

Town of Apex
Electric Utilities Division

Application and Procedures for Interconnecting
A Certified Photovoltaic Generating Facility

- 1.0 The Customer completes the Interconnection Request (“Application”) and submits it to the Town of Apex Electric Utilities Division. Submit to

Al Ball
Town of Apex Electric Utilities Division
P.O. Box 250
Apex, NC 27502

- 2.0 The Electric Utilities Division acknowledges to the Customer receipt of the Application within three business days of receipt.
- 3.0 The Electric Utilities Division evaluates the Application for completeness and notifies the Customer within ten Business Days of receipt that the Application is or is not complete and, if not advises what material is missing.
- 4.0 The Electric Utilities Division verifies that the Photovoltaic Generating Facility can be interconnected safely and reliably. The Electric Utilities Division has 15 business days to complete this process. Unless the Electric Utilities Division determines and demonstrates that the Photovoltaic Generating Facility cannot be interconnected safely and reliably, the Electric Utilities Division approves the Application and returns it to the Customer.
- 5.0 After installation, the Customer returns the Certificate of Completion to the Electric Utilities Division prior to parallel operation, the Division may inspect the Photovoltaic Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary. The Installer shall be onsite during the witness test process to answer questions.
- 6.0 Permits and Electrical Inspections - The Customer shall obtain all local permits required for wiring modifications and/or installation of the Photovoltaic Generating System. The local Authority Having Jurisdiction shall perform required inspections and issue approval for connection. The Installer shall be onsite during the inspection process to answer questions.
- 7.0 The Electric Utilities Division notifies the Customer in writing that interconnection of the Photovoltaic Generating Facility is authorized. If the witness test is not satisfactory, the Electric Utilities Division has the right to disconnect the Photovoltaic Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed or previously waived on the Application. The Electric Utilities Division is obligated to complete this witness test within ten business days of the receipt of the Certificate of Completion. If the Division does not inspect within ten business days or by mutual agreement of the Parties, the witness test is deemed waived.

- 8.0 Contact Information - The Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for interfacing with the electric distribution system, that contact information must be provided on the Application.
- 9.0 Ownership Information - Enter the legal names of the owner(s) of the Photovoltaic Generating Facility.
- 10.0 Underwriters Laboratories (UL) 1741 Listed - This standard (“Inverters, Converters, and Controllers for Use in Independent Power Systems”) addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL 1741. This listing is then marked on the equipment and supporting documentation. The Photovoltaic Generation Facility must be listed and labeled in compliance with UL 1741.
- 11.0 Insurance Requirements - The Customer shall furnish to the Electric Utilities Division the required Certificate of Insurance naming the Town as additional insured prior to interconnection of the system. **The additional insured requirement shall not apply to generation facilities installed on single family residences which are interconnected through a residential account.**

Application ID No. _____
(For Town Use Only)

Town of Apex
Electric Utilities Division

Application for
Interconnecting A Certified Photovoltaic Generating Facility

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required.

Processing Fee

A non-refundable processing fee of \$100 must accompany this Application.

Interconnection Customer

Name: _____

Contact Person: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail: _____

Contact (If different from Interconnection Customer)

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail: _____

Owner of Facility: _____

Small Generating Facility Information

Location (If different from above): _____

Electric Service By: Town of Apex (NC) Electric Utilities Division

*Account Number: _____

* If Existing Customer

Inverter Manufacturer: _____ Model: _____

Nameplate Rating: _____ (kW) _____ (kVA) _____ (AC Volts)

Single Phase? _____ Three Phase? _____

System Design Capacity: _____ (kW) _____ (kVA)

Prime Mover: Photovoltaic _____

Energy Source: Solar _____

Metering Type: Net Metering: _____ Bilateral Metering: _____

Is the equipment UL 1741 Listed? Yes _____ No _____

If "Yes", attach manufacturer's cut-sheet showing UL 1741 Listing

Estimated Installation Date: _____ Estimated In-Service Date: _____

List components of the Photovoltaic Generating Facility equipment package that are currently certified:

	Equipment Type:	Certifying Entity:
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

Interconnection Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Photovoltaic Generating Facility no larger than 10 kW for Residential Bilateral Metering, 10 KW for Residential Net Metering, or 100 KW for Non-Residential and return the Certificate of Completion when the Small Generating Facility has been installed.

Signed: _____ Date: _____

Title: _____

Contingent Approval to Interconnect the Small Generating Facility (For Town Use Only)
Interconnection of the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Photovoltaic Generating Facility No Larger than 10 kW for Residential Bilateral Metering, 10 KW for Residential Net Metering, or 100 KW for Non-Residential and return of the Certificate of Completion.

Town of Apex Signature: _____

Title: _____

Date: _____

Application ID Number: _____

Electric Utilities Division waives inspection/witness test? Yes _____ No _____

List of Attachments

Attachment 1 - Town of Apex Electric Utilities Division Photovoltaic Interface Criteria

Attachment 2 - Town of Apex Electric Utilities Division Photovoltaic System Interconnection and Metering General Notes

Attachment 3 - Bilateral Metering Physical Arrangement of Metering and Disconnect (residential only, commercial configuration to be negotiated)

Attachment 4 - Bilateral Metering Single-Line Diagram for Interconnection of Photovoltaic Generation System

Attachment 5 - Net Metering Physical Arrangement of Metering and Disconnect for 120/240 Volt Single-Phase with Self-Contained Meter

Attachment 6 - Net Metering Physical Arrangement of Metering and Disconnect for Three Phase Metering Cabinet Installation

Attachment 7 - Net Metering Physical Arrangement of Metering and Disconnect for Three Phase or Single Phase Pad Mount Transformer

Attachment 8 - Net Metering Single-Line Diagram for Interconnection of Photovoltaic Generation System

Attachment 9 - Town of Apex Electric Utilities Division Certificate of Completion for Certified Photovoltaic Generating Facility

Attachment 10 - Town of Apex Electric Utilities Division Photovoltaic Generation Service Rider for Bilateral Metering

Attachment 11 - Town of Apex Electric Utilities Division Photovoltaic Generation Service Rider for Bilateral Metering

Attachment 1
Town of Apex
Photovoltaic (PV) Interface Criteria

The Town of Apex supports the development of renewable resources for generation of electric power. In order to maintain current levels of safety and power quality for the general public, electric system employees and customers certain criteria must be applied to all alternative sources of electric power.

Specific criteria applying to photovoltaic (solar panel) installations are as follows:

- PV installations may be connected to the Town’s electric system using either Bilateral Metering or Net Metering. For Bilateral Metering, a second meter is added with the PV system connected to the Line (top) side of the additional meter and the Utility connected to the Load (bottom) side of the additional meter. For Net Metering, the PV System is connected directly to the customer’s premises wiring system and no additional meter is required. The customer’s premises wiring system shall comply with the Bilateral Metering or Net Metering criteria as applicable and as detailed below. See attached installation illustrations and single-line diagrams.
- All PV equipment must comply with the requirements of and be labeled under Underwriters Laboratories Standard 1741 “Inverters, Converters, Controllers, and Interconnection Systems Equipment for Use With Distributed Energy Resources”.
- All PV installations must comply with IEEE Standard 929 “IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems”.
- All PV systems must comply with IEEE Standard 1547 “IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems”.
- All PV systems must comply with IEEE Standard 1547.1 “IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems”.
- All PV installations shall be made in accordance with the National Electrical Code (NFPA 70). Specific compliance with Article 690 and Article 705 is required. Installations shall be inspected and approved by the local Authority Having Jurisdiction.
- All PV installations shall have a service disconnect installed immediately adjacent to and within 6 feet of the customer’s meter. The service disconnect shall be a lockable, heavy duty, fused disconnect sized per the National Electrical Code (NFPA 70). The disconnect shall be fully accessible to and operable by the Town’s personnel at all times. The disconnect shall include provisions for locking in the open position. The disconnect shall be labeled in accordance with NEC 705.10.
- All PV installations are subject to review and testing by the Town’s Electric Utilities Division prior to connection and at subsequent times of their choosing.

- All interconnected PV systems shall produce no voltage at the isolation switch when disconnected from the electric utility distribution system. Systems found to produce voltage at the isolation switch when disconnected from the electric utility distribution system will be disconnected without notice and will remain disconnected until the systems are brought into compliance with specified standards.
- PV systems shall not interfere with the power quality of any customer of the Town's electric distribution system. PV systems found to interfere with utility industry-accepted power quality standards will be disconnected from the system.
- The Town's Electric Utilities Division will design and install reasonable and practical modifications to the electric distribution system to allow the interconnection of PV resources which would otherwise interfere with power quality delivered to other connections. In such cases, the PV system owner shall make an advance payment to the Town in an amount equal to the cost of the required facility modifications.
- All PV systems shall operate within the range of 0.90 lead to 0.90 lag power factor.
- Residential PV systems shall be limited to 10 kW maximum ac output. Special provision may be negotiated for larger PV installations on an independent connection basis. PV systems larger than 10 kW maximum ac output capacity may require special review, additional testing and special interconnection facilities.
- Residential Owners of PV systems shall obtain, and retain in effect as long as the PV system is interconnected, standard homeowner's liability insurance with limits of at least \$100,000 per occurrence which protects the owner from claims for bodily injury and/or property damage. This insurance shall be primary for all purposes. The owner shall provide certificates evidencing this coverage as required by the Town. The Town reserves the right to refuse to establish or to continue the interconnection of the PV system if such insurance is not in effect.

The rules and references cited above represent the state of PV technology in 2014. Information available subsequent to this writing may result in changes by the Town of Apex in order to protect the safety of the public and the Town's employees; as well as to maintain appropriate levels of power quality for all electric customers.

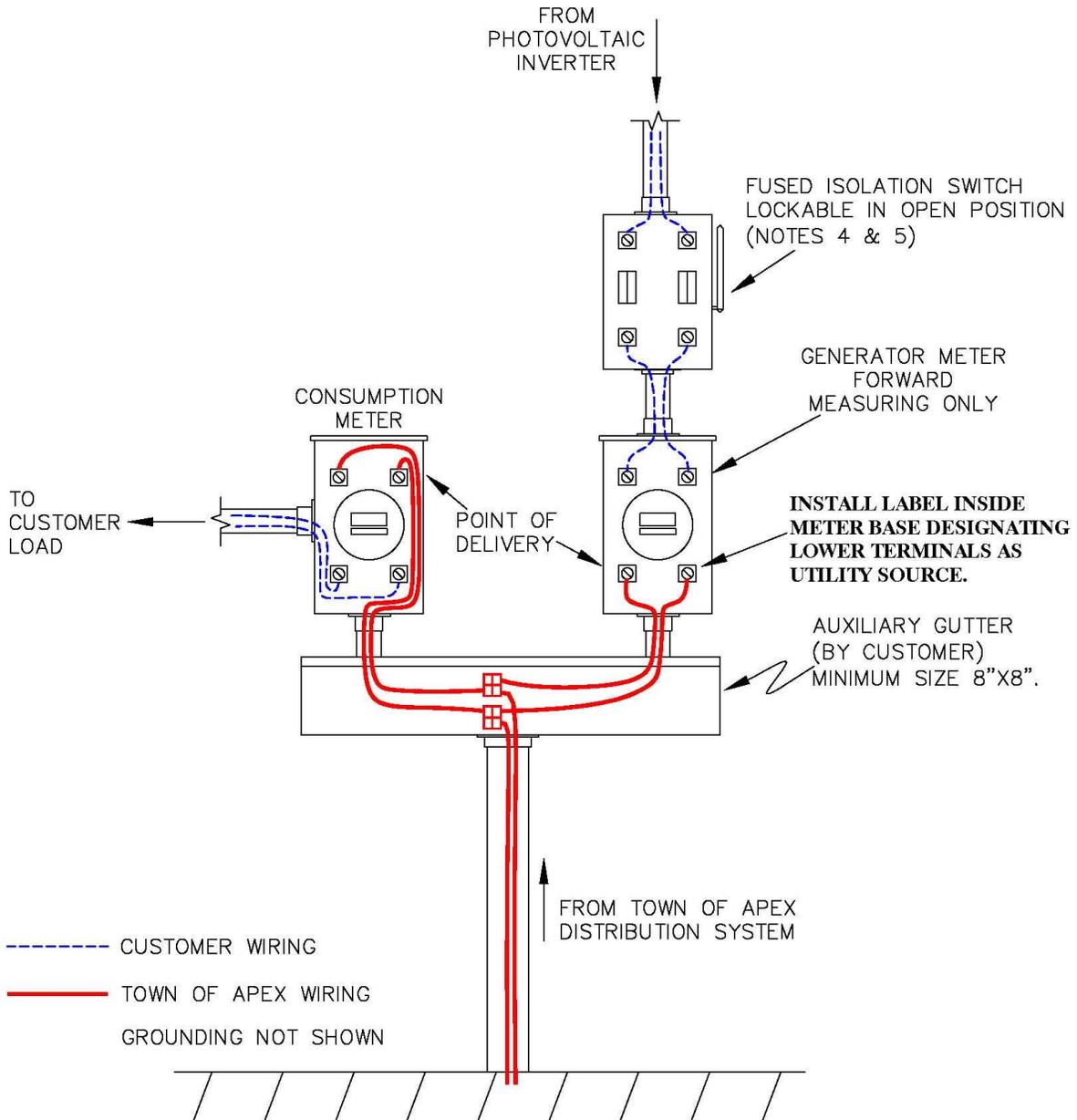
TOWN OF APEX
PHOTOVOLTAIC SYSTEM INTERCONNECTION
AND METERING NOTES
(ATTACHMENT #2)

1. All customer installations must meet the requirements of NFPA 70, National Electrical Code (NEC) and any state or local amendments in force at the time of installation.
2. Photovoltaic Inverter/Isolation System shall be UL 1741 listed and meet the requirements of IEEE 1547.
3. Town Service Conductors, Photovoltaic Generating System, Service Entrance, and Meters:

For Bilateral Metering – The Town Service Conductors shall be connected to the Line (Top) Lugs of the Customer’s Consumption Meter and shall be connected to the Load (Bottom) Lugs of the Photovoltaic Generating System Meter. The Photovoltaic Generating System Isolation Switch Conductors shall be connected to the Line (Top) Lugs of the Photovoltaic Generating System Meter. The Customer Service Entrance Conductors shall be connected to the Load (Bottom) Lugs of the Customer’s Consumption Meter.

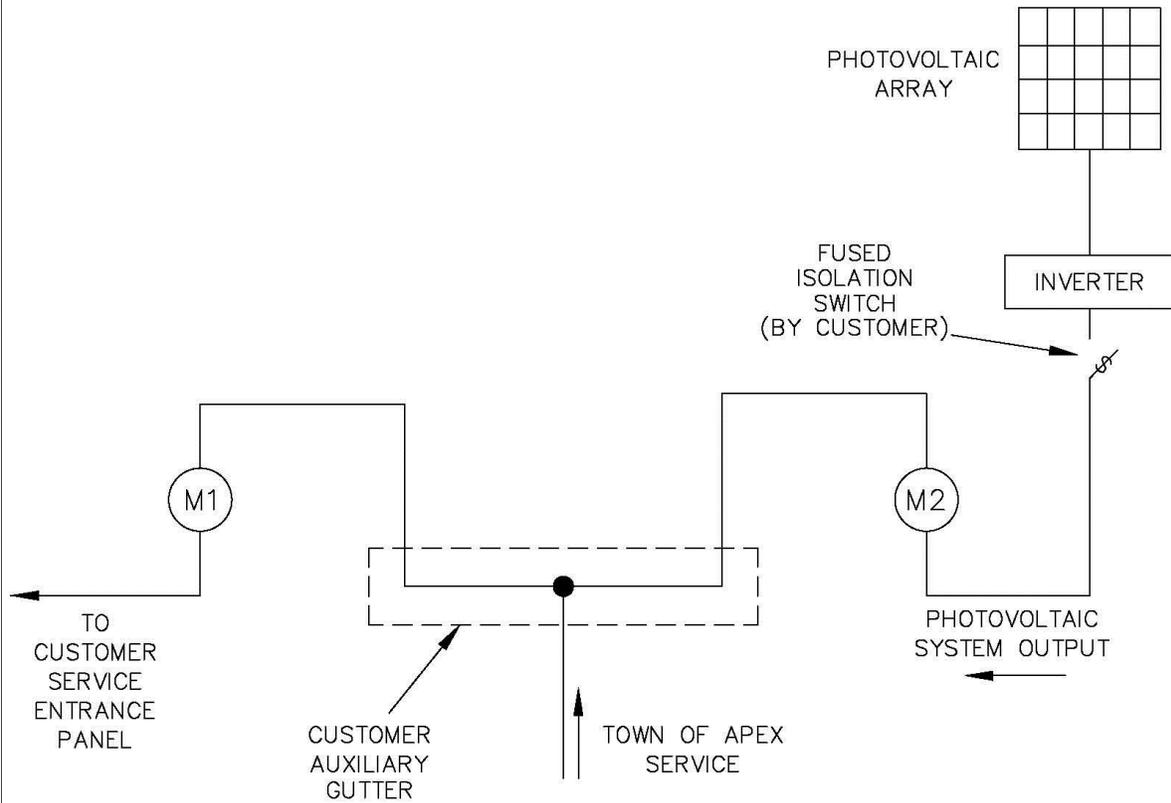
For Net Metering - The Town Service Conductors shall be connected to the Line (Top) Lugs of the Consumption Meter and the Load (Bottom) Lugs shall be connected to the Customer’s Service Entrance. The Photovoltaic Generating System shall be connected directly to the Customer’s Premises Wiring System. An additional meter is not required.
4. Customer Conductors and Isolation Switch shall be sized in accordance with the requirements of the National Electrical Code.
5. Customer Isolation Switch shall be labeled:
“Solar Panel Isolation Switch”
Isolation Switch shall be fused.
Isolation Switch shall be Lockable in the Open position.
Isolation Switch shall be Accessible to the Town of Apex Electric Utility and located within 6 feet of the Customer’s Consumption Meter.
6. All Customer-Furnished and Installed Meter Bases shall be of a Type Approved by the Town of Apex for Revenue Metering.
7. Single-Phase Utility-Interactive Inverter Systems Shall Not Be Connected to Three-Phase Supply Systems. See the National Electrical Code, Articles 690.63 and 705.100.
8. Sockets for Transformer-Rated (Class 20) Meters are Installed by The Town of Apex. Sockets for All Self-Contained (Class 200 or Class 320) are Installed by Customer.
9. Physical Arrangement Drawings are for Typical Installations. Alternate Arrangements Require Review and Approval by The Town of Apex.
10. Transformer Cabinet Penetrations Are Not Allowed.

TOWN OF APEX
 SOLAR PANEL INTERCONNECTION INSTALLATION
 PHYSICAL CONNECTION ILLUSTRATION FOR
 METERING AND DISCONNECT
 BILATERAL METERING OPTION
 120/240V SINGLE PHASE ONLY



ATTACHMENT 3

TOWN OF APEX
SOLAR PANEL INTERCONNECTION
SINGLE LINE DIAGRAM FOR SYSTEM
BILATERAL METERING OPTION

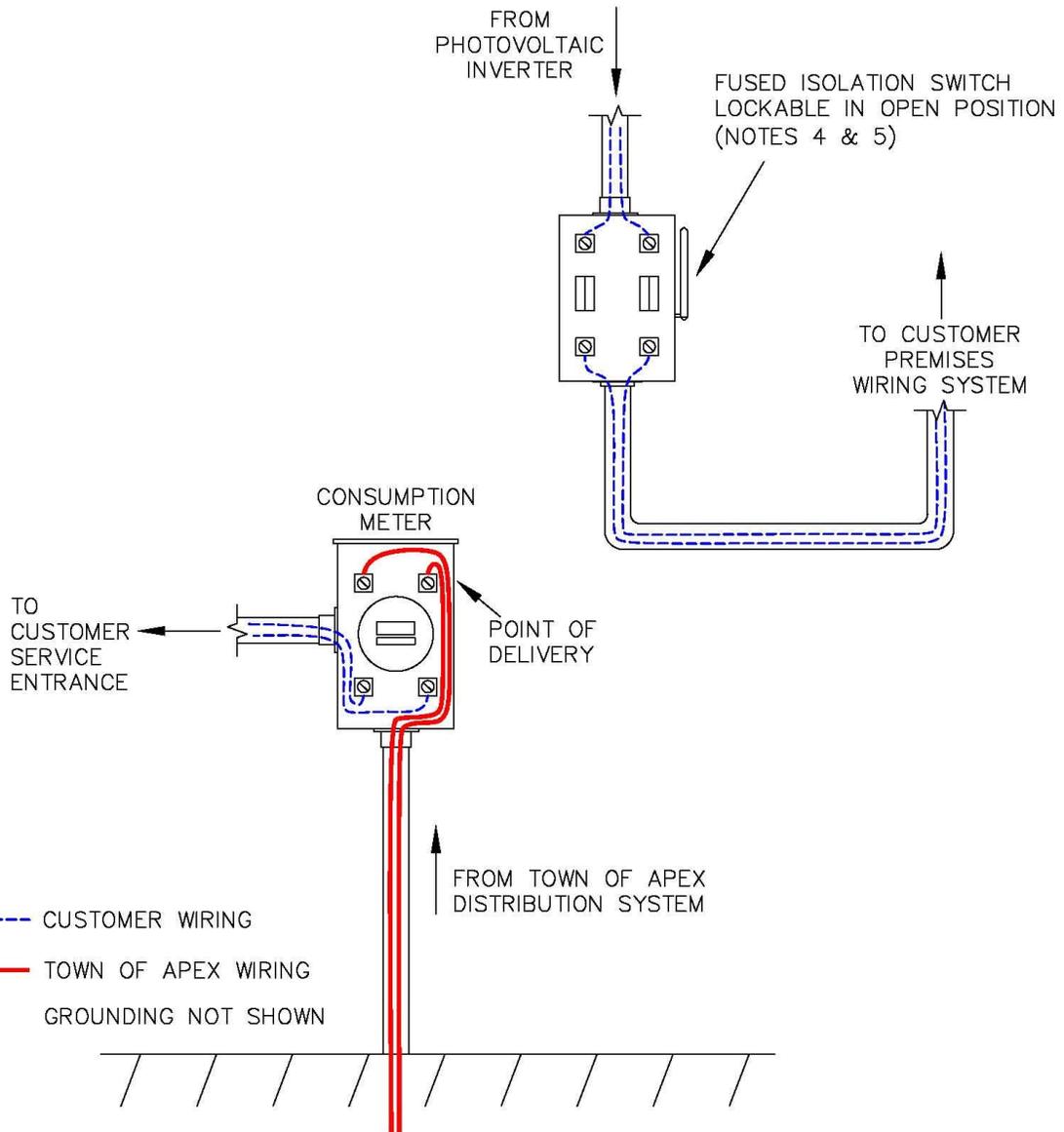


NOTES:

1. CONNECT TOWN SERVICE TO TOP LUGS IN ALL METER BASES
2. M1 IS METER FOR CUSTOMER'S SERVICE.
3. M2 IS METER FOR SOLAR PANEL INPUT TO SYSTEM
4. INVERTER/ISOLATION SYSTEM TO BE UL 1741 LISTED AND INSTALLED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE. (NFPA 70)
5. ISOLATION SWITCH BY CUSTOMER TO BE SIZED PER NEC. (NFPA 70) SWITCH SHALL BE LOCKABLE IN OPEN POSITION.
6. LABEL CUSTOMER ISOLATION SWITCH PER GENERAL NOTE 5.

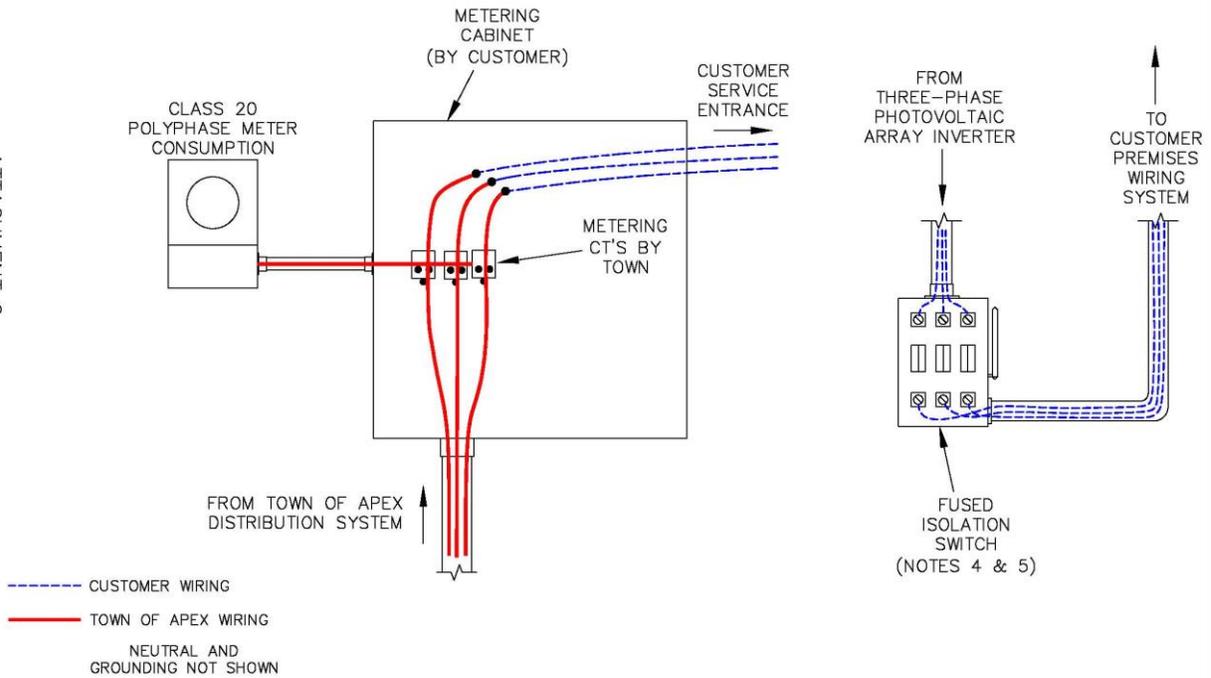
ATTACHMENT 4

TOWN OF APEX
 SOLAR PANEL INTERCONNECTION INSTALLATION
 PHYSICAL CONNECTION ILLUSTRATION FOR
 METERING AND DISCONNECT
 120/240 VOLT SINGLE-PHASE WITH
 SELF-CONTAINED METER
 NET METERING OPTION



TOWN OF APEX
 SOLAR PANEL INTERCONNECTION INSTALLATION PHYSICAL
 CONNECTION ILLUSTRATION FOR METERING AND DISCONNECT
 THREE-PHASE METERING CABINET INSTALLATION
 NET METERING OPTION

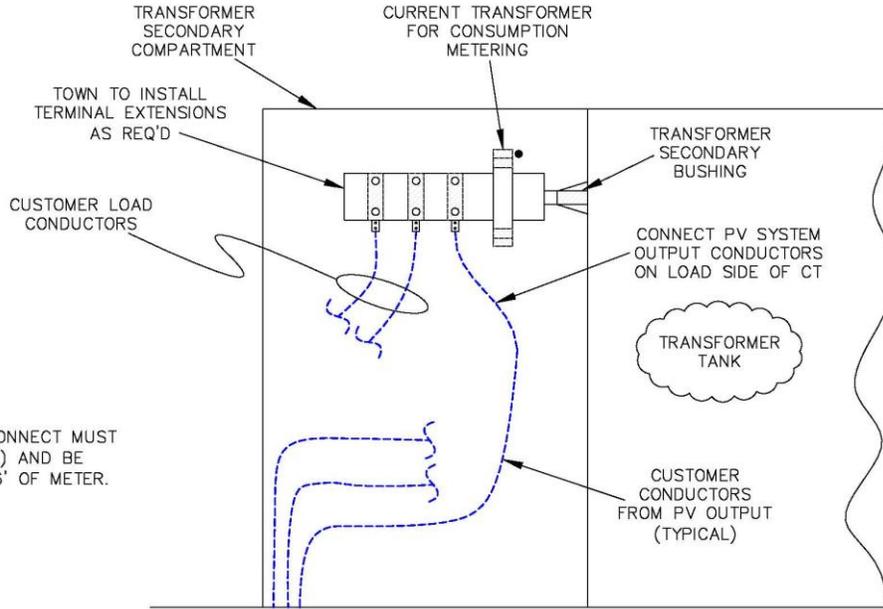
ATTACHMENT 6



TOWN OF APEX
SOLAR PANEL INTERCONNECTION INSTALLATION

CONNECTION DETAIL FOR HIGH CAPACITY CONNECTION
TO PAD-MOUNTED TRANSFORMER
NET METERING OPTION

ATTACHMENT 7

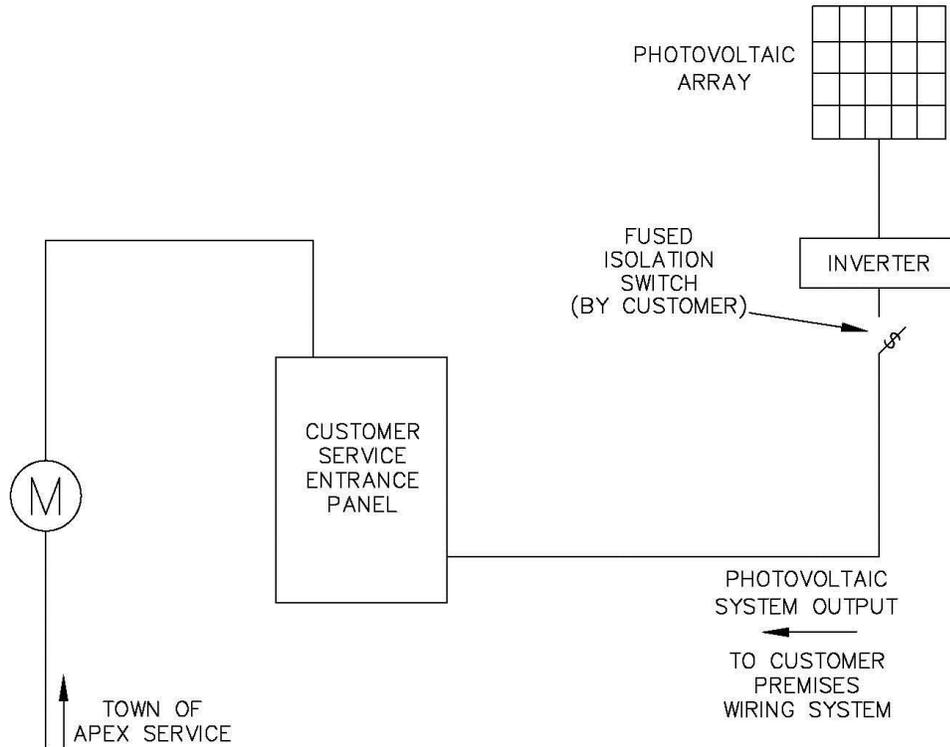


NOTE:
PV ISOLATION DISCONNECT MUST
MEET NEC (NFPA70) AND BE
INSTALLED WITHIN 6' OF METER.

--- CUSTOMER WIRING
— TOWN OF APEX WIRING
NEUTRAL AND
GROUNDING NOT SHOWN

TOWN OF APEX
SOLAR PANEL INTERCONNECTION
SINGLE LINE DIAGRAM FOR SYSTEM

NET METERING OPTION



NOTES:

1. CONNECT TOWN SERVICE TO TOP LUGS IN METER BASE
2. METER FOR RESIDENTIAL SERVICE.
3. INVERTER/ISOLATION SYSTEM TO BE UL 1741 LISTED AND INSTALLED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE. (NFPA 70)
4. ISOLATION SWITCH BY CUSTOMER TO BE SIZED PER NEC (NFPA 70).
5. LABEL CUSTOMER ISOLATION SWITCH PER GENERAL NOTE 5.

ATTACHMENT 8

**Town of Apex
Electric Utilities Division**

**Certificate of Completion
For
Certified Photovoltaic Generating Facility**

Installation Information

Check if Owner-Installed

Interconnecting Customer: _____ Contact Person: _____

Mailing Address: _____

Location of Facility (If different from above):

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail: _____

Electrician:

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Telephone (Day): _____ (Evening): _____

License Number: _____

Date of Approval to Install Facility granted by the Town of Apex: _____

Application ID Number: _____

Attachment 9

Page 1 of 2

Inspection:

The system has been installed and inspected in compliance with the local Building/ Electrical Code of the Town of Apex.

Signed (Local Electrical Wiring Inspector, or attach signed electrical inspection):

Name (Printed): _____

Date: _____

As a condition of interconnection, you are required to send a copy of this form along with a copy of the signed electrical permit to:

Al Ball
Technical Services Manager
Town of Apex Electric Utilities Division
P.O. Box 250
Apex, NC 27502-0250
Fax: (919) 367-7280
Email: al.ball@apexnc.org

Approval to Energize Facility (For Town use only)

Energization of the Facility is approved contingent upon the terms and conditions of this Agreement:

Authorized Town Signature: _____ Date: _____

Title: _____

Attachment 9

Page 2 of 2

TOWN OF APEX

BILATERAL METERING FOR RENEWABLE ENERGY FACILITIES CREDIT RIDER

AVAILABILITY

This Rider is available in conjunction with any of the Town's TOU (Time-of-Use) Electric Rate Schedules to Customers who operate a photovoltaic, wind-powered, or biomass-fueled generating system, without battery storage, located and used at the Customer's primary residence or business where a part or all of the electrical requirements of the Customer can be supplied from the Customer's generating system. Bilateral Metering utilizes two meters. The Utility meter may be on any of the Town's TOU or non-TOU Electric Rate Schedules, but the Customer's Generating System meter shall be set up as a TOU Electric Meter with charges for on-peak and off-peak determined as described in the section below titled "Monthly Credit". The rated capacity of the generating system shall not exceed the lesser of the Customer's estimated maximum annual kilowatt demand or 10 kilowatts for a residential system or 100 kilowatts for a non-residential system. The generating system that is connected in parallel operation with service from the Town and located on the Customer's premises must be manufactured, installed, and operated in accordance with governmental and industry standards and must fully conform with the Town's applicable renewable energy interconnecting interface criteria. Customers with qualified systems may apply for NC Green Power credits.

This Rider is available on a first-come, first-serve basis, except that the aggregate capacity of all of the Customer-generators shall not exceed 5% of the Town's retail peak load for the prior calendar year.

TYPE OF SERVICE

This Rider is applicable to all electric service of the same available type supplied to Customer's premises at one point of delivery.

MONTHLY CREDIT

An amount computed under this rider based on the amount of energy delivered to the Town during specific times as stated below.

- I. For electric service under only either a Residential time-of use (TOU) schedule or Small General Service time-of use (TOU) schedule as per the respective schedule:
 1. The Customer will receive credit for all **on-peak** kWh delivered to the Town during the current month at a rate of \$0.095 per kWh. In no case shall the on-peak kWh billed be less than zero.
 2. The Customer will receive credit for all **off-peak** kWh delivered to the Town during the current month at a rate of \$0.041 per kWh. In no case shall the off-peak kWh billed be less than zero.
 3. In no event will energy delivered to the Town be used to offset purchases in a different period or a different season.
- II. For electric service under only either a Medium General Service time-of use (TOU) schedule or Large General Service time-of use (TOU) schedule as per the respective schedule, all kWh is billed at the same rate regardless of the time of day or the time of year.

Attachment 10

Page 1 of 2

DEFINITIONS

1. The on-peak and off-peak periods and seasons shall be defined in the applicable time-of-use rate schedule.
 - All participants in the Bilateral Metering For Renewable Energy Facilities Credit Rider that have any Residential Rate Schedule shall use the Residential Service Time-of-Use Rate Schedule to determine on-peak and off-peak times.
 - All participants in the Bilateral Metering For Renewable Energy Facilities Credit Rider that have any Small Commercial Rate Schedule shall use the Small General Service Time-of-Use Rate Schedule to determine on-peak and off-peak times.
 - All participants in the Bilateral Metering For Renewable Energy Facilities Credit Rider that have any Medium Commercial Rate Schedule shall use the Medium General Service Time-of-Use Rate Schedule to determine on-peak and off-peak times.
 - All participants in the Bilateral Metering For Renewable Energy Facilities Credit Rider that have any Large Commercial Rate Schedule shall use the Large General Service Time-of-Use Rate Schedule to determine on-peak and off-peak times.

SPECIAL CONDITIONS

1. The Customer must complete any applicable alternative energy interconnection request (“Application”) and submit same to the Town of Apex prior to receiving service under this Rider.
2. The Customer’s service shall be metered with two meters – the Utility Meter and the Customer’s Generating System Meter. The Utility meter may be on any of the Town’s TOU (Time-of-Use) or non-TOU Electric Rate Schedules, but the Customer’s Generating System meter shall be set up as a TOU Electric Meter. For this service, the Basic Customer Charge is that of the applicable non-TOU Electric Rate Schedule with charges for on-peak and off-peak determined as described in the section above titled “Monthly Credit” instead of by the applicable TOU Electric Rate Schedule.
3. In the event the Town determines that it is necessary to install a dedicated transformer or other equipment to protect the safety and adequacy of electric service provided to other customers, the Customer shall pay a Monthly Facilities Charge of 2% of the total installed cost of the additional facilities except that the Monthly Facilities Charge cannot be less than \$25.00.
4. The Town reserves the right to test the Customer’s alternative energy generator for compliance with the applicable interface criteria. Should it be determined that Customer’s installation is in violation the Town will disconnect the alternative energy generator from the Town’s distribution system and it will remain disconnected until the installation is brought into compliance.

CONTRACT PERIOD

The Contract Period for service under this Rider shall be one year and thereafter shall be renewed for successive one-year periods. After the initial period, Customer may terminate service under this Rider by giving at least sixty (60) days previous notice of such termination in writing to the Town.

The Town may terminate service under this Rider at any time upon written notice to Customer. In the event that Customer violates any of the terms or conditions of this Rider, or operates the generating system in a manner which is detrimental to the Town or its customers, service under this Rider may be terminated immediately.

Effective with billing after January 20, 2009.

Attachment 10

Page 2 of 2

TOWN OF APEX

NET METERING FOR RENEWABLE ENERGY FACILITIES RIDER

AVAILABILITY

This Rider is available in conjunction with any of the Town's TOU (Time-of-Use) Electric Rate Schedules to Customers who operate a photovoltaic, wind-powered, or biomass-fueled generating system, without battery storage, located and used at the Customer's primary residence or business where a part or all of the electrical requirements of the Customer can be supplied from the Customer's generating system. Net Metering utilizes one meter which shall be on any of the Town's TOU Electric Rate Schedules with charges for on-peak and off-peak determined as described in the section below titled "Monthly Credit". The rated capacity of the generating system shall not exceed 10 kilowatts for a residential system or 100 kilowatts for a non-residential system. The generating system that is connected in parallel operation with service from the Town and located on the Customer's premises must be manufactured, installed, and operated in accordance with governmental and industry standards and must fully conform with the Town's applicable renewable energy interconnecting interface criteria. Net metering systems may not apply for NC Green Power credits.

This Rider is available on a first-come, first-serve basis, except that the aggregate capacity of all of the Customer-generators shall not exceed 5% of the Town's retail peak load for the prior calendar year.

TYPE OF SERVICE

This Rider is applicable to all electric service of the same available type supplied to Customer's premises at one point of delivery.

MONTHLY BILLING

An amount computed under the applicable rate schedule and any other applicable riders with which this Rider is used, as adjusted to reflect excess energy delivered to Town as follows:

- I. For electric service under only either a Residential time-of use (TOU) schedule or Small General Service time-of use (TOU) schedule as per the respective schedule:
 1. Customer's on-peak usage for service rendered shall be reduced by the sum of (a) any on-peak excess energy delivered to Town in the current month plus (b) any accumulated on-peak excess energy balance from prior months. In no case shall the on-peak kWh billed be less than zero.
 2. Customer's off-peak usage for service rendered shall be reduced by the sum of (a) any off-peak excess energy delivered to Town in the current month plus (b) any accumulated off-peak excess energy balance from prior months plus (c) any accumulated on-peak excess energy balance in the current or prior months that was not used to reduce on-peak usage. In no case shall the off-peak kWh billed be less than zero.
 3. Customer's on-peak and off-peak demands for service rendered shall be billed pursuant to the applicable schedule. In months when demand charges are prorated based upon seasonal on-peak usage and the usage to be billed exceeds the excess energy available to reduce such usage, excess energy delivered to Town shall be used to reduce billed kWh usage based upon the ratio of on-peak energy consumed in each season.
 4. Excess energy not used in the current billing month to reduce billed kWh usage shall be accumulated and used to reduce usage in future months; however, any accumulated excess energy not used to reduce billed kWh usage shall be set to zero each May 31st. Excess energy delivered prior to May 31st will be used to reduce energy usage provided by the Town prior to May 31st. There will be no compensation paid to Customer for excess energy granted to Town.

Attachment 11

Page 1 of 2

- II. For electric service under only either a Medium General Service time-of use (TOU) schedule or Large General Service time-of use (TOU) schedule as per the respective schedule, all kWh is billed at the same rate regardless of the time of day or the time of year.

DEFINITIONS

1. The on-peak and off-peak periods and seasons shall be defined in the applicable time-of-use rate schedule.
 - All participants in the Net Metering For Renewable Energy Facilities Rider that have any Residential Rate Schedule shall use the Residential Service Time-of-Use Rate Schedule to determine on-peak and off-peak times.
 - All participants in the Net Metering For Renewable Energy Facilities Rider that have any Small Commercial Rate Schedule shall use the Small General Service Time-of-Use Rate Schedule to determine on-peak and off-peak times.
 - All participants in the Net Metering For Renewable Energy Facilities Rider that have any Medium Commercial Rate Schedule shall use the Medium General Service Time-of-Use Rate Schedule to determine on-peak and off-peak times.
 - All participants in the Net Metering For Renewable Energy Facilities Rider that have any Large Commercial Rate Schedule shall use the Large General Service Time-of-Use Rate Schedule to determine on-peak and off-peak times.

SPECIAL CONDITIONS

1. The Customer must complete an applicable alternative energy interconnection request (“Application”) and submit same to the Town of Apex prior to receiving service under this Rider.
2. The Customer’s service shall be metered with a TOU (Time-of-Use) meter. For this service, the Basic Customer Charge is that of the applicable TOU Electric Rate Schedule with charges for on-peak and off-peak determined as described in the section above titled “Monthly Credit” instead of by the applicable TOU Electric Rate Schedule.
3. In the event the Town determines that it is necessary to install a dedicated transformer or other equipment to protect the safety and adequacy of electric service provided to other customers, the Customer shall pay a Monthly Facilities Charge of 2% of the total installed cost of the additional facilities except that the Monthly Facilities cannot be less than \$25.00.
4. The Town reserves the right to test the Customer’s alternative energy generator for compliance with the applicable interface criteria. Should it be determined that Customer’s installation is in violation the Town will disconnect the alternative energy generator from the Town’s distribution system and it will remain disconnected until the installation is brought back into compliance.

CONTRACT PERIOD

The Contract Period for service under this Rider shall be one year and thereafter shall be renewed for successive one-year periods. After the initial period, Customer may terminate service under this Rider by giving at least sixty (60) days previous notice of such termination in writing to the Town.

The Town may terminate service under this Rider at any time upon written notice to Customer. In the event that Customer violates any of the terms or conditions of this Rider, or operates the generating system in a manner which is detrimental to the Town or its customers, service under this Rider may be terminated immediately.

Effective with billing after August 7, 2013.

Attachment 11

Page 2 of 2