

**Grant
County
Public
Utility
District**



**INTERCONNECTION STANDARDS
And Related Documents
For
CUSTOMER-OWNED GENERATING FACILITIES
100 kW Or Less**

Residential and Commercial Services

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CHAPTER ONE

General Requirements

Introduction

Welcome to Public Utility District No. 2 of Grant County, hereafter referred to as "District". Note: *Italicized* words are defined in Chapter 3.

The complete workbook includes a "Customer Interconnection Checklist", a "Net Metering Application", a "Net Metering Interconnection Agreement", and *Certificate of Completion*, outlines procedures for safe and reliable operation of customer-owned generating facilities, 100 kW or less in capacity for residential and commercial structures. It is the customer's responsibility to ensure compliance with the National Electrical Code (NEC), Washington Administrative Code (WAC), National Electric Safety Code (NESC), the Institute of Electrical and Electronics Engineers (IEEE), American National Standards Institute (ANSI), and Underwriters Laboratories (UL) standards, and local, state and federal building codes and ordinances that apply to the project. The Customer shall be responsible to obtain all applicable permit(s) for the equipment installations on their property.

The customer, if not knowledgeable in electrical work, should consider using a contractor to install the electrical equipment.

Other workbooks are available with information regarding the installation of electric service/fiber optic cable to permanent single-family, multifamily and nonresidential commercial buildings, condominium complexes, apartment buildings, mobile home parks, and irrigation sites. These workbooks are available free of charge from the District's Local Offices.

Getting Started

Complete a "Net Metering Application" Exhibit B of this workbook or obtain a copy from the *Service Expediter*. Upon completing the "Net Metering Application", the *Service Expediter* will assist and coordinate your service requirements with the appropriate District personnel.

Net Metering Application

The customer is required to have available the following information in order to complete a "Net Metering Application." **NOTE:** All service connections are subject to the District's Customer Service Policies as they are written or as they are amended by the District's Board of Commissioners.

Completing the Net Metering Application

The Net Metering *Application* is comprised of five areas:

- Customer Information
- Equipment Information
- Interconnection Fee
- Signature of Legal Land Owner
- Site Sketch & Electric Schematic Drawing

When completing the Net Metering *Application*, please type or print legibly. The information on the Net Metering *Application* will include the location of the *net metering system* and electrical details. This *application* will be used by the District to determine which *interconnection* requirements are applicable to the customer's proposed generating facility. **NOTE:** All requested information must be provided or the *application* may be delayed or returned.

General Conditions

This document states the general conditions and requirements and technical specifications for the safe and reliable operation of interconnected *net metering system*, 100 kW or less in capacity, that are intended to generate energy to serve all or a part of the customer's load.

A. Electrical Generating Systems (100kW or Less)

Any electrical generating facility with a maximum electrical generating capacity of 100 kW or less must comply with these standards to be eligible to connect and operate in parallel with the District's distribution system.

B. Application

Each customer seeking to install and operate an interconnected *net metering system* shall complete and submit an *application*, along with the *application* fees, to the District. Information must be accurate and complete before being approved by the District.

C. Application Fee

The *application* fee of \$300 shall be submitted with the application for an interconnected *net metering system*. The application fee includes the meter installation and is non-refundable.

D. Net Metering Interconnection Agreement

Upon approval of an Application, the Customer shall sign a "Net Metering Interconnection Agreement". This agreement shall be signed prior to the District proceeding.

E. Application Prioritization

All generation interconnection requests for facilities 100 kW or less from customers will be prioritized by the District the same as any new service connection requests. Preference will not be given to either request types, provided the Customer has accurately completed the application and signed a "Net Metering Interconnection Agreement".

F. Certificate of Completion

Prior to connecting any interconnected generation, all qualifying customers shall obtain an approved final inspection from the Department of Labor and Industries Electrical Inspections. This information shall be indicated on the *Certification of Completion*, Exhibit D.

G. Unauthorized Connections

For public and working personnel safety, any District non-approved generation interconnections shall be

immediately disconnected from the District's system.

H. Technical Specifications

All technical specifications are contained in Chapter 2.

I. Dedicated Distribution Transformer

To ensure reliable service to District customers, the District will review the application and determine if a dedicated distribution transformer is required. If the District requires a dedicated distribution transformer, the Customer shall pay all costs of the new transformer and related facilities.

J. Metering

Metering for Net Metering System as set forth in RCW 80.60: The District shall install, own and maintain a kilowatt-hour meter, or meters as the installation may determine, capable of registering the bi-directional flow of electricity at the *Point of Common Coupling* at a level of accuracy that meets all applicable standards, regulations and statutes. The meter(s) may measure such parameters as time of delivery, power factor, voltage and such other parameters as the District shall deem necessary to monitor the installation. The customer shall provide in the design adequate space per National, State, and Local Codes for metering equipment. It will be the customer's responsibility to provide all the interconnection equipment including the current transformer enclosure (if required), meter socket(s) and junction box(s). All equipment shall be included in the design and shown on the Customers supplied drawings prior to requesting District approval. The District will determine if the installation will be compatible with the Districts distribution system and may or may not approve an interconnected *net metering system*.

K. Production Metering

The District may require separate metering for all Customer generated power. This meter, if required, will record the total amount of electricity generated by the facilities and be utilized for statistics, billing, and any interaction required with government agencies. All costs associated with the installation of production metering will be paid by the customer. An approved District socket is required to be installed for the meter.

L. Labeling.

Common labeling furnished or approved by the District and in accordance with NEC requirements must be posted on meter base(s), disconnects, and transformers informing working personnel that generation is operating at or is located on the premises.

M. Insurance & Liability

As currently set forth for qualifying generation under RCW 80.60, no additional insurance will be necessary. For other generation facilities permitted under these standards but not contained within RCW 80.60, additional insurance and indemnification may be required. Qualifying generation must meet these interconnection standards and maintain compliance with these standards during operation.

N. Future Modification, Removal or Expansion.

Prior to any future modification, removal or expansion of the *net metering system*, the customer will obtain District review and approval. The District reserves the right to require the customer, at the customer's expense, to provide corrections or additions to existing electrical devices in the event of modification of government or industry regulations and standards.

O. District System Capacity

For the overall safety and protection of the District's system RCW 80.60 currently limits interconnection of

generation for net metering to 0.25% of the District's peak demand during 1996. Additionally, *interconnection* of qualified customer-owned generation to individual distribution feeders will be limited to 10% of the feeder's peak capacity. However, it is at the discretion of the District to determine the capability of adding additional generation facilities to the distribution system.

P. Customer-Owned Equipment Protection

It is the responsibility of the customer to protect their facilities, loads and equipment and comply with the requirements of all appropriate standards, codes, statutes and authorities.

Q. Interconnection Costs

Additional costs above and beyond the application fee will be determined after the *application* is received. These costs will include any District installed equipment and required testing in order to integrate the *net metering systems*. For example costs may be incurred for transformers, production meters, and District testing, qualification, and approval of non UL 1741 listed equipment.

CHAPTER TWO

Technical Specifications

This Chapter sets forth the technical specifications and conditions that must be met to interconnect *net metering systems*, 100 kW or less, for parallel operation with the distribution system of the District.

A. General Interconnection Requirements

1. Any *net metering system* desiring to interconnect with the District's distribution system or modify an existing *interconnection* must meet all minimum technical specifications applicable, in their most current approved version, as set forth in this Chapter.
2. The specifications and requirements listed herein are intended to mitigate possible adverse impacts caused by the *net metering system* on District equipment and personnel and on other customers of the District. They are not intended to address protection of the *net metering system* itself or its internal load. It is the responsibility of the *net metering system* to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect itself and its loads.
3. The specifications and requirements listed herein shall apply generally to the non-District-owned electric generation equipment to which this standard and agreement(s) apply throughout the period encompassing the Customer's installation, testing and commissioning, operation, maintenance, decommissioning and removal of said equipment. The District may verify compliance at any time, with reasonable notice.
4. **The Customer shall comply with the requirements in Sections 4(a), 4(b) and 4(c). However, at its sole discretion, the District may approve alternatives that satisfy the intent of, and/or may excuse compliance with,**

any specific elements of these requirements.

a) **Code and Standards.** Customer shall conform to all applicable codes and standards for safe and reliable operation. Among these are the National Electric Code (NEC), National Electric Safety Code (NESC), the Institute of Electrical and Electronics Engineers (IEEE), American National Standards Institute (ANSI), and Underwriters Laboratories (UL) standards, and local, state and federal building codes. The Customer shall be responsible to obtain all applicable permit(s) for the equipment installations on their property.

b) **Safety.** All safety and operating procedures for joint use equipment shall be in compliance with the Occupational Safety and Health Administration (OSHA) Standard 29, CFR 1910.269, the NEC, Washington Administrative Code (WAC) rules, the Washington Industrial Safety and Health Administration (WISHA) Standard, and equipment manufacturer's safety and operating manuals.

c) **Power Quality.** Installations will be in compliance with all applicable standards including IEEE Standard 519-1992 Harmonic Limits.

B. Inverter-Based Interconnection Requirements, as Applicable

- IEEE Std 1547-2003 Standard for Interconnecting Distributed Resources with Electric Power Systems
- UL Standard 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems - Equipment must be UL listed.
- IEEE Standard 929-2000, IEEE Recommended Practice for District Interface of Photovoltaic (PV) Systems

C. Non-Inverter-Based Interconnection Requirements

The Application for such Interconnection may require more detailed District review, testing, and approval, at Customer cost, of the equipment proposed to be installed to ensure compliance with applicable standards including:

- IEEE Std 1547-2003 Standard for Interconnecting Distributed Resources with Electric Power Systems
- ANSI Standard C37.90, IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus
- Customers proposing such interconnection may also be required to submit a power factor mitigation plan for District review and approval.

D. Specific Interconnection Requirements

1. Visible/Lockable Disconnect.

Customer shall furnish and install on Customer's side of the meter a UL approved safety disconnect switch which shall be capable of fully disconnecting the Customer's energy generating equipment from District electric service. The disconnect switch shall be located adjacent to District meters and shall be of the visible break type in a metal enclosure which can be secured by a padlock. The disconnect switch shall be accessible to District personnel at all times.

The District shall have the right to disconnect the Facility at the disconnect switch: when necessary to maintain safe electrical operating conditions; if the Facility does not meet required standards; or if the Facility at any time adversely affects The District's operation of its electrical system or the quality of The District's service to other customers.

2. Voltage and Phasing. Nominal voltage and phase configuration of Customer generation must be compatible to the District's system at the *Point of Common Coupling (PCC)*.

E. Interconnection to secondary *Network Distribution Systems*.

Customer must provide evidence that their generation will never result in reverse current flow through the District's Network Protectors. All instances of interconnection to secondary Distribution Networks shall require review and written pre-approval by The District. Interconnection to distribution secondary area networks is not allowed. Closed Transition Transfer Switches are not allowed in secondary *Network Distribution Systems*.

CHAPTER THREE

Definitions

The following words and terms shall be understood to have the following meanings when used in the General Conditions and Technical Specifications of the Interconnection Standards.

Application: The notice provided by Customer to the District, which initiates the interconnection process.

Certificate of Completion: Form completed by Customer and the electrical inspector having jurisdiction over the installation indicating completion of installation and inspection.

Customer: Entity who owns and/or operates the *net metering system* interconnected to the District distribution system

Facility, also referred to as Electrical Generating System (EGS): A source of electricity owned by the Customer that is located on the Customer's side of the PCC, and all facilities ancillary and appurtenant thereto, including interconnection equipment, which the Customer requests to interconnect to the District's distribution system.

In-Service Date: The date on which the *net metering system* modifications (if applicable) are complete and ready for service, even if the *net metering system* is not placed in service on or by that date.

Interconnection Agreement: An agreement for interconnection service between the Customer and the District. The agreement also includes any amendments or supplements thereto entered into by the Customer and the District.

Net Metering: as defined in RCW 80.60.010, means "measuring the difference between the electricity supplied by an electric utility and the electricity generated by a customer-generator that is fed back to the electric utility over the applicable billing period."

Net Metering System: As defined in RCW 80.60.010, means "a fuel cell, a facility that produces electricity and used and useful thermal energy from a common fuel source, or a facility for the production of electrical energy that generates *renewable energy*, and that:

(a) Has an electrical generating capacity of not more than one hundred kilowatts;

(b) Is located on the customer-generator's premises;

(c) Operates in parallel with the electric utility's transmission and distribution facilities; and

(d) Is intended primarily to offset part or all of the customer-generator's requirements for electricity.

Network Distribution System (Area or Spot): Electrical service from a distribution system consisting of one or more primary circuits from one or more substations or transmission supply points arranged such that they collectively feed secondary circuits serving one (a spot network) or more (an area network) District customers.

Point of Common Coupling (PCC): The point where the Customer's local electric power system connects to the District's distribution system, such as the electric power revenue meter or at the location of the equipment designated to interrupt, separate or disconnect the connection between the Customer and the District. See the District for the location at a particular Customer site.

Renewable Energy: As defined by RCW 80.60.010, means "the energy generated by a facility that uses water, wind, solar energy, or biogas from animal waste as a fuel.

CUSTOMER CHECKLIST

FOR NET METERING INTERCONNECTION

- Submit a completed, signed **Net Metering Application (Exhibit B)** to the PUD with:
 - ✓ Non-refundable fee, \$300.00. Fee includes the meter installation and is non-refundable.
 - ✓ A Site Sketch Drawing (or clearly labeled aerial photo).
 - ✓ An Electrical Schematic Drawing. See Exhibit E.
 - ✓ Interconnection inverter must be UL Listed or 3rd party label evaluated
NOTE: If inverter is not UL 1741 Listed, additional review time and information will be required.
 - ✓ Send to:
 - Grant County PUD
 - Energy Services Department
 - 312 West 3rd Avenue
 - Moses Lake, Washington 98837
- Design must meet current applicable NEC and state requirements.
- Receive written design approval from the District, **prior** to installation.
- Sign the **Interconnection Agreement** as part of the Interconnection Standards (**Exhibit C**).
- Pay additional fees, if applicable, as determined by District review.
- Get an electrical permit from Washington State L&I.
- Complete the installation.
- Get inspection from a state electrical inspector. (All installations must first be accepted and approved by the State Department of L&I prior to interconnection.)
- Get inspection from the District (call Energy Services for inspection at 509-766-2512)
- Submit **Certificate of Completion (Exhibit D)** to District.
- District installs a bi-directional meter.
- Start generating power.

Questions? Contact: Public Utility District No 2 of Grant County
Energy Services Department
312 West 3rd Ave
Moses Lake WA 98837
Phone: 509-766-2512 Fax: 509-766-2514
EnergyService@gcpud.org

NET METERING APPLICATION
For Interconnection of
Net Metered Systems of 100 Kilowatts or Less

PART I: CUSTOMER INFORMATION

Customer/Company Name: _____

Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____ Email: _____

Location of Proposed Power Generator:

Site Address: _____

Current Meter Number: _____

PUD Account Number: _____

Other Relevant Information: _____

In addition to the description of the location of the Proposed Power Generator, include:

1. **A Site Sketch** (A simple line drawing on a regular size sheet of paper indicating the location of the property and the location of the generator; include a North directional arrow, or aerial photo), and
2. **An Electrical Schematic Drawing** (A detailed drawing on a regular size sheet of paper indicating the electrical schematic of the generator and interconnection.) See Exhibit E.

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

If applicable, Engineering/Design Firm Name: _____

Contact Person: _____ Phone: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____ E-mail: _____

PART II: EQUIPMENT INFORMATION

Type of Existing Meter Service:

- Single Phase OR Three Phase AC Volts _____
- New meter base connected to customer's electrical distribution panel, or
- New meter base and new connection to an existing District transformer.
- Production Meter Socket- Make: _____ Model: _____

Solar PV Type:

Quantity of Solar PV Panels: _____ x Nominal Rating Watts (Each): _____ = Total Wattage _____

Solar Panel Manufacturer: _____, Model No.: _____

Type of Array Mounting: Fixed Tracking

$$\left(\begin{array}{l} \text{Rated Power Output} \\ \text{of Inverter (Watts)} \end{array} \right) \text{_____} \times \left(\begin{array}{l} \text{Quantity of} \\ \text{Inverters} \end{array} \right) \text{_____} = \left(\begin{array}{l} \text{Peak Power} \\ \text{Output (Watts)} \end{array} \right) \text{_____}$$

Inverter Manufacturer: _____, Model No.: _____

UL 1741 Listed: Yes No

Wind Turbine:

Est. Average Wind Speed at Location (if known): _____ mph.

Wind Turbine Manufacturer: _____, Model No.: _____

Rated Power Output, Watts: _____, at _____ mph Wind Speed.

Inverter Manufacturer: _____, Model No.: _____

UL 1741 Listed: Yes No

Other Qualified Alternative Energy Generator (Describe):

UL 1741 Listed: Yes No

If Yes, attach manufacturer's cut-sheet showing UL1741 listing.

PART III: INTERCONNECTION FEE AND CUSTOMER SIGNATURE

Interconnection Fee (payable when the application is submitted for approval):

\$300.00 Non-Refundable Processing and Meter Installation fee.

New Transformer and Line Extension required: (Determined by District)

Yes No

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 Net Metering Interconnection Agreement for Net Metered Systems of 100 Kilowatts or Less.

Name: _____ Date: _____

This application is only valid for Generating Facilities that meet the codes, standards, and certification requirements of Interconnection Standards for Customer-Owned Generating Facilities 100 kW or Less.

Please return this application to the District before purchasing and installing a power generator:

All inquiries should be made to:

Grant County PUD
Energy Services Department
312 West 3rd Ave
Moses Lake WA 98837

Phone: 509-766-2512

Fax: 509-766-2514

Web site: www.gcpud.org

For District use only

Distribution list: APPROVAL DATE _____ Account Number: _____
 T&D Engineering _____ Federal Tax ID: _____
 Line Superintendent _____ Connection Fees Paid: _____ Check No. _____
 Electric Shop Supervisor _____ Customers UBI: _____
 Energy Services _____

Interconnection of the *Net Metering System* is approved contingent upon the Terms and Conditions for Net Metering Interconnection Agreement for Net Metered Systems of 100 Kilowatts or Less, and subject to the following conditions (if any):

Application approved by:

_____ Title: _____ Date: _____

NET METERING INTERCONNECTION AGREEMENT

Between
Public Utility District No. 2 of Grant County, Washington
And

THIS NET METERING AGREEMENT (“Agreement”) is made and entered as of the ____ day of _____, 20____, by and between PUBLIC UTILITY DISTRICT NO. 2 OF GRANT COUNTY, WASHINGTON, a municipal corporation organized and existing under the laws of the State of Washington (the “District”), and _____ (“Customer”).

RECITALS

- a. In accordance with Chapter 80.60 RCW, Customer intends to install and operate on his or her premises a Net Metering System. The Customer’s Net Metering System is intended to offset either part or all of the Customer’s electrical requirements.
- b. Customer intends to use any power from the Net Metering System for Customer’s own consumption with excess, if any, to be supplied to the District.
- c. In accordance with Chapter 80.60 RCW, the District intends to install a bi-directional meter on Customer’s premises and to bill the appropriate Customer charge and credit the Customer for the excess kilowatt-hours generated during the billing period.
- d. In order to protect the safety and reliability of the District’s electric system and its employees, Customer agrees to install at its own expense all necessary interconnection, safety, and power quality equipment.

AGREEMENT

1. NET METERING SYSTEM

In accordance with Chapter 80.60 RCW, “Net Metering System” as used in this Agreement shall mean a fuel cell, a facility that produces electricity and used and useful thermal energy from a common fuel source, or a facility for the production of electrical energy generated by water, wind, solar energy, or biogas from animal waste as a fuel, and that has an electrical generating capacity of not more than one hundred kilowatts, is located on the Customer’s premises, operates in parallel with the District’s transmission and distribution facilities, and is intended primarily to offset part or all of the Customer’s requirements for electricity.

2. TERM

This Agreement shall be in effect when signed by the Customer and the District and shall remain in effect thereafter month to month unless terminated by either Party upon thirty (30) days’ prior written notice in accordance with Section 14. All obligations incurred before the termination of the contract shall continue in force until fully satisfied. The Customer shall pay the reasonable costs of removal, relocation, modification or renovation of any facilities or equipment required for interconnection with the District’s electrical system upon termination of this Agreement.

3. CUSTOMER’S OBLIGATIONS

A. Net Metering System Location and Specifications: Customer has elected, in accordance with Chapter 80.60 RCW to operate a Net Metering System. Customer shall own and operate entirely at its own expense the Net Metering System at the Customer’s premises located at _____. Customer’s Application for a Net Metering System which provides details on the electrical generating unit(s) is hereby incorporated into this Agreement as Exhibit B.

ExhibitC

The installation is identified by the District with the following designators:

Transformer No. (feeder and phase) _____

Customer Service Account No. _____

B. Additional Service Locations: A separate agreement shall be entered into for each Customer's electrical service location(s).

C. Interconnection Requirement: Customer shall design, install, operate and maintain, entirely at its own expense the Net Metering System and such equipment necessary to meet applicable safety, power quality, and Interconnection requirements established by the National Electrical Code, National Electric Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, and the District's Interconnection Standards, as set forth in Exhibit C, which is attached hereto.

The District shall have the sole authority to determine which Interconnection requirements set forth herein are applicable to Customer's proposed net metering system. Customer shall pay for the District's standard watt-hour meter electrical hook-up, if not already present.

D. Approval and Initial Operation: Customer shall submit equipment specifications and detailed plans, including one-line diagrams, for the installation of the Net Metering System and associated interconnection, safety, and control equipment and wiring to the District for its review and advance written approval prior to the actual installation.

Customer shall not commence parallel operation of the net metering system until written approval of the Interconnection facilities has been given by the District. Such approval shall not be unreasonably withheld. The District shall have the right to have representatives present at the initial testing of Customer's protective apparatus. Customer shall notify the District when testing is to take place.

E. Operations and Maintenance: Customer shall be solely responsible for all costs related to the operation and maintenance of the Net Metering System. Customer shall maintain the net metering system and Interconnection facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, the District's Interconnection Standards. Customer may not rely upon any representations or statements of District employees or representatives regarding the correct operation and maintenance of the Net Metering System and shall have no liability therefore.

Customer shall reimburse the District for any and all losses, damages, claims, penalties or liability it incurs as a result of Customer's operation of its Net Metering System or failure to maintain its Net Metering System as required in this Section 3.

F. Wheeling: The District will not provide wheeling for Customer as generation from the net metering system will only be applied to consumption at the location of said net metering system.

G. Changes in Operation: Customer shall make no change to the Net Metering System or associated equipment and wiring without prior written approval of the District.

H. Legal Compliance and Permits: Customer shall be solely responsible for obtaining any and all necessary easements, authorizations, licenses, and permits, or exemptions, as may be required by any federal, state, or local statutes, regulations, or ordinances for the construction and operation of the Net Metering System and Interconnection facilities, including electrical permit(s). Customer shall operate the Net Metering System in compliance with all applicable statutes, regulations, or ordinances. In addition, Customer shall comply with all applicable provisions of the District's Electric Service Requirements, Interconnection Standards, and Customer Service Policies as they may be revised from time to time by the District.

Customer shall reimburse the District for any and all losses, damages, claims, penalties or liability it incurs as a result of Customer's failure to obtain or maintain any governmental authorizations and permits required for construction and operations of Customer's Net Metering System.

4. NET METERING

A. Metering Equipment: The District shall install and maintain an electronic kilowatt-hour meter capable of registering the bi-directional flow of electricity at the Point of Interconnection at a level of accuracy that meets all applicable standards, regulations and statutes.

B. Interconnection Charge: The Customer shall be responsible for all costs, fees, and charges billed by the District pursuant to its Interconnection Standards (Attached as Exhibit C) and Customer Service Policies as they may be revised from time to time by the District.

C. Payment for Net Energy: The District shall calculate and bill Customer for electricity and credit Customer for Customer supplied electricity as provided in the District's Customer Service Policies as they may be revised from time to time by the District's Board of Commissioners.

5. ACCESS

A. Inspection: The District may enter the Customer's premises or property to inspect, with reasonable prior notice, at all reasonable hours, Customer's net metering system, the net metering system's protective devices, and all related equipment and wiring.

B. Meter Reading: The District may enter the Customer's premises or property to read the meter.

C. Emergency Access: The District shall have the right to and may enter Customer's premises or property to disconnect at the District's meter or transformer, without notice, the net metering system if, in the District's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, or the District's facilities, or property of others from damage or interference caused by Customer's Net Metering System, or lack of properly operating protective devices or inability to inspect the same.

D. Disclaimer: The District inspection or other action shall not constitute approval by the District. The customer remains solely responsible for the safe and adequate operation of its facilities.

6. INDEMNITY

Customer hereby indemnifies and agrees to hold harmless and release the District and its elected and other officials, officers, employees and agents and each of their heirs, personal representatives, successors and assigns of any of the foregoing from and against any and all losses, claims, damages, costs, demands, fines, judgments, penalties, obligations, payments, liabilities, and expenses, including, but not limited to, reasonable attorney fees, resulting from or in incurred in connection with performance of this Agreement or which may occur or be sustained by the District on account of any claim or action brought against the District for any reason including but not limited to the following:

- (i) any failure or abnormality in the operation of Customer's Net Metering System or any related equipment;
- (ii) any failure of the Customer to comply with the standards, specifications, or requirements referenced in this Agreement;
- (iii) any failure of the Customer duly to perform or observe any term, provision, covenant, agreement or condition hereunder to be performed or observed by or on behalf of Customer;
- (iv) any negligence or intentional misconduct of Customer related to operation of the Generator or any associated equipment or wiring; or
- (v) loss to the electrical system of the Customer caused by or arising out of an electrical disturbance.

Such indemnity, protection, and hold harmless includes any demand, claim, suit or judgment for damages, death or bodily injury to all persons, including officers, employees or agents, and subcontractors of either Party hereto including payment made under or in connection with any Worker's Compensation Law or under any plan for employee's disability and death benefits or property loss which may be caused or contributed to by the Interconnection, maintenance, operation, use, presence, or removal of Customer's equipment. The only exception will be liability occasioned by the sole negligence or willful misconduct of the District or its employees acting within the scope of their employment and liability occasioned by a partial negligence of the District or its employees acting

ExhibitC

within the scope of their employment to the extent that such partial liability is fixed by a court of competent jurisdiction.

The provisions of this Section 6 shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any insurance policy.

The District shall have no liability, ownership interest, control or responsibility for the Customer's Net Metering System or its interconnection with the District's electric system, regardless of what the District knows or should know about the Customer's Net Metering System or its Interconnection.

Customer recognizes that it is waiving immunity under Washington Industrial Insurance law, Title 51 RCW, and further agrees that this indemnification clause has been mutually negotiated. This indemnification shall extend to and include attorney's fees and the costs of establishing the right of indemnification hereunder in favor of the District.

7. DISCONNECTION

A. Disconnection by the Customer: Customer may disconnect the Net Metering System at any time upon thirty (30) days' notice to the District and this Agreement shall terminate upon permanent physical removal of facilities necessary to interconnect the Net Metering System with the District's electric system, provided that any payment obligation arising and indemnification obligations shall survive such termination and shall continue in force until fully satisfied.

B. Disconnection by the District: Notwithstanding any other provision of this Agreement, if at any time the District determines that the net metering system may endanger District personnel, the continued operation of Customer's net metering system may endanger the integrity of the District's electric system, or the Customer's net metering system causes damage to or interferes with the District's operation or facilities, the District shall have the right to temporarily or permanently disconnect Customer's net metering system from the District's electric system until such time as the District is satisfied that the conditions referenced in this Section 7 have been corrected.

Any nonpayment of any money owed to the District will result in disconnection by the District.

8. FORCE MAJEURE

A. Suspension of Obligations. Neither Party shall be liable to the other for, or be considered to be in breach of or default under this Agreement because of any failure or delay in performance by such Party under this Agreement to the extent such failure or delay is caused by or results from any cause or condition which is beyond such Party's reasonable control, or which such Party is unable to prevent or overcome by exercise of reasonable diligence including but not limited to: failure or threat of failure of facilities or equipment; fire, lightning, flood, earthquake, volcanic activity, wind, drought, storm, and other natural disasters or acts of the elements; court order, or failure to act, of civil, military or governmental authority; or epidemic, riot, insurrection, sabotage.

Any Party claiming failure or delay in performance of this Agreement due to a Force Majeure event shall give the other Party maximum practicable advance notice and shall use its reasonable best efforts to resume performance as soon as possible.

Notwithstanding any other provision of this Agreement, in no event shall a Force Majeure event excuse a Party's failure or delay to pay any amounts due and owing to the other Party pursuant to this Agreement.

9. INTERRUPTION OF PRODUCER'S ENERGY DELIVERIES BY DISTRICT

The District shall have the right at any time, without liability to the Customer or any other person, to interrupt, reduce, suspend or curtail generation and/or deliveries of energy:

(a) when necessary in order for the District to construct, install, maintain, repair, replace, remove, investigate, or inspect any equipment or any part of its electric system; or

ExhibitC

(b) if the District determines, in its sole discretion, that curtailment, interruption or reduction of deliveries is necessary because of emergencies, a forced outage, compliance with prudent electrical practices, or other operational considerations.

Whenever possible, the District shall give Customer reasonable notice of the possibility that interruption or reduction of deliveries may be required.

10. NO RIGHT TO USE DISTRICT’S SYSTEM FOR DIRECT SALES TO THIRD PARTIES.

The Parties recognize that this Agreement does not confer a right upon Customer to transmit or distribute power to any third party using the District’s electric system.

11. LIMITATION OF DISTRICT’S LIABILITY

The District shall not be liable to the Customer for consequential, incidental, punitive or indirect damage of any kind due to any damage to or disconnection of Customer’s net metering system. The District shall have no responsibility or liability to the Customer or any other person or entity for or in connection with any service interruption, suspension, curtailment or fluctuation or disturbance of energy, whatever the cause, except the District shall be liable for repair or replacement costs (whichever is less) of Customer’s net metering system suffering physical damage as a consequence of the District’s negligence in operating its electric system.

12. INDEPENDENT CONTRACTORS

The Parties hereto are independent contractors and shall not be deemed to be partners, joint ventures, employees, franchisees or franchisers, servants or agents of each other for any purpose whatsoever under or in connection with this Agreement.

13. ASSIGNMENT

Customer shall not assign its rights under this Agreement to any other party without the express written consent of the District. The District may impose reasonable conditions on any such assignment to ensure that all of the Customer’s obligations under this Agreement are met and that none of the Customer’s obligations under this Agreement are transferred to the District as a result of default, bankruptcy, or any other cause.

14. NOTICES AND OTHER COMMUNICATIONS

A. Notice Methods and Addresses. All notices required or permitted to be given under this Agreement shall be given in writing (i) by personal delivery, (ii) by recognized overnight air courier service, (iii) by United States postal service, postage prepaid, registered or certified mail, return receipt requested, or (iv) by facsimile transmission. All notices to either Party shall be made to the address set forth below.

B. Address for Notification:

DISTRICT
Public Utility District No. 2 of Grant County WA.
Energy Services Department
312 West 3rd Avenue
Moses Lake, Washington 98837

CUSTOMER

Name

Address

City, State & Zip

ExhibitC

Customer notices to the District, pursuant to this Section 14, shall refer to the Service Address set forth in Exhibit B, Net Metering Application.

15. NO THIRD PARTY BENEFICIARIES

Except as expressly set forth in this Agreement, none of the provisions of this Agreement shall inure to the benefit of or be enforceable by any third party.

16. ENTIRE AGREEMENT

This Agreement and the Exhibits attached hereto set forth the entire agreement of the Parties and supersede any and all prior agreements with respect to the subject matter of this Agreement. The rights and obligations of the Parties hereunder shall be subject to and governed by this Agreement.

17. INVALID PROVISIONS

The invalidity or unenforceability of any provision of this Agreement shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if such invalid or unenforceable provisions were omitted.

18. AMENDMENT

Any amendments or modifications to this Agreement shall be in writing and agreed to by both Parties. The failure of any Party at any time or times to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same. No waiver by any Party of the breach of any term or covenant contained in this Agreement, whether by conduct or otherwise, shall be deemed to be construed as a further or continuing waiver of any such breach or waiver of the breach of any other term or covenant unless such waiver is in writing.

19. HEADINGS

All headings herein are inserted only for convenience and ease of reference and are not to be considered in the construction or interpretation of any provision of this Agreement.

20. COUNTERPARTS

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

21. ATTORNEY'S FEES

In the event it is necessary for either party to utilize the services of an attorney to enforce any of the terms of this Agreement, such enforcing party shall be entitled to compensation for its reasonable attorney's fees and costs. In the event of litigation regarding any of the terms of this Agreement, the substantially prevailing party shall be entitled, in addition to other relief, to such reasonable attorney's fees and costs as determined by the court.

22. GOVERNING LAW / VENUE

This Agreement shall be interpreted, governed and construed under the laws of the State of Washington. Venue for any action arising under or in connection with this Agreement shall be in the Superior Court for Grant County, Washington.

24. RULES OF CONSTRUCTION

Reference to "or" in this Agreement shall be deemed to be disjunctive but not necessarily exclusive. No provision of this Agreement shall be construed in favor of or against either of the Parties hereto by reason of the extent to which any such Party or its counsel participated in the drafting.

25. FUTURE MODIFICATION, REMOVAL OR EXPANSION

ExhibitC

Any future modification, removal or expansion of the Customer owned net metering system will require an engineering, safety and reliability review and approval by the District. The District reserves the right to deny the modification or expansion or to require the Customer, at Customer's expense, to provide modifications or additions to existing electrical devices including, but not limited to protection device and meters, in the event of changes to government or industry regulation and/or standards.

26. EXHIBITS

The Agreement includes the following exhibits attached and incorporated by reference:

- Exhibit A: Customer Checklist
- Exhibit B: Net Metering Application
- Exhibit C: Net Metering Interconnection Standards
- Exhibit D: Certificate of Completion
- Exhibit E: Electrical Schematic Drawing Sample

IN WITNESS WHEREOF, the Parties have executed this Agreement effective as of the last date set forth below.

PUBLIC UTILITY DISTRICT NO. 2 OF GRANT COUNTY,
WASHINGTON

By: _____

Title: _____

CUSTOMER

By: _____

Title: _____

CERTIFICATE OF COMPLETION
For Interconnection of
Net Metered Systems of 100 Kilowatt or Less

Interconnection Customer: _____

Contact Person: _____

Address: _____

Date the Net Metered System of 100 Kilowatts or Less was approved by the District: _____

Electric Inspection (Required on ALL Customer-Owned Generator Installations):

Customer shall not commence parallel operation of the generating facility until Customer obtains all governmental authorizations and permits required for the construction and operation of the electric generating facility and connection facilities, including electrical permit(s). All customer-owned generating facilities must obtain an electrical permit and pass electrical inspection before they can be connected or operated in parallel with the District's electrical distribution system.

Electrical Permit number: _____

Is the Customer-Owned Generating Facility owner-installed? Yes No

If no, provide the following information:

Name of Electrical Contractor who performed the work: _____

Address: _____

City: _____ State: _____ Zip Code: _____

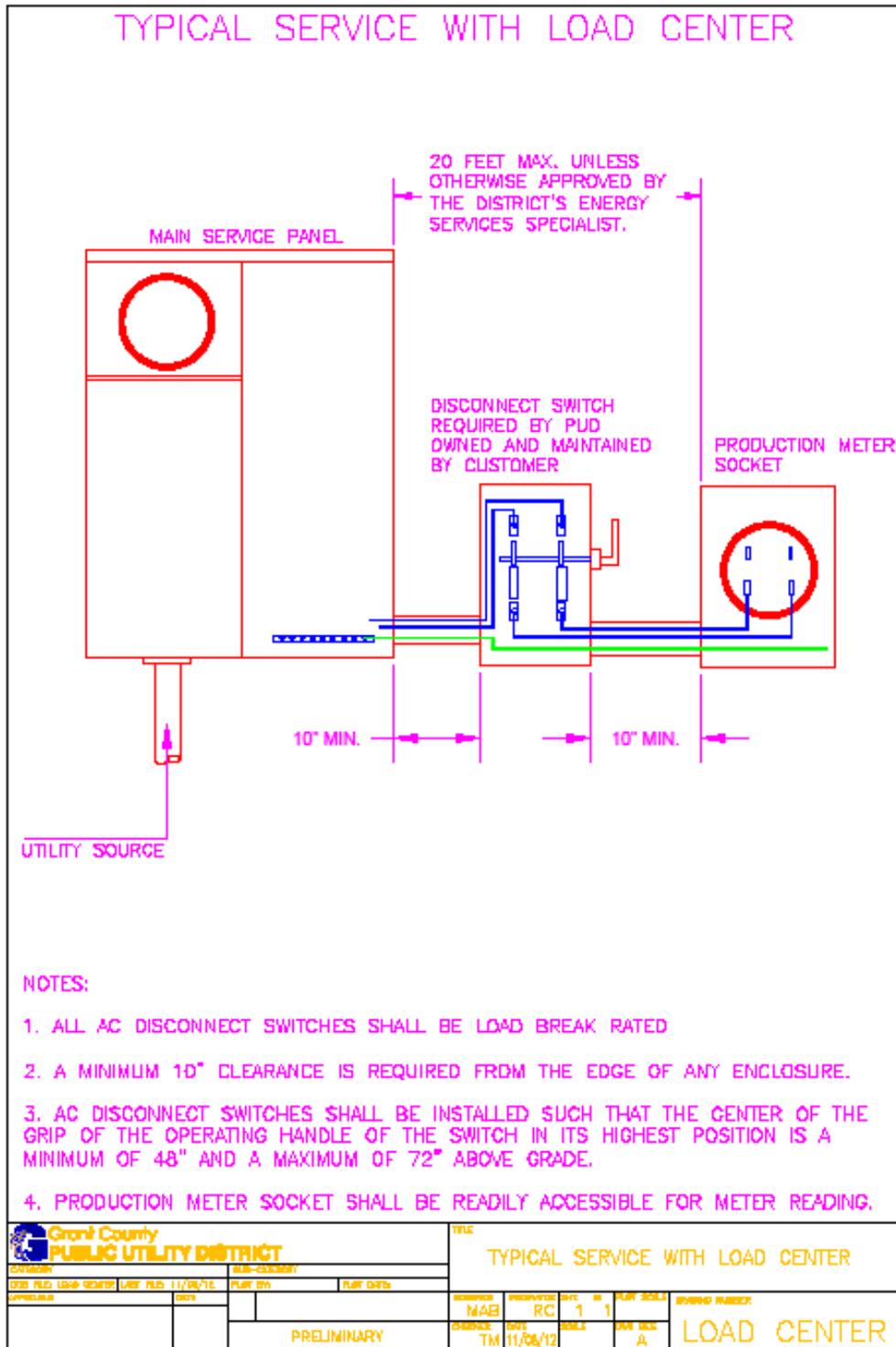
Telephone (Day): _____ (Evening): _____

Fax: _____ E-Mail Address: _____

License Number: _____

Electrical Inspection

The Customer-Owned Generating Facility has been installed and passed inspection for compliance with the local building/electrical code on _____. The same facility also passed PUD inspection for compliance with PUD specifications and requirements on _____.



Contact Numbers

Grant County PUD

Service Expediter	766-2501
Service Expediter Fax.....	754-6658
Energy Services – 312 West Third Avenue, Moses Lake.....	766-2512
Customer Service Call Center	766-2505
Grant County PUD Toll Free Number	1-800-422-3199

State & County Government

WA Department of Labor and Industries- 3001 W. Broadway, Moses Lake	764-6900
WA Department of Labor and Industries Electrical Inspection (24 hour) Line.....	764-6966
Grant County Building Department - 332 Division West, Ephrata	754-2011

City and Town Government

Town of Coulee City - 501 Main Street West.....	632-5331
Town of Electric City - 10 Western Avenue	633-1510
City of Ephrata - 121 Alder S.W.	754-4601
City of George - 102 Richmond Avenue	785-5081
City of Grand Coulee - 306 Midway Avenue.....	633-1105
Town of Hartline - Main Street North	639-2606
Town of Krupp (Marlin) - 293 Urquhart Avenue North	345-2531
City of Mattawa - East 521 Government Road	932-4037
City of Moses Lake - 321 Balsam Street.....	764-3756
City of Quincy - 104 B Southwest	787-3523
City of Royal City - 697 Camelia Street	346-2263
City of Warden - 201 Ash Street	349-2326
City of Wilson Creek- 204 4th North	345-2531