Applicant. In either case, the disconnect device is subject to the following requirements:

1. Only devices specifically approved by RECO for this purpose may be used. The device must provide a visible air break.
2. The device shall be physically located for ease of access and visibility to RECO personnel. When installed in the Applicant's wiring, the device shall normally be located in close proximity to the metering.
3. The disconnect switch shall be clearly marked "Generator Disconnect Switch" with permanent 3/8-inch letters or larger.
4. RECO personnel shall inspect and approve the installation before parallel operation will be permitted.
5. The device must be lockable in the open position with a standard RECO padlock with a 3/8-inch shank.
6. The Applicant is responsible for all labor and material costs to maintain, repair, or replace the disconnect device.

b. Interrupting Device

The generator shall have, as a minimum, an interrupting device(s) sized to meet all applicable local, state, and federal codes. The interrupting device shall be operated by the required over and under voltage and over and under frequency protection. All phases of a generator or inverter interface shall disconnect for a voltage or frequency trip on any phase. It is recommended the voltage protection be wired phase to ground.

c. Under and overvoltage protection.

This protection is used to trip the circuit breaker when the voltage is above or below RECO's normal level.
The voltage protection is set to initiate a trip of the circuit breaker within six (6) cycles if the voltage rises above 165v phase to ground or falls below 60 volts phase to ground (nominal 120Vrms base) on any phase.
The voltage protection is set to initiate a trip of the circuit breaker within 2 seconds when the voltage rises above 132 volts phase to ground or falls below 106V rms phase to ground (nominal 120Vrms base) on any phase.

d. Over and underfrequency protection.

This protection is used to trip the circuit breaker when the frequency varies from the nominal of 60 Hz.

1) Overfrequency protection is set to initiate a trip of the circuit breaker, after a six (6) cycle time delay, when the frequency is equal to or above 60.5 Hz.

2) Underfrequency protection is set to initiate a trip of the circuit breaker after a six (6) cycle time delay, when the frequency is equal to or below 59.3 Hz.

2. Generators greater than 10KW may require a dedicated transformer which serves only the Applicant (no other customer served from this transformer). Generators less than 10KW generating at a secondary voltage level may not require a dedicated transformer. However, this must be approved by RECO after review of the project details.

   The dedicated transformer provides isolation between the Applicant's generator and RECO's customers.

3. In addition to the items listed above, all generators exceeding 40KW must have the following:

   a. A ground fault sensing scheme.

      This scheme detects system ground faults and trips the circuit breaker, thus prohibiting the Applicant's generator from continuously contributing to a ground fault.

      This scheme must be able to detect ground faults between the RECO system side of the dedicated transformer and RECO's end of line.

4. Induction generator installations may require capacitors to be switched on to correct the generator output to near unity power factor. Capacitors installed on the generator terminals may be acceptable; but caution should be used since this increases the possibility of the generator becoming self-excited. Preferably, capacitors should be provided and installed by RECO on the RECO system at the Applicant's expense.

5. Synchronous generators and induction generators designed to operate similar to synchronous generators must also have manual synchronization with relay supervision to synchronize with the RECO system. Synchro-check relays (such as G. E. Model IJS) normally used for checking two voltages between which there is no slip are not acceptable.

6. It is recommended that the Applicant protect his three-phase equipment from negative sequence currents.

   Certain conditions in the utility system may cause negative sequence currents to flow. It is the sole responsibility of the customer to protect his equipment from excessive negative sequence currents.

7. To avoid out-of-phase reclosing, the design of the Applicant’s protection and control scheme shall take into account the utility practice of automatically reclosing the feeder without synchronism check as quickly as 20 cycles after being tripped.

8. A failure of the Applicant's interconnection protection equipment, including loss of control power, shall open the interrupting device, thus disconnecting the generation from the utility system. An Applicant's protection equipment shall utilize a non-volatile memory design such that a loss of internal or external control power, including batteries, will not cause a loss of interconnection protection functions or loss of protection set points.

C. RECO System Modifications:

RECO will provide equipment and labor necessary to perform all system modifications at the Applicant's expense under the terms of a special facilities agreement. The following modifications are required as noted:

For synchronous generators or other generators designed to operate similarly, RECO's automatic restoration equipment will be prevented from operating until all generation on the Applicant side of the restoration equipment is off line.

Generator damage and system disturbances may result from the restoration of power by automatic equipment to a line energized by an Applicant's generator.

Modifications will be required when the generator(s) have the capability of energizing a line when the RECO system is disconnected. The Applicant's generators(s) will not be allowed to automatically re-energize RECO's facilities until five (5) minutes after voltage and frequency have returned to normal.

D. Direct Telephone Service:

The Applicant shall provide 24-hour telephone contact(s). This contact will be used by the utility to arrange access for repair, inspection or emergencies. The utility will make such arrangements (except for emergencies) during normal business hours.

III. PERFORMANCE CRITERIA

A. Harmonic Requirements:

The harmonic content of the voltage and current waveforms in the RECO system must be restricted to levels which will not cause interference or equipment operating problems for RECO or its customers. All applicants generating facilities must conform to IEEE 519-1992, Recommended Practices for Harmonic Control in Electric Power System .

Any harmonic problems will be handled on a complaint basis. A facility causing harmonic interference is subject to being disconnected from the RECO system until the condition has been corrected. If the cause of the problem is traceable to the Applicant's facilities, all costs associated with determining and correcting problems will be at the Applicant's expense.

B. Generator Connection to the RECO System:

Connecting a generator to the RECO system must not cause harmful voltage fluctuations. A facility causing such harmful voltage fluctuations is subject to being disconnected from the RECO system until the condition has been corrected.

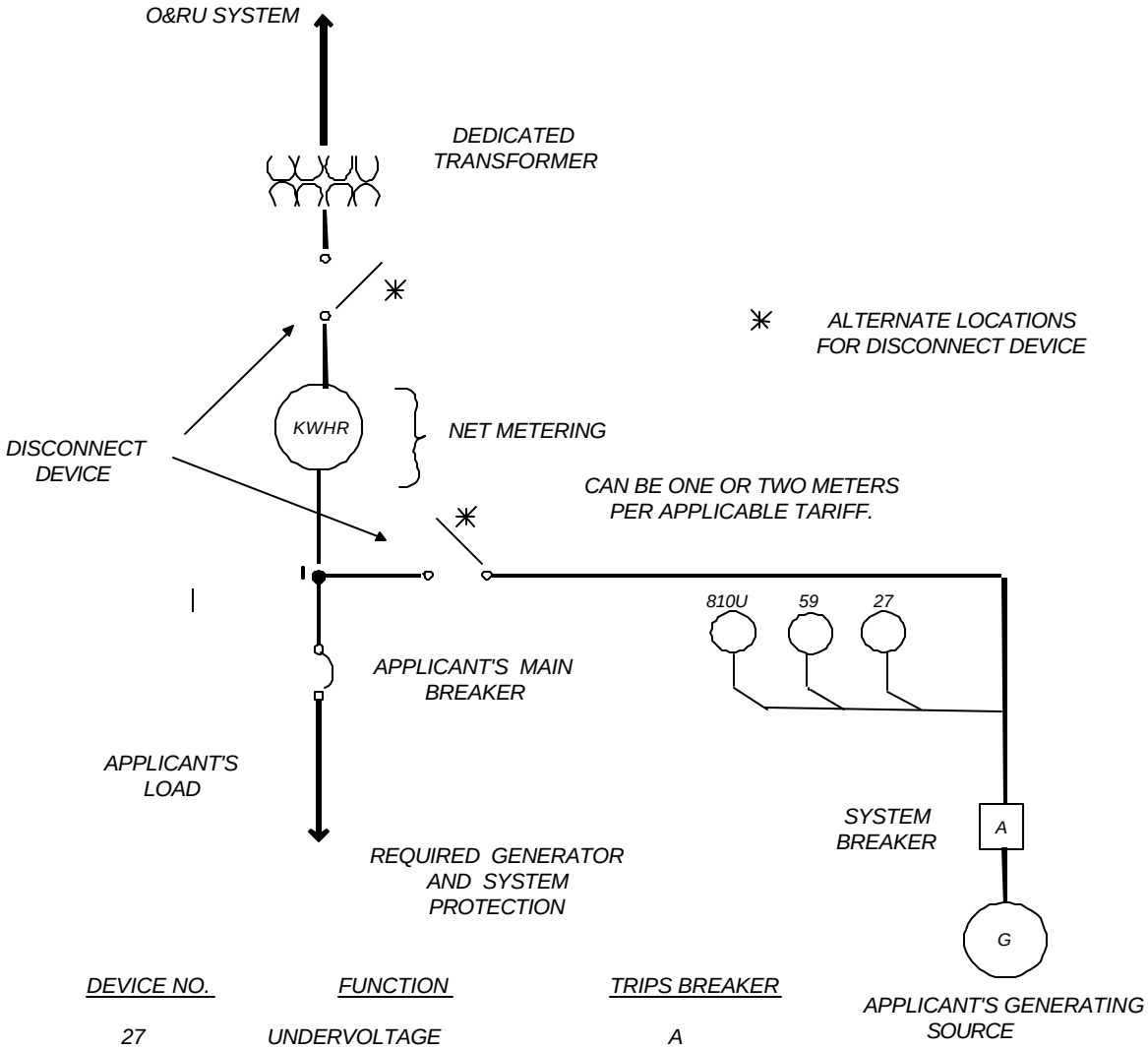
IV. OPERATING AND MAINTENANCE PROCEDURES

A. All Generators Must Have an Operations Log:

A log must be kept for information on unit availability maintenance outages, circuit breaker trip operations requiring a manual reset, and other unusual events. RECO shall have the right to review these logs especially in analyzing system disturbances.

FIGURE 1

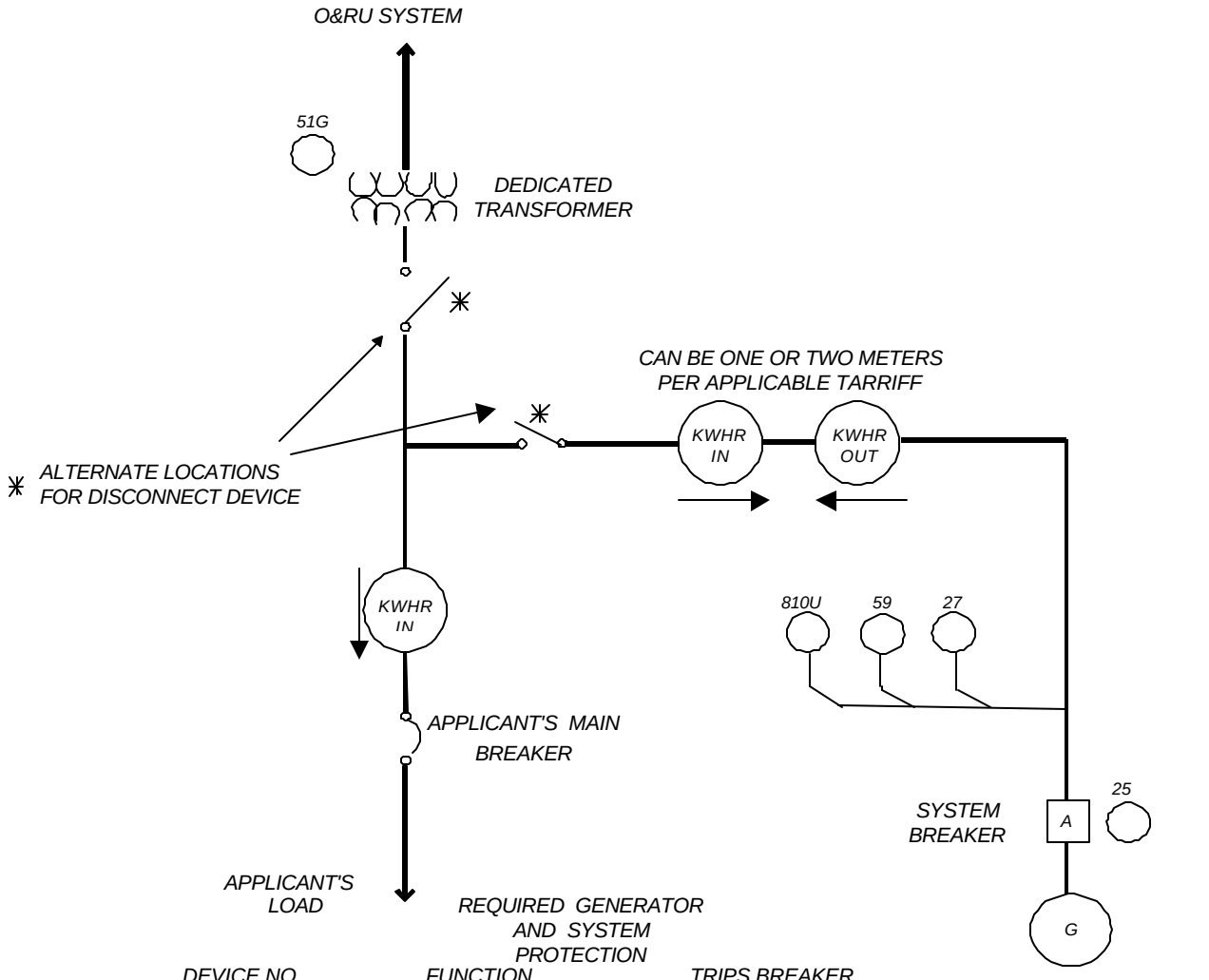
TYPICAL
PROTECTION & NET METERING INSTALLATION
FOR RESIDENTIAL SOLAR ELECTRIC POWER PRODUCING FACILITIES
10 - 100 KILOWATTS



DEVICE NO.	FUNCTION	TRIPS BREAKER
27	UNDERVOLTAGE	A
51G	GROUND OVERCURRENT	A
59	OVERVOLTAGE	A
810U	OVER & UNDER FREQUENCY	A

FIGURE 2

TYPICAL
PROTECTION AND METERING INSTALLATION
FOR ELECTRIC POWER PRODUCING FACILITIES
10 - 100 KILOWATTS
FOR SIMULTANEOUS PURCHASE AND SALE



REQUIRED GENERATOR AND SYSTEM PROTECTION

DEVICE NO.	FUNCTION	TRIPS BREAKER
27	UNDERVOLTAGE	A
51G	GROUND OVERCURRENT	A
59	OVERVOLTAGE	A
810U	OVER & UNDER FREQUENCY	A
25	SYNCHRONIZING	---

NET METERING AGREEMENT

NET METERING AGREEMENT

This AGREEMENT, dated as of _____ , 200__ ("Agreement") between **ROCKLAND ELECTRIC COMPANY**, a New Jersey corporation with offices at 82 East Allendale Avenue, Saddle River, New Jersey 07458 ("Company") and _____ ("Customer") who resides at or operates a commercial facility at _____ ("Premises"). The Company and Customer are from time to time jointly referred to in this Agreement as the "Parties" or individually as "Party."

WITNESSETH

WHEREAS, New Jersey Board of Public Utilities ("Board") requires the Company to interconnect wind and solar photovoltaic electric generating systems in order to allow for net energy metering for residential and small commercial customers that use these systems; and

WHEREAS, Customer is a residential or small commercial customer of the Company who has installed a wind or solar photovoltaic electric generating system at the Premises; and

WHEREAS, Customer wishes to make arrangements for the net metering of the Customer's wind or solar photovoltaic electric generating system;

NOW, THEREFORE, in consideration of the premises and mutual covenants hereinafter set forth and for other good and valuable consideration, the parties agree as follows:

1. Incorporation by Reference

A. This Agreement incorporates by reference and hereby makes a part hereof all applicable terms and conditions of the Company's Schedule for Electric Service, P.U.C. No. 2 - Electricity ("Tariff"), as the same may be modified or superseded from time to time.

B. To the extent there is any conflict between the terms and conditions of this Agreement and the Tariff, the terms and conditions of this Agreement will take precedence and govern those of the Tariff.

2. Term

A. This Agreement is effective on the date set forth above and will remain in effect for an initial term of five (5) years or until terminated in accordance with its terms, the Tariff, or any order of the Board. Thereafter, this Agreement shall be renewed automatically for yearly periods unless either Party gives written notice of cancellation at least 30 days prior to the end of the term. Applicable provisions to this Agreement shall continue in effect after termination to the extent necessary to provide for final billings, payments, adjustments and other contractual obligations.

3. Customer Obligations

A. Customer shall install and maintain a wind or solar photovoltaic electric generating system with a rated capacity of not more than the lesser of [10 *or* 100 kilowatts, *as applicable*] or the current peak electric demand of the Customer's residence or facility ("System") at the Premises. The System shall be manufactured, installed, operated and maintained in accordance with the Company's [Interconnection Standards for Solar or Wind Electric Power Producing Facilities of 10 kW or Less in the State of New Jersey *or* Interconnection Standards for Parallel Operation of Small-Size Generating Facilities 10 – 100 KiloWatts in the State of New Jersey, *as applicable*] attached as Appendix A to this Agreement, as well as all manufacturers' specifications and applicable government and industry standards including standards approved by the National Electric Code, Institute of Electrical and Electronics Engineers, and accredited testing institutions such as Underwriters Laboratories [and specifically IEEE Standard 929-2000 *(for 10 kW or less)*]. Customer shall not operate the System in parallel with the Company's electric distribution system until approval is received from the Company. Customer shall be responsible for all costs of designing, engineering, purchasing, installing, maintaining and operating the System.

B. Customer must submit an application for net metering service and submit an application processing fee of $100 at the time of application.

C. Prior to the purchase and installation of the System, the Customer must submit detailed plans and specifications for the System and control and protective devices associated with the System for written approval by the Company. The System shall not be installed until written authorization is received from the Company.

D. The Customer shall reimburse the Company, prior to the commencement of operation of the System, for all interconnection costs incurred by the Company in providing net metering service to the Customer.

E. At all times during the term of this Agreement, Customer shall purchase all the energy utilized at the Premises from the Company or its successor regulated delivery company.

F. The Customer will provide telephone service at the Premises so operating instructions from the Company can be given to the Customer or any designated operator of the System.

4. Company Obligations

A. The Company will review the plans and specifications for the System submitted by the Customer and provide written approval or provide, in writing, changes to such plans and specification which must be made in order to obtain Company approval of the System.

B. The Company will determine its facilities' ability to accept the additional input of power from the System and the point at which the System may be connected to the Company's distribution system.

C. The Company will provide net energy metering for the System at the Premises in accordance with the terms of the Tariff.

D. The Company will bill the Customer for net energy utilized at the Premises and compensate the Customer for energy produced by the System, in excess of the amount of energy utilized by the Customer, in accordance with the Tariff.

5. Representations and Warranties

A. The parties hereto represent that they have all requisite authorizations necessary or proper to enter into this Agreement.

B. Customer warrants the title to all electricity produced by System for which the Company or an Electric Generation Supplier provides a credit or payment. Customer warrants that it will pay and satisfy any and all claims of every nature whatsoever in, to or in respect to the title of electric power delivered hereunder.

C. Customer represents and warrants that, throughout the term of this Agreement, Customer will be in compliance with, or will have acted in good faith and used its best efforts to be in compliance with all laws, judicial and administrative orders, rules and regulations with respect to the ownership and operation of the System including but not limited to all requirements to obtain and comply with the conditions of any applicable certificates, licenses, permits and governmental approvals.

D. Customer represents, covenants and warrants that the System (i) will be installed and operated in accordance with this Agreement; (ii) will in no event exceed an output equal to the lesser of [10 *or* 100 kW, *as applicable*] or the current peak electric demand of the Customer's residence or facility; and (iii) will be designed to generate electricity solely for consumption by the Customer and sale to the Company or the Customer's Electric Generation Supplier.

E. Customer is the owner of the Premises.

6. Regulatory

A. It is understood by both Customer and the Company that this Agreement and performance hereunder is subject to all present and future valid and applicable laws, orders, statutes, and regulations of courts or regulatory bodies (state or federal) having jurisdiction over either party or the Agreement. The rights of the parties hereunder shall not be effective until all regulatory approvals have been obtained.

7. Limitation of Liability and Insurance

A. Neither party shall be liable for any consequential, incidental, punitive, special, exemplary or indirect damages, lost profits or other business interruption damages, by statute, in tort or contract, under any indemnity provision or otherwise. It is the intent of the parties that the limitations herein imposed on remedies and the measure of damages be without regard to the cause or causes related thereto, including the negligence of any party, whether such negligence be sole, joint, or concurrent, or active or passive.

B. The Company's review, inspection and testing of the System shall not be construed as confirming or endorsing the design or as any warranty of safety, durability or reliability of the System. The Company shall not, by reason of such review or failure to review, be responsible for the strength, design detail, adequacy, or capacity of the System.

C. This provision shall survive the expiration or termination of this Agreement.

8. Events of Default

A. Any one or more of the following events shall constitute an Event of Default under this Agreement:

(i) The sale of the Premises by the Customer, unless this Agreement is properly assigned to the purchaser as set forth in Article 11A of this Agreement;

(ii) the proving of any material representation or warranty made herein to

have been false or incorrect in any material respect at the time made;

(iii) Customer's construction of any facilities or structures or Customer's engaging in any activities which materially interfere with the rights granted to the Company under this Agreement;

(iv) failure of Customer to obtain, maintain or comply with any or all permits required for the System; or

(v) failure of either of the Parties to observe and perform any material covenant, condition, or agreement on its part to be performed.

9. Termination

A. Whenever an Event of Default shall have occurred and be continuing, the non-defaulting Party, to the extent permitted by law, may, upon 30 days prior written notice to the defaulting Party, terminate this Agreement, and thereupon this Agreement shall cease and terminate unless within such 30 day period prior to such termination, all Events of Default hereunder that were the subject of such notice shall have been fully cured, or the defaulting Party has instituted and is diligently pursuing corrective action reasonably sufficient to cure such Default. However, the sale of and transfer of title to the Premises shall constitute immediate termination.

B. No termination of this Agreement shall relieve the defaulting Party of its liability and obligations hereunder, and the non-defaulting Party may take whatever action at law or in equity as may appear necessary or desirable to enforce performance and observance of any obligations, agreements, or covenants under this Agreement, and the rights given hereunder shall be in addition to all other remedies available to the Parties, either at law, in equity or otherwise, for the breach of this Agreement.

C. Notwithstanding the above, Customer has the right to terminate this

Agreement without cause if it discontinues the use of the System. In such cases, Customer agrees to reimburse the Company for all costs associated with removing the Company's interconnection facilities.

10. Suspension

A. The Company will notify Customer of the Company's intention to suspend service to Customer as of a date certain ("suspension date") in any instance in which Customer's actions or inactions could, in the Company's sole judgment, affect safety or system reliability. The Company will cease to provide service to Customer on the suspension date.

11. Assignment

A. Customer may not assign, transfer, or otherwise dispose of this Agreement or any of its rights, duties or obligations hereunder, without the prior written consent of the Company, which consent will not be unreasonably withheld. Notwithstanding the foregoing, Customer may assign this Agreement to a subsequent purchaser of the Premises so long as Customer provides the Company with prompt written notice of such assignment.

B. Any assignment, transfer or other disposition of this Agreement, or any rights, duties or obligations hereunder, by Customer, except as specifically permitted herein, will be null and void.

12. Notices

A. Any notice to be given by either party hereunder will be deemed given, and any other document to be delivered hereunder will be deemed delivered, if in writing and (i) delivered by hand, (ii) deposited for next-business day delivery (fee prepaid) with a reputable overnight delivery service such as Federal Express, or (iii) mailed by certified mail (return receipt requested) postage prepaid, addressed to the recipient at the address set forth below for that party (or at such other address as that party may from time to time designate by giving notice thereof).

To Company: Rockland Electric Company

One Blue Hill Plaza

Pearl River, NY 10965

Attention:

To Customer:

Attention:

13. Prior Agreements Superseded

A. This Agreement constitutes the entire understanding between the parties hereto with respect to the subject matter hereof, supersedes any and all previous understandings between the parties with respect to the subject matter hereof, and binds and inures to the benefit of the parties, their successors and permitted assigns.

14. Waiver and Modification

A. No waiver or modification of all or any part of this Agreement will be valid unless in writing and signed by both parties hereto. Any waiver will be effective only for the particular event for which it is issued and will not be deemed a waiver with respect to any subsequent performance, default or matter.

15. Applicable Law and Forum

A. Interpretation and performance of this Agreement will be in accordance with, and will be controlled by, the laws of the State of New Jersey except its conflict of laws provisions to the extent they would require the application of the laws of any other jurisdiction. Customer irrevocably consents that any legal action or proceeding arising under or relating to this Agreement will be brought in a court of the State of New Jersey or a federal court of the United States of America located in the State of New Jersey.

16. Agency

A. This Agreement is not intended, and will not be construed, to create any association, joint venture, agency relationship or partnership between the parties or to impose any such obligation or liability upon either party. Neither party will have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act or be an agent or representative of, or otherwise bind, the other party.

17. Not for the Benefit of Third Parties

A. This Agreement is for the benefit of the parties hereto and not for the benefit of third parties.

18. Taxes

A. Each party will be liable to the appropriate tax authorities for sales, use, gross receipts or other similar or different taxes imposed upon the revenues derived or services rendered by such party.

19. Petitions and Interventions Not Precluded

A. Nothing in this Agreement shall prevent either the Company or Customer from intervening before the Board, the Federal Energy Regulatory Commission ("FERC") or any other agencies or courts in proceedings which affect, or potentially affect, the sales or services provided by or to either the Company or Customer or the rates, including the terms and conditions of service, for such sales or services. Nothing in this Agreement shall prevent either Party from petitioning any agency having jurisdiction over such sales, services or rates.

20. Set Off

A. In addition to any right of set off provided by law, the Company may deduct any sums or amounts due or to become due from the Company to Customer from any sums or accounts due or to become due from Customer to the Company.

21. Disputes

A. This Agreement is subject to the Board's continuing jurisdiction. Any disputes arising under this Agreement shall first be presented to the Board, and shall be resolved in accordance with the Board's regulations.

22. Article Headings

A. The Article headings and other titles used in this Agreement are for convenience only and shall not affect the construction of any terms of this Agreement.

23. Property Access

A. In addition to any existing easements or rights of way, Customer hereby grants the Company permission to enter the Premises, without notice, when necessary. In addition, Customer grants the Company permission, where necessary, to trim trees in order to afford proper clearance to System.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the date first above written.

ROCKLAND ELECTRIC COMPANY

BY_____

Title_____

CUSTOMER

_____