

**POLICY NO. 30-420** 

**REVISION DATE: April 24, 2023** 

**SUBJECT:** Net Metering Installations

## **PURPOSE:**

To set forth the manner in which OCEC (the Cooperative), will fulfill its obligations pursuant to Washington State statute RCW 80.60 which provides for net metering.

## **DEFINITIONS:**

DESIGNATED METER: electric service meter at the service of a net metering system that is interconnected with the Cooperative's utility distribution system.

MEMBER-GENERATOR: a member of the Cooperative who is a user of the net metering system.

METER AGGREGATION: the administrative combination of billing net energy consumption from a designated net meter and eligible aggregated meter.

NET METERING: Measuring the difference between the electricity supplied by the Cooperative and the excess electricity generated by a Member-generator's net metering system that is fed back to the Cooperative over the applicable billing period.

NET METERING SYSTEM: 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:

- Uses either water, wind, solar energy, or biogas from animal waste as a fuel;
- Has an electrical generating AC capacity of not more than one hundred (100) kilowatts;
- Is located on the Member-generator's premises and for which the Cooperative has, at the time of application as Member-generator, an active account in the Member-generator's name;
- Operates in parallel with the Cooperative's transmission and distribution facilities and is connected to the Cooperative's distribution system; and
- Is intended primarily to offset part or all of the Member-generator's requirements for electricity.

NET METERING LOCATION: The single connection point of a net metering system to the

OCEC power distribution system where power flow is measured in both directions.

WHEELING: For the purposes of this policy, wheeling is the transmission of electrical energy produced inside the OCEC power system to points outside the OCEC system.

NAME PLATE CAPACITY: The intended, full load, sustained output of an electrical generation facility.

### **POLICY:**

## I. GENERAL POLICY:

OCEC shall make net metering available to its members pursuant to the applicable provisions of RCW 80.60. Once the minimum requirements of RCW 80.60 are met OCEC shall continue to make net metering available to its members on a first come, first served, case-by-case basis until such time that the Cooperative voluntarily ends this option.

The value of power generated by a net metering system shall be used to offset the cost of power consumed at the net metering location. Excess power generation that exists after offsetting consumption shall be accounted for by the Cooperative, and maintained for the Member-generator's use to offset future consumption at the same location. However, there shall be no carryover of excess generation beyond March 31<sup>st</sup> of each year and as set forth in RCW 80.60.030 any remaining excess generation accumulated during the previous twelve (12) months shall be granted to the Cooperative, without compensation to the member-generator.

Wheeling of excess power produced by a member-generator shall not be allowed.

Nothing in this policy shall limit the Cooperative's ability to evaluate such net metering installations and determine terms and conditions that are mutually satisfactory to all parties, but in no event shall such terms and conditions be detrimental to the operation of the Cooperative's facilities and/or service to its members.

## II. POWER PRODUCTION AND CONSUMPTION:

- A. Credit for power produced by a Member-generator shall be at the same rate for power provided by OCEC to the net metering location. Credit will be for future energy charges only and not applied to the base charge.
- B. The furnishing of electrical service to the net metering system shall be subject to all policies of the Cooperative.
- C. There shall be no wheeling or resale of energy produced by a Net Metering System, nor shall the Member-generator be financially compensated for excess generation other than credit to offset power consumption at the net metering location.

# III. Meter Aggregation

If a member-generator requests, OCEC shall provide such a member-generator meter aggregation subject to the terms described below.

- a) For a member-generator participating in meter aggregation, credits for kilowatt-hours earned by the member-generator's net metering system during the billing period first shall be used to offset electricity supplied by OCEC at the location of the member-generator's designated meter.
- b) A member-generator may aggregate a designated meter with one additional aggregated meter located on the same parcel as the designated meter or a parcel that is contiguous with the parcel where the designated meter is located.
- c) For the purposes of (b) of this subsection, a parcel is considered contiguous if they share a common property boundary but may be separated only by a road or rail corridor.
- d) A retail electric member who is a member-generator and receives retail electric service from an electric utility at an aggregated meter must be the same retail electric member who receives retail electric service from such an electric utility at the designated meter that is located on the premises where such a customergenerator's net metering system is located.
- e) Credits for excess kilowatt-hours earned by the net metering system at the site of a designated meter during a billing period shall be credited by the electric utility for kilowatt hour charges due at the aggregated meter at the applicable rate of the aggregated meter.

# IV. REQUIREMENTS AND CONDITIONS:

# A. Application

Before any action is taken by OCEC, any member wishing to become a membergenerator shall complete and submit to OCEC a Net Metering Application, as provided in Exhibit 2. Applications will be processed in the order received by the Cooperative, on a first-come first-served basis.

# B. Liability

The Cooperative and its members are to be held harmless from all acts or omissions on the part of the Member-generator or the Net Metering System. The Member-generator responsible for the Net Metering System shall agree to indemnify the Cooperative in connection with any damages or injury, affecting any party, resulting from the installation, interconnection, or operation of the Net Metering System. The Member-generator responsible for the Net Metering System shall also agree to indemnify the Cooperative for any money damages, liabilities, administrative and/or legal expenses incurred by the Cooperative as a result of the Net Metering System's failure to meet any requirement set forth in this policy.

If performance of labor is required at the Net Metering System, or performance of labor is incident to the Cooperative's supplying articles, material and/or work at the Net Metering System, the Member-generator agrees to indemnify and protect the Cooperative against all liabilities, claims or demands for injuries or damages to any person(s) growing out of the performance of labor.

The Member-generator responsible for the Net Metering System shall protect the property of the Cooperative placed on the Member-generator's premises, and the Member-generator assumes responsibility and agrees to hold the Cooperative harmless for injury or damage to persons or property occurring on the premises, except where caused solely by the negligence of the Cooperative.

# C. Quality of Service and Safety

A Net Metering System used by a Member-generator shall include, at the Member-generator's own expense, all equipment necessary to meet applicable safety, power quality, and interconnection requirements established by OCEC, the State of Washington, the National Electric Code, National Electric Safety Code, the Institute of Electrical and Electronics Engineers, and Underwriters Laboratories.

The Cooperative may require additional safety, power quality, and interconnection requirements including limitations on the number of Net Metering Systems and total Net Metering Systems' capacity interconnected to any distribution feeder, circuit or network as necessary to protect public safety and system reliability.

Additionally, OCEC requires the appropriate disconnects and protective devices to prevent inadvertent energizing of the OCEC distribution system during outages, including an accessible and lockable disconnect switch. The equipment shall also prevent unacceptable levels of voltage, frequency, power factor, short circuit current, harmonics or any other condition, that could be detrimental to the operation of the distribution system.

To ensure safe interconnection, the Member-Generator will be required to observe IEEE 1547 - Standard for Interconnecting Distributed Resources with Electric Power Systems; UL 1741 Standard for Safety for Inverters, Converters, Controllers, and Interconnection System Equipment for Use With Distributed Energy Resources; and other protection measures deemed necessary by OCEC.

# D. Inspection

The Cooperative reserves the right to inspect the Net Metering System, as it deems necessary, for compliance with the rules, regulations and Bylaws of the Cooperative, to assure proper operation of the Net Metering System for the protection and safety of Cooperative employees, to assure the integrity of the Cooperative's system, and for satisfactory operation in parallel with the Cooperative's system. Such inspection by the Cooperative shall not relieve the Member-generator from their responsibility to install, operate, and maintain the Net Metering System in a safe and satisfactory manner.

# E. Engineering Analysis

When the Cooperative determines engineering analysis is required the Cooperative will provide the engineering design and construction standards for the interconnection. Such standards are necessary to protect persons and property, including Cooperative personnel, and to avoid abnormal voltages, voltage fluctuations and harmonic content which might cause interference with

other Cooperative members, equipment or communications.

# F. Metering

Metering of kilowatt-hours at the Net Metering System shall be provided by a electronic TWACS kilowatt-hour meter capable of registering the flow of electricity in two directions or by multiple meters capable of registering flow of electricity in each direction. The cost of purchasing and installing an additional meter(s) will be responsibility of the Member-generator. Cooperative personnel will remotely read the meter(s) on the cycle as defined by rate schedules or policy. Additional metering or monitoring may from time to time be required to determine compliance with power quality, and interconnection requirements of the system at the expense of the Cooperative.

# G. Accounting and Billing

Based on the meter readings in Section F above, the Cooperative will monthly prepare a statement showing in necessary detail all net kilowatt-hours delivered by the Cooperative to the Member-generator or delivered from the Membergenerator to the Cooperative.

If the electricity supplied by the Cooperative exceeds the electricity generated by the Member-generator during the billing period, the Member-generator shall be billed for both base and kilowatt hour charges in accordance with applicable OCEC policies.

If the electricity generated by the Member-generator exceeds the electricity supplied by the Cooperative, the Member-generator will be billed the appropriate base charge and credited for the excess kilowatt-hours generated during the billing period, with this kilowatt-hour credit appearing on the bill for the following billing period.

# H. Proof of Licenses and Permits

Prior to executing an agreement providing for interconnection with the Cooperative's system, the Member-generator responsible for the Net Metering System must submit proof to the Cooperative that all licenses, permits or approvals necessary for operation of the Net Metering System have been obtained from applicable federal, state or local authorities. Further, the Member-generator must demonstrate that all features and equipment of the Net Metering System are capable of operating in conformance with the interconnection standards listed in Exhibit 1.

# I. Interruption of Service

The Cooperative may notify the Member-generator of instances when the Cooperative determines that curtailment, interruption, or reduction of deliveries of energy is necessary because of emergencies, forced outages, critical maintenance, operating conditions on its system, or as otherwise required by prudent electrical practices.

# J. Written Agreement

Prior to interconnection of a Net Metering System with the Cooperative system for the purpose of generation, the Cooperative and the Member-generator responsible for the Net Metering System shall enter into a written Net Metering Agreement as provided in Exhibit 3.

## VIII. SURVIVORSHIP:

The invalidity of any one or more phrases, clauses, sentences, paragraphs or provisions of this policy by virtue of state or federal laws shall not affect the remaining portions hereof and all surviving sections of the policy shall remain in full force and effect.

This policy supersedes any existing policy that may be in conflict with the provisions of this policy and does not represent a contract between the parties.

## IX. RESPONSIBILITY:

The General Manager shall have responsibility for implementation of this policy.

ATTESTING:		
Secretary	President	
Date		

Revised April 24, 2023 Revised 08/24/2020 Revised 09/26/2016 Revised 04/24/12 Revised 04/26/11 Established 2008

#### EXHIBIT 1

# GENERAL STANDARDS FOR THE INTERCONNECTION OF NET METERING SYSTEMS

# **Chapter 1 - Purpose and scope.**

- (1) The purpose of this chapter is to establish rules for determining the terms and conditions governing the interconnection of Net Metering Systems with an electrical generating capacity of no more than 100 kilowatts to the electric system of the Cooperative.
- (2) These rules are intended to be consistent with the requirements of chapter 80.60 RCW, Net Metering of electricity and to comply with provisions of the Energy Policy Act of 2005, Pub. L. No. 109-58 (2005) that amended section 111 (d) of the Public Utility Regulatory Policy Act (PURPA) relating to Net Metering (subsection 11) and Interconnection (subsection 15).
- (3) These standards govern the terms and conditions under which the Member-generator's Net Metering System will interconnect with, and operate in parallel with, the Cooperative's electric system. These standards do not govern the settlement, purchase or delivery of any power generated by the Member-generator's Net Metering System.

# **Chapter 2 - Definitions**

- **"Applicant"** means a Cooperative member applying to interconnect a Net Metering System to the Cooperative's electric system pursuant to this chapter.
- "**Application**" means the written notice provided by the applicant to the Cooperative that initiates the interconnection process.
  - "Cooperative" means Okanogan County Electric Cooperative, Inc.
- "Electric system" means all electrical wires, equipment, and other facilities owned or provided by the Cooperative that are used to transmit electricity to its members.
  - "Generating facility" see Net Metering System.
- "**Initial operation**" means the first time the Net Metering System is in Parallel operation with the Electric system.
- "In-service date" means the date on which the Net Metering System is complete and ready for service, even if the Net Metering System is not placed in service on or by that date.
- "Interconnection" means the physical connection of the Net Metering System to the Electric system so that Parallel operation may occur.
- "Interconnection facilities" means the electrical wires, switches and other equipment used to interconnect Net Metering System to the Electric system.
- "Maximum generating capacity" means the maximum amount of energy that the Net Metering System is capable of producing on an instantaneous basis.
- "Member-generator" means a member of the Cooperative and is the user of the Net Metering System.
- "Net Metering" means measuring the difference between the electricity supplied by the Cooperative and the electricity generated by a Member-generator's net metering system over the applicable billing period.
- "Net Metering System" 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:
  - a. Uses either water, wind, solar energy, or biogas from animal waste as a fuel;

- b. Has an electrical generating capacity of not more than one hundred kilowatts;
- c. Is located on the Member-generator's premises and for which the Cooperative has, at the time of application as Member-generator, an active account in the Member-generator's name;
- d. Operates in parallel with the Cooperative's transmission and distribution facilities and is connected to the Cooperative's distribution system; and
- e. Is intended primarily to offset part or all of the Member-generator's requirements for electricity.

"Parallel operation" or "operate in parallel" means the synchronous operation of the Net Metering System while interconnected with the Electric system.

"Point of common coupling" or "PCC" means the point where the Net Metering System connects to the Electric 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 Net Metering System and Electric system.

# **Chapter 3 Technical Standards for Interconnection.**

The technical standards listed in this section shall apply to all Net Metering Systems to be interconnected to the Cooperative within the size range indicated.

# (1) General interconnection requirements.

- (a) Any Net Metering System desiring to interconnect with the Electric 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.
- (b) Any Net Metering System desiring to interconnect must comply with all requirements from Table 1.
- (c) Any Net Metering System with a capacity greater than 50 kW shall require a three-phase interconnection.
- (d) The specifications and requirements in this section are intended to mitigate possible adverse impacts caused by the Net Metering System on Cooperative equipment and personnel and on other members of the Cooperative. They are not intended to address protection of the Net Metering System itself, Net Metering System operating personnel, or its internal load. It is the responsibility of the Member-generator to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect its own facilities, personnel, and loads.

Table 1. 100 kW or Smaller.

	Singl	e-Phase	Three	e-Phase
	*Capacity			
<u>Feature</u>	≤ 50 kW Inverter based	≤ 50 kW Non- inverter based	≤ 100 kW Inverter based	≤ 100 kW Non- inverter based
IEEE 1547 compliant	$\sqrt{}$	V	V	$\sqrt{}$
UL 1741 listed	$\sqrt{}$		$\checkmark$	
Interrupting devices (capable of interrupting maximum available fault current)	√[8]	<b>V</b>	√[8]	√
Interconnection disconnect device (manual, lockable, visible, accessible)	[1]	V	V	V
System Protection		√[3][4][6]		√ [3][4][5][6]
Over-voltage trip	√ [8]	$\sqrt{}$	√[8]	V
Under-voltage trip	√ [8]	$\sqrt{}$	√[8]	V
Over/Under frequency trip	√ [8]	V	√[8]	V
Automatic synchronizing check		$\sqrt{}$		V
Ground over-voltage or over-current trip for Cooperative system faults.				√[2]
Power factor		√[7]		√[7]

# Notes:

- [1] Cooperative may choose to waive this requirement
- [2] May be required by Cooperative; selection based on grounding system
- [3] No single point of failure shall lead to loss of protection.

 $<sup>\</sup>sqrt{-\text{Required feature (blank} = \text{not required)}}$ 

<sup>\*</sup> Capacity of single or aggregate generation

- [4] All protective devices shall fully meet the requirements of ANSI C37.90
- [5] Cooperative will specify the transformer connection.
- [6] It is the Members' responsibility to ensure that their system is effectively grounded as defined by IEEE Std. 142 at the point of common coupling .
- [7] Variance may be allowed based upon specific requirements per Cooperative review. Charges may be incurred for losses.
- [8] UL 1741 listed equipment provides required protection.
- (e) The specifications and requirements in this section shall apply generally to the Net Metering System (equipment not owned by the Cooperative) to which this standard and agreement(s) apply throughout the period encompassing the generator's installation, testing and commissioning, operation, maintenance, decommissioning and removal of said equipment. The Cooperative may verify compliance at any time, with reasonable notice.
- (f) The Member-generator shall comply with the requirements in (f)(i), (ii) and (iii) of this subsection. However, at its sole discretion, the Cooperative may approve alternatives that satisfy the intent of, and/or may excuse compliance with, any specific elements of these requirements except local, state and federal building codes.
- (i) **Code and standards.** Applicant 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 Member-generator shall be responsible to obtain all applicable permit(s) for the equipment installations on its property.
- (ii) **Safety**. All safety and operating procedures for joint use equipment shall be in compliance with the Occupational Safety and Health Administration (OSHA) Standard at 29 CFR 1910.269, the NEC, Washington Administrative Code (WAC) rules, the Washington Division of Occupational Safety and Health (DOSH) Standard, and equipment manufacturer's safety and operating manuals.
- (iii) **Power quality**. Installations will be in compliance with all applicable standards including IEEE Standard 519-1992 Harmonic Limits.

# (2) Specific interconnection requirements.

- (a) Applicant shall furnish and install on applicant's side of the meter, a UL-approved safety disconnect switch which shall be capable of fully disconnecting the Net Metering System from the Electric system. The disconnect switch shall be located adjacent to Cooperative 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 Cooperative personnel at all times.
  - (b) The requirement in (a) of this subsection may be waived by the Cooperative if:
- (i) Applicant provides interconnection equipment that applicant can demonstrate, to the satisfaction of Cooperative, performs physical disconnection of the generating equipment supply internally; and
- (ii) Applicant agrees that its service may be disconnected entirely if generating equipment must be physically disconnected for any reason
  - (c) The Cooperative shall have the right to disconnect the Net Metering System at the

disconnect switch under the following circumstances: When necessary to maintain safe electrical operating conditions; if the Net Metering System does not meet required standards; or if the Net Metering System at any time adversely affects or endangers any person, the property of any person, the Cooperative's operation of its Electric system or the quality of Cooperative's service to other members.

(d) Nominal voltage and phase configuration of the Net Metering System must be compatible to the Cooperative Electric system at the Point of common coupling.

# (3) Specifications applicable to all inverter-based interconnections.

Any inverter-based Net Metering System desiring to interconnect with the Cooperative's Electric system or modify an existing interconnection must meet the technical specifications, as set forth below. A more recent approved version may supersede specifications on the list below.

- (a) IEEE Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, for systems 10 MVa or less.
- (b) UL Standard 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems. Equipment must be UL listed.
- (c) IEEE Standard 929, IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems.

# (4) Requirements applicable to all noninverter-based interconnections.

Noninverter-based interconnection requests require compliance with applicable technical specifications, in their most current approved version, including:

- (a) IEEE Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, for systems 10 MVa or less.
- (b) ANSI Standard C37.90, IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus.

## **Chapter 4** Application for Interconnection

- (1) When an Applicant requests interconnection from the Cooperative, the Applicant shall be responsible for conforming to the rules and regulations that are in effect and on file with the Cooperative. The Cooperative will designate a point of contact for this specific purpose. The applicant seeking to interconnect a Net Metering System under these rules must fill out and submit a signed application form to the Cooperative. Information must be accurate, complete, and approved by the Cooperative prior to installing the Net Metering System.
- (2) **Application fees**. The Cooperative charges a non-refundable Net Metering Application Fee of \$100.
- (3) **Non-Discrimination**. All Net Metering applications will be processed by the Cooperative in a first-come first-served manner.
- (4) **Application evaluation**. All Net Metering applications will be reviewed by the Cooperative for compliance with the rules of this policy. If the Cooperative in its sole discretion finds that the application does not comply with this policy, the Cooperative may reject the application. If the Cooperative rejects the application, it shall provide the applicant with written notification stating its reasons for rejecting the application.
- (5) Once an application is accepted by the Cooperative as complete, the Cooperative shall determine if any additional engineering, safety, reliability or other studies are required.

# **Chapter 5 General Terms and Conditions of Interconnection**

The general terms and conditions listed in this section shall apply to all Net Metering Systems interconnecting to the Cooperative under this chapter.

- (1) Any Net Metering System must comply with these rules to be eligible to interconnect and operate in parallel with the Cooperative's Electric system. These standards shall apply to all Net Metering Systems that are intended to operate in parallel with the Cooperative's Electric system.
- (2) In order to ensure system safety and reliability of interconnected operations, all Net Metering Systems shall be constructed and operated by the Member-generator in accordance with these standards and all other applicable federal, state, and local laws and regulations.
- (3) Prior to Initial Operation, all Member-generators must submit a completed electrical inspection permit to the Cooperative, execute an appropriate Interconnection & Net Metering Agreement and any other agreement(s) required for the disposition of the Net Metering System's electric power output. The Interconnection & Net Metering Agreement between the Cooperative and Member-generator outlines the interconnection standards, cost allocation and billing agreements, and on-going maintenance and operation requirements.
- (4) Applicant shall promptly furnish the Cooperative with copies of such plans, specifications, records, and other information relating to the Net Metering System and the ownership, operation, use, or maintenance of the Net Metering System, as may be reasonably requested by the Cooperative from time to time.
- (5) Net metering for fuel cells, facilities that produce electricity and used and useful thermal energy from a common fuel source, or facilities that use water, wind, solar energy, or biogas from animal waste as a fuel as set forth in chapter 80.60 RCW: The Cooperative 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 Cooperative shall specify. The applicant shall provide space for metering equipment. It will be the applicant's responsibility to provide the current transformer enclosure (if required), meter socket(s) and junction box after the applicant has submitted drawings and equipment specifications for Cooperative approval. The Cooperative may approve other generating sources for net metering but is not required to do so.
- (6) Common labeling furnished or approved by the Cooperative and in accordance with NEC requirements must be posted on meter base, disconnects, and transformers informing working personnel that generation is operating at or is located on the premises.
- (7) No additional insurance will be necessary for a Net Metering System that is a qualifying generating facility under chapter 80.60 RCW.
- (8) Prior to any future modification or expansion of a Net Metering System, the Membergenerator will obtain Cooperative review and approval. The Cooperative reserves the right to require the Member-generator to provide corrections or additions to existing electrical devices in the event of modification of government or industry regulations and standards.
  - (9) Reserved.
- (10) It is the responsibility of the Member-generator to protect its facilities, loads and equipment and comply with the requirements of all appropriate standards, codes, statutes and authorities.
  - (11) Member-generator may disconnect the Net Metering System at any time; provided

that the Member-generator provides reasonable advance notice to the Cooperative.

(12) Member-generator shall notify the Cooperative in writing at least twenty (20) days prior to the sale or transfer of the Net Metering Systems, or the premises upon which the Net Metering System is located. The Member-generator shall not assign its rights or obligations under any agreement entered into pursuant to these rules without the prior written consent of Cooperative, which consent shall not be unreasonably withheld.

# <u>Chapter 6 – Electrical Inspection.</u>

All Net Metering Systems must obtain an electrical permit and pass electrical inspection before they can be connected or operated in parallel with the Cooperative's Electric system. Member-generator shall provide to Cooperative written certification that the Net Metering System has been installed and inspected in compliance with the local building and/or electrical codes.

# **Chapter 7 - Adoption by Reference.**

In this chapter, the Cooperative adopts by reference all or portions of regulations and standards identified below. They are available for inspection at the Cooperative's office or as otherwise indicated. The publications, effective date, references within this chapter, and availability of the resources are as follows:

- (1) The National Electrical Code is published by the National Fire Protection Association (NFPA). The National Electrical Code is a copyrighted document. Copies are available from the NFPA at 1 Batterymarch Park, Quincy, Massachusetts, 02169 or at internet address http://www.nfpa.org.
- (2) National Electric Safety Code (NESC). Copies of the National Electric Safety Code are available from the Institute of Electrical and Electronics Engineers at http://standards.ieee.org/nesc.
- (3) Institute of Electrical and Electronics Engineers (IEEE) Standard 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems. Copies of IEEE Standard 1547 are available from the Institute of Electrical and Electronics Engineers at http://www.ieee.org/web/standards/home.
- (4) Institute of Electrical and Electronics Engineers (IEEE) Standard 929, Recommended Practice for Utility Interface of Photovoltaic (PV) Systems. Copies of IEEE Standard 929 are available from the Institute of Electrical and Electronics Engineers at http://www.ieee.org/web/standards/home.
- (5) American National Standards Institute (ANSI) Standard C37.90, IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus. Copies of IEEE Standard C37.90 are available from the Institute of Electrical and Electronics Engineers at http://www.ieee.org/web/standards/home.
- (6) Institute of Electrical and Electronics Engineers (IEEE) Standard 519, Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems. Copies of IEEE Standard 519 are available from the Institute of Electrical and Electronics Engineers at http://www.ieee.org/web/standards/home.
- (7) Underwriters Laboratories (UL), including UL Standard 1741, Inverters, Converters, and Controllers for Use in Independent Power Systems. UL Standard 1741 is available from Underwriters Laboratory at http://www.ul.com.
  - (8) Occupational Safety and Health Administration (OSHA) Standard at 29 CFR 1910.269.

Copies of Title 29 Code of Federal Regulations are available from the U.S. Government Online Bookstore, http://bookstore.gpo.gov/, and from various third-party vendors.

(9) Washington Division of Occupational Safety and Health (DOSH) Standard, chapter 296-155 WAC. The DOSH Standard is available from the Washington Department of Labor and Industries at P.O. Box 44000, Olympia, WA 98504-4000, or at internet address <a href="http://www.lni.wa.gov">http://www.lni.wa.gov</a>.

# **EXHIBIT 2**

OCEC Net Metering Application
For Installation of Member-Owned, Grid Connected Net Metering Systems of 100kW or Less

A. Applicant Information
Name:
Account No. TWACS Serial. #
Mailing Address:
Installation Address (if different from above):
Daytime Phone: Email:
B. System Information
1. Type of system: ☐ Solar PV Array ☐ Fuel Cell ☐ Wind ☐ Other (please describe below)
2. Location of system on property:
3. System description. Include components, manufacturer(s) and where they are made; how the system will be configured, the output voltage and frequency, and the manufacturer and model of the synchronous inverter/generator that will be used. Attach technical specifications if you have them.

# Okanogan County Electric Cooperative, Inc

C. System Designer & Installer (if applicable)	
1. Design Consultant:	
Address:	Zip Code:
Phone:	Fax:
2. Installation Contractor:	Contractor's License No.
Address:	Zip Code:
Phone:	Fax:
D. Installation	
1. Proposed installation date:	
2. Submit/Attach a one-line electrical diagram of Cooperative's Electric system and the Net Meter	for proposed Net Metering System, including metering points in relation to the ring System location.
E. Interconnection Compliance & Owner Ack	knowledgement
The Net Metering System referenced ab Interconnection of Net Metering System	ove shall meet the Cooperative's "General Standards for as"
easements, licenses and permits, or exer	nsible for obtaining and complying with any and all necessary apptions, as may be required by any federal, state, local statutes, andates, including policy requirements of the Cooperative.

- The Member-generator shall submit documentation to the Cooperative that verifies the Net Metering System has been inspected and approved by the local permitting agency regarding electrical code requirements.
- Member-generator shall <u>not</u> commence parallel operation of the Net Metering System until written approval of the interconnection has been given by the Cooperative.
- This Application Form shall be Appendix A to the Cooperative's "Interconnection & Net Metering Agreement."
- The Cooperative may require additional information in order to process this application.

Signature of Applicant:	 		
Date:			

# EXHIBIT 3 Interconnection & Net Metering Agreement

For Member-Owned, Grid Connected, Net Metering Systems of 100kW or Less

This INTERCONNECTION &	& NET METERING AG	REEMENT ("Agreement"	) is between
and Okanogan County Electri Cooperative may be referred t		. ,	C
Member-generator N     Member-generator's N     System and details on agreement as Appendix	et Metering Application the electrical generation	on, including the locationg unit(s), is hereby incor	
System Location/Address:			
System Manufacturer:			
Model (Name and Number	·):		
Name Plate Electrical Cap	acity (AC):		
Name Plate Date: phase)	kW	Volts	(Single or three
Energy Source:			

- 1.2. Member-generator has elected (in accordance with RCW 80.60) to operate, at their own expense, a Net Metering system using a fuel cell, a facility that produces electricity and used and useful thermal energy from a common fuel source, or a facility for production of electrical energy that generates renewable energy, with an electrical generating capacity of not more than one hundred kilowatts aggregated at the service interconnection point, in parallel with the Cooperative's electrical system. This Net Metering System is intended to offset either part or all of the Member-generator's electrical requirements.
- 1.3. A separate agreement shall be entered into for each Net Metering System at each electrical service location of the Member-generator.
- 1.4. The Net Metering System used by the Member-generator shall be located on the Member-generator's premises. It shall include all equipment necessary to meet applicable safety, power quality, and interconnection requirements established by the latest revisions of National Electrical Code, National Electrical Safety Code, the Institute of Electrical and Electronics Engineers, Underwriters Laboratories, and the Cooperative's General Standards for Interconnection of Net Metering Systems as set forth in Appendix B, which is attached hereto and incorporated herein, and any other applicable Cooperative policies.

1.5. The Cooperative shall have the sole authority to determine interconnection requirements set forth herein or (including appendices) are applicable to Member-generator's proposed installation.

## TERMS OF NET METERING BILLING AND ENERGY CREDITING

- 2.1. The Cooperative shall measure the net electricity produced and consumed by the Member-generator at each premise which has incorporated a Net Metering System, during each billing period, in accordance with the Cooperative's metering practices.
- 2.2. If the electricity supplied by the Cooperative exceeds the electricity generated by the Membergenerator, then the Member-generator shall be billed for the net electricity supplied by the Cooperative, at the rate and with the same charge(s) paid by other members of the Cooperative in the same rate class as the Member-generator.
- 2.3. If the electricity generated by the Member-generator exceeds consumption during the billing period, then the Member-generator: (i) shall be billed for all appropriate charge(s) as are applied to other members of the Cooperative in the same rate class; and shall be credited for the net excess kilowatthours generated during the billing period, with this kilowatt-hour credit appearing on the Membergenerator's bill for the following billing period; (ii) agrees that on March 31st of each year any and all of the kWh energy credit(s) remaining on its account from the previous twelve month period shall be set to zero. All credits shall be energy (kilowatt-hour) credits, not monetary credits.

- 3. INTERRUPTION OR REDUCTION OF DELIVERIES
  3.1. The Cooperative may require 41. 37 The Cooperative may require the Member-generator to interrupt or reduce deliveries as follows: (a) when necessary in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any of its equipment or part of its system; or (b) if the Cooperative determines that curtailment, interruption, or reduction is necessary because of emergencies, or compliance with prudent electrical practices as determined by the Cooperative.
- 3.2. Notwithstanding any other provision of this Agreement, if at any time the Cooperative determines that either (a) the Net Metering System may endanger Cooperative personnel, or (b) the continued operation of the Net Metering System may endanger the integrity of the Cooperative's Electric system, the Cooperative shall have the right to disconnect the Net Metering System from the Cooperative's Electric system. Net Metering System shall remain disconnected until such time as the Cooperative is satisfied that the condition(s) that caused the problems referenced in (a) or (b) of this section 3.2 have been corrected.
- The Cooperative shall have no liability to the Member-generator or any other persons for any interruption, suspension, curtailment or fluctuation in service or for any loss or damage caused thereby due to a shutdown, interruption or reduction described in Sections 3.1 or 3.2, or for causes beyond the Cooperative's reasonable control, including those described in Section 8. Furthermore, the Cooperative shall not be liable for any special, indirect, incidental, punitive, or consequential damages arising from the operation, replacement, maintenance or repair of the Cooperative-owned or Member-generator owned electric facilities, including, without limitation, Member-generator's loss of actual or anticipated profits or revenue, loss by reason of shutdown, non-operation, or increased expense of its facilities or operations, cost of capital, or claims of third parties.

# 4. INTERCONNECTION

- Member-generator shall comply with the Cooperative's General Standards for the Interconnection of Net Metering Systems as set forth in Appendix B which is attached and shall pay for designing, installing, inspecting, operating, and maintaining the Net Metering System in accordance with all applicable laws, regulations, and Cooperative's policies.
- 4.2. Metering of kilowatt-hours at the Net Metering System shall be provided by a standard kilowatt-

hour meter capable of registering the flow of electricity in two directions or by multiple meters capable of registering flow of electricity in each direction. The cost of purchasing and installing an additional meter will be the responsibility of the Member-generator.

- 4.3. Member-generator shall not commence parallel operation of the Net Metering System until written approval of the interconnection has been given by the Cooperative. Such approval shall not be unreasonably withheld. The Cooperative shall have the right to have representatives present at the initial testing of Net Metering System's protective apparatus, and the Member-generator shall notify the Cooperative of its intent to test the Net Metering System not less than two (2) business days prior to the scheduled test.
- 4.4. Once in operation, the Member-generator shall make no changes or modifications in the equipment, wiring, or the mode of operation without the prior approval of the Cooperative.

# 5. MAINTENANCE AND PERMITS

Member-generator shall (i) maintain the Net Metering System in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, the Cooperative's General Standards for the Interconnection of Net Metering; (ii) obtain any governmental authorizations and permits required for the construction and operation of the Net Metering System, including electrical permit; (iii) reimburse the Cooperative for any and all losses, damages, claims, penalties, or liability it incurs as a result of Member-generator's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of the Net Metering System or failure to maintain Net Metering System as required in this Section. The Net Metering System shall also be subject to other applicable policies of the Cooperative as may from time to time be approved or modified by the Board of Directors.`

## 6. ACCESS TO PREMISES

The Cooperative may enter the Member-generator's premises or property (i) to inspect with prior notice at all reasonable hours the Member-generator's protective devices and to read meter; and (ii) to disconnect the Net Metering System at the Cooperative's meter or transformer, without notice, if, in the Cooperative's opinion, a hazardous condition exists and such immediate action is necessary to protect persons, or the Cooperative's facilities, or property of others from damage or interference caused by the Net Metering System, or lack of properly operating protective devices or inability to inspect the same.

## 7. **INDEMNITY AND LIABILITY**

The Member-generator hereby indemnifies and agrees to defend, hold harmless and release the Cooperative and its elected officials, officers, employees and agents and each of the heirs, personal representatives, successors and assigns of any of the foregoing (collectively, the "Indemnitees") from and against any and all losses, claims, damages, costs, demands, fines, judgments, penalties, obligations, payments and liabilities, together with any costs and expenses (including without limitation attorneys' fees and out-of-pocket expenses and investigation expenses) incurred in connection with any of the foregoing, resulting from, relating to or arising out of or in connection with: (i) any failure or abnormality in the operation the Member-generator's Net Metering System or any related equipment; (ii) any failure of the Member-generator to comply with the standards, specifications, or requirements referenced in this Agreement (including appendices hereto) which results in abnormal voltages or voltage fluctuations, abnormal changes in the harmonic content of the generating facility output, single phasing, or any other abnormality related to the quantity or quality of the power produced by the generating facility; (iii) any failure of the Member-generator duly to perform or observe any term, provision, covenant, agreement or condition hereunder to be performed or by or on behalf of the Member-generator or (iv) any negligence or intentional misconduct of Member-generator related to operation of the Net Metering System or any associated equipment or wiring.

#### 8. FORCE MAJEURE

- 8.1 **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 such 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 (any such cause or condition, a "Force Majeure"), including breach of contract or failure of performance by any person providing services to the Cooperative which the Cooperative intended to use in its performance under this Agreement.
- 8.2 **Notice; Required Efforts to Resume Performance**. Any Party claiming Force Majeure shall give the other Party maximum practicable advance notice of any failure or delay resulting from a Force Majeure, and shall use its reasonable best efforts to overcome the Force Majeure and to resume performance as soon as possible; provided however, that nothing in this Agreement shall be construed to require either Party to settle any labor dispute in which it may be involved.
- 8.3 **No Excuse of Payment Obligations.** Notwithstanding any other provision of this Agreement, in no event shall a Force Majeure excuse a Party's failure or delay to pay any amounts due and owing to the other Party under or pursuant to this Agreement.

# 9. INDEPENDENT CONTRACTORS

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

# 10. ASSIGNMENT; BINDING AGREEMENT

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

#### 11. 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.

## 12. ENTIRE AGREEMENT

This Agreement and the Exhibits and Appendices 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.

#### 13. GOVERNING LAW; VENUE

This Agreement shall be governed by and construed in accordance with the laws of the State of Washington (regardless of the laws that might otherwise govern under applicable principles of conflicts of law of such state). Venue for any action arising under or in connection with this Agreement shall be in the Superior Court for Okanogan County, Washington, or in the United States District Court for the Eastern District of Washington.

#### 14. RULES OF CONSTRUCTION; STATUTORY REFERENCES

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 thereof or by reason of the extent to which such provision or any other provision or provisions of this Agreement is or are inconsistent with any prior draft thereof. Any reference to statutes or laws will include all amendments, modifications, or replacements of the specific sections and provisions concerned.

## 15. AMENDMENT, MODIFICATIONS OR WAIVER

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.

#### 16. NOTICES AND OTHER COMMUNICATIONS

Notice Methods and Addresses. All notices, requests, demands and other communications 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, using facsimile equipment providing written confirmation of successfully completed transmission to the receiving facsimile number. All notices to either Party shall be made to the addresses set forth below. Any notice shall be deemed to have been given on the date delivered, if delivered personally, by overnight air courier service or by facsimile transmission; or, if mailed, shall be deemed to have been given on the date shown on the return receipt as the date of delivery or the date on which the United States postal service certified that it was unable to deliver, whichever is applicable.

P.O. Box 69 93 W. Chewuch Rd. Winthrop, WA 98869 Phone: (509) 996-2228 Fax: (509) 996-2241 Fax:	Cooperative:	Member-Generator:
93 W. Chewuch Rd. Winthrop, WA 98869 Phone: (509) 996-2228 Fax: (509) 996-2241 Fax:   17. APPENDICES The Agreement includes the following appendices attached and incorporated by reference: Appendix A: Net Metering Application Appendix B: The Cooperative's General Standards for the Interconnection of Net Metering System Appendix C (if applicable): Incentive Payment Addendum  18. TERM OF AGREEMENT This Agreement shall be and remain in effect until terminated by either Party upon thirty (30) days written notice to the other. Notwithstanding the foregoing, the Net Metering System or the Member generator may be disconnected from the Cooperative's Electric system at any time if it is considere unsafe or having adverse impact on the existing members.  IN WITNESS WHEREOF the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives.  MEMBER-GENERATOR OCEC  Signature Print name Print name	Okanogan County Electric Cooperative, Inc.	Name:
Winthrop, WA 98869 Phone: (509) 996-2228 Fax: (509) 996-2221 Fax: (509) 996-2241 Fax:	P.O. Box 69	Address:
Phone: (509) 996-2228 Fax: (509) 996-2241 Fax: (509) 996-2241 Fax:	93 W. Chewuch Rd.	
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	Date:	Date: