

WAC 480-108-040 General terms and conditions of interconnection.

(1) The terms, conditions, and technical requirements in this section apply to the interconnection customer and generating facility throughout the generating facility's installation, testing, commissioning, operation, maintenance, decommissioning and removal. The electrical company may verify compliance at any time, with reasonable notice.

(2) Any generating facility proposing to be interconnected with the electric system or any proposed change to a generating facility that requires modification of an existing interconnection agreement must meet all applicable terms, conditions, and technical requirements set forth in this chapter, including the regulations and standards adopted by reference in WAC 480-108-999.

(3) The terms, conditions and technical requirements in this section are intended to mitigate possible adverse impacts caused by the generating facility on electrical company equipment and personnel and on other customers of the electrical company. They are not intended to address protection of the generating facility itself, generating facility personnel, or its internal load. It is the responsibility of the generating facility to comply with the requirements of all appropriate standards, codes, statutes and authorities to protect its own facilities, personnel, and loads.

(4) The interconnection customer shall comply with and must ensure its generating facility meets the requirements in (a), (b), and (c) of this subsection. However, at its sole discretion, the electrical company may approve, in writing, alternatives that satisfy the intent of, or waive compliance with, any specific elements of these requirements except local, state and federal building codes.

(a) **Codes and standards.** These include 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 interconnection customer shall be responsible for obtaining all applicable permit(s) for the equipment installations on its 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 at 29 C.F.R. 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.

(c) **Power quality.** Installations will be in compliance with all applicable standards including IEEE standard 519 Harmonic Limits, or more stringent harmonic requirements of the electrical company that have been approved by the commission.

(5) Any electrical generating facility must comply with this chapter to be eligible to interconnect and operate in parallel with the electric system. These specifications and standards shall apply to all interconnecting generating facilities that are intended to operate in parallel with the electric system regardless of whether the interconnection customer intends to generate energy to serve all or a part of the interconnection customer's load; or to sell the output to the electrical company or any third party purchaser.

(6) In order to ensure system safety and reliability of interconnected operations, all interconnected generating facilities shall be constructed, operated and maintained by the interconnection customer in accordance with these rules, with the interconnection agreement, with the applicable manufacturer's recommended maintenance schedule

and operating requirements, good electric company practice, and all other applicable federal, state, and local laws and regulations.

(7) This section does not govern the settlement, purchase, sale, transmission or delivery of any power generated by interconnection customer's generating facility. The purchase, sale or delivery of power, including net metered electricity pursuant to chapter 80.60 RCW, and other services that the interconnection customer may require will be covered by separate agreement or pursuant to the terms, conditions and rates as may be from time to time approved by the commission. Separate agreements may be required with the electrical company, the balancing area authority or transmission provider, or other party but not necessarily with the electrical company. Any such agreement shall be complete prior to initial operation.

(8) An interconnection customer shall promptly furnish the electrical company with copies of such plans, specifications, records, and other information relating to the generating facility or the ownership, operation, use, or maintenance of the generating facility, as may be reasonably requested by the electrical company from time to time.

(9) **Disconnection.**

(a) **Electrical company's right to disconnect.**

(i) An electrical company may disconnect a generating facility as described in this subsection. The electrical company shall provide reasonable advance notice to an interconnection customer before any scheduled disconnection, or reasonable notice after an unscheduled disconnection.

(ii) **Unapproved interconnection.** For the purposes of public and working personnel safety, any unapproved generating facility will be immediately disconnected from the electric system. Such disconnection of unapproved interconnections may result in disconnection of electric service to customers of the electrical company other than the owner of the generating facility.

(iii) **Unapproved operation.** If a generating facility does not operate in a manner consistent with this chapter or an approved tariff, the electrical company may disconnect the generating facility.

(iv) **Temporary disconnection.** To maintain electrical company operating and personnel safety the electrical company has the right to temporarily disconnect electric service to the interconnection customer if the generating facility must be physically disconnected for any reason. The disconnection of the generating facility (due to an emergency or maintenance or other condition on the electric system) will result in loss of electrical service to the customer's facility or residence for the duration of time that work is actively in progress. If no disconnect switch is present, the duration of such an outage may be longer than it would be with the switch.

(b) **Interconnection customer's right to disconnect.** The interconnection customer may disconnect the generating facility at any time, provided that the interconnection customer provides reasonable advance notice to the electrical company.

(10) To ensure reliable service to all electrical company customers and to minimize possible problems for other customers, the electrical company may review the need for upgrades to its system, including a dedicated transformer. If the electrical company notifies the interconnection customer that upgrades are required before or at the time of application approval, the interconnection customer shall pay for all costs of those upgrades, except where inconsistent with these rules.

(11) The electrical company may require, and if it so requires will provide its reasoning in writing, a transfer trip system or an equivalent protective function for a generating facility, that cannot: Detect distribution system faults (both line-to-line and line-to-ground) and clear such faults within time and operating parameters found in IEEE 1547 Tables 1 and 2; or detect the formation of an unintended island and cease to energize the electric system within two seconds.

(12) **Metering.**

(a) **Net metering.** The electrical company shall install, own, and maintain a kilowatt-hour meter or meters capable of registering the bi-directional flow of electricity at the point of common coupling. The meters shall meet or exceed all applicable accuracy standards. The meter may measure parameters including the time of delivery, power factor, and voltage. The interconnection customer shall provide space for metering equipment. The interconnection customer must provide the current transformer enclosure (if required), meter socket(s) and junction box after the electrical company approves the interconnection customer's drawings and equipment specifications.

(b) **Production metering.** The electrical company may require separate metering for production. This meter will record all generation produced and may be billed separately from any net metering or customer usage metering. All costs associated with the installation of production metering will be paid by the interconnection customer.

(13) **Labeling.** The interconnection customer must post common labeling, furnished or approved by the electrical company and in accordance with NEC requirements, on the meter base, disconnects, and transformers informing working personnel that a generating facility is operating at or is located on the premises.

(14) **Insurance.** No additional insurance is necessary for a generating facility with a nameplate capacity under 100 kW.

(15) **Future modification.** An interconnection customer must obtain electrical company approval before any future modification or expansion of a generating facility. The electrical company may require the interconnection customer, at the interconnection customer's expense, to provide corrections or additions to existing electrical devices in the event of modification of government or industry regulations and standards, or major changes in the electric system which impacts the interconnection.

(16) Chapter 80.60 RCW limits the total capacity of generation for net metering. However, the electrical company may restrict or prohibit new or expanded net metered systems on any feeder, circuit or network if engineering, safety, or reliability studies establish the need for a restriction or prohibition.

(17) **Cost allocation.** Charges by the electrical company to the interconnection customer in addition to the application fee, if any, will be compensatory and applied as appropriate. Such costs may include, but are not limited to, transformers, production meters, and electrical company testing, qualification, studies and approval of non-UL 1741 listed equipment. The interconnection customer shall be responsible for any costs associated with any future upgrade or modification to its interconnected system required by modifications in the electric system.

(18) **Sale and assignment.** The interconnection customer shall notify the electrical company prior to the sale or transfer of the generating facility, the interconnection facilities or the premises upon which the facilities are located. The interconnection customer shall

not assign its rights or obligations under any agreement entered into pursuant to these rules without the prior written consent of electrical company; such consent shall not be unreasonably withheld.

(19) If the interconnection customer is a different entity than the owner of the real property on which the generating facility is located, the interconnection customer shall indemnify the electrical company for all risks to the owner of the real property, including disconnection of service. In addition, the interconnection customer shall obtain all legal rights and easements requested by the electrical company for the electrical company to access, install, own, maintain, operate or remove its equipment and the disconnect switch, if installed, on the real property where the generating facility is located, at no cost to the electrical company.

(20) **Inverters.** If an inverter is utilized, the inverter must be certified by an independent, nationally recognized testing laboratory to meet the requirements of UL 1741. Inverters certified to meet the requirements of UL 1741 must use undervoltage, overvoltage, and over/under frequency elements to detect loss of electrical company power and initiate shutdown.

[Statutory Authority: RCW 80.01.040 and 80.04.160. WSR 13-15-089 (Docket UE-112133, General Order R-571), § 480-108-040, filed 7/18/13, effective 8/18/13; WSR 07-20-059 (Docket UE-060649, General Order 545), § 480-108-040, filed 9/27/07, effective 10/28/07; WSR 06-07-017 (Docket No. UE-051106, General Order No. R-528), § 480-108-040, filed 3/6/06, effective 4/6/06.]