

199—45.1(476) Definitions. Terms defined in the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 U.S.C. 2601 et seq., in effect as of July 16, 2025, will have the same meaning for purposes of these rules as the terms have under PURPA unless further defined in this chapter.

“Adverse system impact” means a negative effect that compromises the safety or reliability of the electric distribution system or materially affects the quality of electric service provided by the utility to other customers.

“AEP facility” means an AEP facility, as defined in 199—Chapter 15, used by an interconnection customer to generate electricity that operates in parallel with the electric distribution system. An AEP facility typically includes an electric generator and the interconnection equipment required to interconnect safely with the electric distribution system or local electric power system.

“Affected system” means an electric system not owned or operated by the utility reviewing the interconnection request that could suffer an adverse system impact from the proposed interconnection.

“Applicant” means a person (or entity) who has submitted an interconnection request to interconnect a distributed generation facility to a utility’s electric distribution system.

“Area network” means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit, generally used in large, densely populated metropolitan areas.

“Certificate of Completion” means the Certificate of Completion form that contains information about the interconnection equipment to be used, its installation, and local inspections.

“CFR” means the Code of Federal Regulations, which contains the general administrative rules adopted by federal departments and agencies, in effect as of July 16, 2025, unless a separate effective date is identified in a specific rule.

“Commissioning test” means a test applied to a distributed generation facility by the applicant after construction is completed to verify that the facility does not create adverse system impacts and performs to the submitted specifications. At a minimum, the scope of the commissioning tests performed will include the commissioning test specified in Institute of Electrical and Electronics Engineers Inc. (IEEE) Standard 1547, Section 11 “Test and Verification Requirements.”

“Distributed generation facility” means a qualifying facility, an AEP facility, or an energy storage facility.

“Distribution upgrade” means a required addition or modification to the electric distribution system to accommodate the interconnection of the distributed generation facility. Distribution upgrades do not include interconnection facilities.

“Electric distribution system” means the facilities and equipment owned and operated by the utility and used to transmit electricity to ultimate usage points, such as homes and industries, from interchanges with higher voltage transmission networks that transport bulk power over longer distances. The voltage levels at which electric distribution systems operate differ among areas but generally operate at less than 100 kilovolts of electricity. “Electric distribution system” has the same meaning as the term “Area EPS,” as defined in Section 3.1 of IEEE Standard 1547.

“Fault current” is the electrical current that flows through a circuit during an electrical fault condition. A fault condition occurs when one or more electrical conductors contact ground or each other. Types of faults include phase to ground, double-phase to ground, three-phase to ground, phase-to-phase, and three-phase. Often, a fault current is several times larger in magnitude than the current that normally flows through a circuit.

“IEEE Standard 1547” is the IEEE, 3 Park Avenue, New York, NY 10016-5997, Standard 1547 (2018), as amended on March 9, 2020, “Standard for Interconnection and Interoperability of Distributed Energy Resources and Associated Electric Power System Interfaces.”

“IEEE Standard 1547.1” is the IEEE Standard 1547.1 (2005) “Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems.”

“Interconnection equipment” means a group of components or an integrated system owned and operated by the interconnection customer that connects an electric generator with a local electric power system, as that term is defined in Section 3.1 of IEEE Standard 1547, or with the electric distribution system. Interconnection equipment is all interface equipment, including switchgear, protective devices,

inverters, or other interface devices. Interconnection equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.

“Interconnection facilities” means facilities and equipment required by the utility to accommodate the interconnection of a distributed generation facility. Collectively, interconnection facilities include all facilities and equipment between the distributed generation facility’s interconnection equipment and the point of interconnection, including any modifications, additions, or upgrades necessary to physically and electrically interconnect the distributed generation facility to the electric distribution system. Interconnection facilities are sole-use facilities and do not include distribution upgrades.

“Interconnection request” means an applicant’s request, in a form approved by the commission, for interconnection of a new distributed generation facility or to change the capacity or other operating characteristics of an existing distributed generation facility already interconnected with the electric distribution system.

“Interconnection study” is any study described in rule 199—45.11(476).

“Lab-certified” means a designation that the interconnection equipment meets the requirements set forth in rule 199—45.6(476).

“Line section” is that portion of an electric distribution system connected to an interconnection customer’s site, bounded by automatic sectionalizing devices or the end of the distribution line, or both.

“Local electric power system” means facilities that deliver electric power to a load that is contained entirely within a single premises or group of premises and has the same meaning as that term as defined in Section 3.1 of IEEE Standard 1547.

“Nameplate capacity” is the maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer and is usually indicated on a nameplate physically attached to the power production equipment.

“Nationally recognized testing laboratory” or *“NRTL”* means a qualified private organization that meets the requirements of the Occupational Safety and Health Administration’s (OSHA’s) regulations. More information is contained in 29 CFR 1910.7 as amended through February 18, 2020. NRTLs perform independent safety testing and product certification.

“Parallel operation” or *“parallel”* means a distributed generation facility that is connected electrically to the electric distribution system for longer than 100 milliseconds continuously.

“Point of interconnection” has the same meaning as the term “point of common coupling” as defined in Section 3.1 of IEEE Standard 1547.

“Primary line” means an electric distribution system line operating at greater than 600 volts.

“Qualifying facility” means a cogeneration facility or a small power production facility that is a qualifying facility under 18 CFR Part 292, Subpart B, used by an interconnection customer to generate electricity that operates in parallel with the electric distribution system.

“Radial distribution circuit” means a circuit configuration in which independent feeders branch out radially from a common source of supply.

“Review order position” means, for each distribution circuit or line section, the order of a completed interconnection request relative to all other pending completed interconnection requests on that distribution circuit or line section. The review order position is established by the date that the utility receives the completed interconnection request.

“Scoping meeting” means a meeting between representatives of the applicant and utility conducted for the purpose of discussing interconnection issues and exchanging relevant information.

“Secondary line” means an electric distribution system line, or service line, operating at 600 volts or less.

“Shared transformer” means a transformer that supplies secondary voltage to more than one customer.

“Spot network” means a type of electric distribution system that uses two or more inter-tied transformers to supply an electrical network circuit and is generally used to supply power to a single customer or a small group of customers. “Spot network” has the same meaning as the term “spot network” as defined in Section 9 “DER on distribution secondary grid/area/street (grid) networks and spot networks” of IEEE Standard 1547.

“*UL Standard 1741*” means the standard titled “Inverters, Converters, Controllers, and Interconnection System Equipment for Use with Distributed Energy Resources,” January 28, 2010, edition, Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

“*Utility*” means an electric utility that is subject to rate regulation by the Iowa utilities commission.

“*Witness test*” for lab-certified equipment means a verification either by an on-site observation or review of documents that the interconnection installation evaluation and the commissioning test required by IEEE Standard 1547, Section 11, have been adequately performed. For interconnection equipment that has not been lab-certified, the witness test also includes verification of the on-site design tests and production tests required by IEEE Standard 1547, Section 11. All verified tests are to be performed in accordance with the test procedures specified by IEEE Standard 1547.1.

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