

TITLE 17 PUBLIC UTILITIES AND UTILITY SERVICES
CHAPTER 9 ELECTRIC SERVICES
PART 568 INTERCONNECTION OF GENERATING FACILITIES WITH A RATED CAPACITY UP TO AND INCLUDING 10 MW CONNECTING TO A UTILITY SYSTEM

17.9.568.1 ISSUING AGENCY: New Mexico Public Regulation Commission.
[17.9.568.1 NMAC - N, 10/15/08]

17.9.568.2 SCOPE:

A. This rule, and the definitions, standards, procedures and screening processes described in the New Mexico *interconnection manual*, separately published and incorporated into this rule by reference, apply to every electric utility including rural electric cooperatives and investor-owned utilities operating within the state of New Mexico that is subject to the jurisdiction of the New Mexico public regulation commission. These standards and procedures apply to both qualifying and non-qualifying facilities.

B. The standards and procedures described in this rule (17.9.568 NMAC) and the **manual** apply only to the interconnection of generating facilities with a rated capacity up to and including 10 MW. The standards and procedures described in 17.9.569 NMAC apply to the interconnection of generating facilities with a rated capacity greater than 10 MW.

C. All interconnection contracts between a utility and an interconnection customer existing at the time 17.9.568 NMAC is adopted shall automatically continue in full force and effect. Any changes made to existing interconnection contracts shall conform to the provisions of 17.9.568 NMAC
[17.9.568.2 NMAC - N, 10/15/08]

17.9.568.3 STATUTORY AUTHORITY: This rule is adopted under the authority vested in this commission by the New Mexico Public Regulation Commission Act, NMSA 1978, Section 8-8-1 et seq. and the Public Utility Act, NMSA 1978, Section 62-3-1 et seq.
[17.9.568.3 NMAC - N, 10/15/08]

17.9.568.4 DURATION: Permanent.
[17.9.568.4 NMAC - N, 10/15/08]

17.9.568.5 EFFECTIVE DATE: October 15, 2008, unless a later date is cited at the end of a section
[17.9.568.5 NMAC - N, 10/15/08]

17.9.568.6 OBJECTIVE: The purpose of this rule and the **manual** is to set forth common interconnection requirements and a common interconnection process based on a common screening process for utilities and interconnection customers to expeditiously interconnect generating facilities with a rated capacity up to and including 10 MW in a safe and reliable manner. The parties shall use the procedures and forms set forth in this rule 17.9.568 NMAC and the **manual** for the interconnection of generating facilities with a rated capacity up to and including 10kW. The parties shall use the procedures and forms in this rule 17.9.568 NMAC and the **manual** for the interconnection of generating facilities with a rated capacity greater than 10 kW and up to and including 10 MW unless they mutually agree to other procedures or forms that are consistent with the Public Utility Act.
[17.9.568.6 NMAC - N, 10/15/08]

17.9.568.7 DEFINITIONS: Terms used in this rule 17.9.568 NMAC shall have the following meanings.

A. Business day means Monday through Friday, excluding holidays observed by the utility.

B. Certified equipment package means interconnection equipment that has been tested and listed by a nationally recognized testing and certification laboratory (NRTL) for continuous interactive operation with a utility grid and meets the definition for certification under order 2006, issued by the federal energy regulatory commission on May 12, 2005, in docket no. RM02-12-000. The extent of the equipment package is defined by the type of test performed to certify the package under IEEE 1547.1.

C. Certified inverter means an inverter that has been tested and listed by a nationally recognized testing and certification laboratory (NRTL) for continuous interactive operation with a utility grid and meets the definition for certification under order 2006, issued by the federal energy regulatory commission on May 12, 2005, in docket no. RM02-12-000.

D. Distribution system means the utility's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

E. Distribution upgrade means the additions, modifications, and upgrades to the utility's distribution system at or beyond the point of common coupling to facilitate interconnection of the generating facility and render the service necessary to effect the interconnection customer's operation of on-site generation. Distribution upgrades do not include interconnection facilities.

F. Facilities study means the study that specifies and estimates the cost of the equipment, engineering, procurement, and construction work (including overhead costs) needed to implement the conclusions of the system impact study.

G. Feasibility study means the study that identifies any potential adverse system impacts that would result from the interconnection of the generating facility.

H. Generating facility means the interconnection customer's device for the production of electricity identified in the interconnection application, including all generators, electrical wires, equipment, and other facilities owned or provided by the interconnection customer for the purpose of producing electric power.

I. Grid network means a secondary network system with geographically separated network units where the network-side terminals of the network protectors are interconnected by low-voltage cables that span the distance between sites. The low-voltage cable circuits of grid networks are typically highly meshed and supplied by numerous network units. Grid network is also commonly referred to as area network or street network.

J. Highly seasonal circuit means a circuit with a ratio of annual peak load to the lowest monthly peak load greater than six (6).

K. Impact study means a study that identifies and details the electric system impacts that would result if the proposed generating facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the feasibility study, or to study potential impacts, including but not limited to those identified in the scoping meeting. An impact study shall evaluate the impact of the proposed interconnection on the reliability of the electric system.

L. Interconnection application means the request by an interconnection customer to interconnect a new generating facility, or to increase the capacity or make a material modification to the operating characteristics of an existing generating facility that is interconnected with the utility's system.

M. Interconnection customer means any person that proposes to interconnect its generating facility with the utility's system.

N. Interconnection facilities means the utility's interconnection facilities and the interconnection customer's interconnection facilities. Collectively, interconnection facilities include all facilities and equipment between the generating facility and the point of common coupling, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the generating facility to the utility's system. Interconnection facilities are sole use facilities and shall not include distribution upgrades.

O. Line section means that portion of a utility's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

P. Manual means the New Mexico *interconnection manual* and its exhibits separately published and incorporated into this rule by reference.

Q. Network system means a collection of spot networks, secondary networks, or combinations of such networks on a primary network feeder or primary network feeders that supply them. This may also consist of primary feeders networked ("tied together") to supply connected loads.

R. Network transformer means a transformer designed for use in a vault to feed a variable capacity system of interconnected secondaries.

S. Party means the utility and the interconnection customer separately or in combination.

T. Person, for purposes of this rule, means an individual, firm, partnership, company, rural electric cooperative organized under Laws 1937, Chapter 100 or the rural electric cooperative act, corporation or lessee, trustee or receiver appointed by any court.

U. Point of common coupling means the point where the interconnection facilities connect with the utility's system.

V. Primary network feeder means a feeder that supplies energy to a network system or the combination of a network system and other radial loads. Dedicated primary network feeders are feeders that supply only network transformers for the grid network, the spot network, or both. Non-dedicated primary network feeders, sometimes called combination feeders, are feeders that supply both network transformers and non-network load.

- W.** Power conversion unit (PCU) means an inverter or AC generator, not including the energy source.
- X.** Qualifying facility means a cogeneration facility or a small power production facility which meets the criteria for qualification contained in 18 C.F.R. Section 292.203.
- Y.** Rated capacity means the total AC nameplate rating of the power conversion unit(s) at the point of common coupling.
- Z.** Secondary network system means an AC power distribution system in which customers are served from three-phase, four-wire low-voltage circuits supplied by two or more network transformers whose low-voltage terminals are connected to the low-voltage circuits through network protectors. The secondary network system has two or more high-voltage primary feeders, with each primary feeder typically supplying multiple network transformers, depending on network size and design. The secondary network system includes automatic protective devices intended to isolate faulted primary feeders, network transformers, or low-voltage cable sections while maintaining service to the customers served from the low-voltage circuits.
- AA.** Small utility means a utility that serves less than 50,000 customers.
- BB.** Spot network means a secondary network system consisting of two or more network units at a single site. The low-voltage network side terminals of these network units are connected together with bus or cable. The resulting interconnection structure is commonly referred to as the "paralleling bus" or "collector bus." In spot networks, the paralleling bus does not have low-voltage ties to adjacent or nearby secondary network systems. Such spot networks are sometimes called isolated spot networks to emphasize that there are no low-voltage connections to network units at other sites.
- CC.** Study process means the procedure for evaluating an interconnection application that includes the scoping meeting, feasibility study, impact study, and facilities study.
- DD.** System means the facilities owned, controlled, or operated by the utility that are used to provide electric service under a utility's tariff.
- EE.** System emergency means a condition on a utility system that is likely to result in imminent significant disruption of service to customers or is imminently likely to endanger life or property.
- FF.** Upgrade means the required additions and modifications to the utility's system at or beyond the point of common coupling. Upgrades do not include interconnection facilities.
- GG.** Utility means a utility or public utility as defined in NMSA 62-3-3 (G) serving electric customers subject to the jurisdiction of the commission.
[17.9.568.7 NMAC - N, 10/15/08]

17.9.568.8 APPLICABLE CODES AND STANDARDS:

- A.** The interconnection customer shall install, operate, and maintain the generating facility and the interconnection equipment in a safe manner in accordance with the rules for safety and reliability set forth in the latest editions of the *national electrical code*, other applicable local, state, and federal electrical codes, and prudent electrical practices.
- B.** In order to qualify for any interconnection procedures, each generating facility generator shall be in conformance with the following codes and standards as applicable:
 - (1) IEEE 1547 standard for interconnecting distributed resources with electric power systems or equivalent IEEE 1547.1;
 - (2) IEEE standard conformance test procedures for equipment interconnecting distributed resources with electric power systems or equivalent; and
 - (3) UL 1741 Inverters, converters and controllers for use in independent power systems or equivalent.
- C.** The interconnection equipment package shall be considered certified for interconnected operation if the equipment package has been tested and listed by a nationally recognized testing and certification laboratory (NRTL) for continuous interactive operation with a utility grid and meets the definition for certification under order 2006, issued by the federal energy regulatory commission on May 12, 2005, in docket no. RM02-12-000.
- D.** The generating facility shall be designed to conform with all of the applicable requirements in the **manual**.
[17.9.568.8 NMAC - N, 10/15/08]

17.9.568.9 INTERCONNECTION APPLICATION:

- A.** An interconnection customer shall submit its interconnection application to the utility using **manual** exhibit 1A or 1B as applicable, together with the fees specified in 17.9.568.12 NMAC. The utility shall record the date and time on the face of the interconnection application upon receipt by the utility. The original date and time recorded by the utility on the interconnection application at the time of its original submission shall be

accepted as the date and time on which the interconnection application was received for the purposes of any timetable established in this rule or the **manual**. Following submission of the interconnection application, the parties will follow the procedures and time requirements described in the **manual**.

B. The utility shall place interconnection applications in the order they are received. The order of each interconnection application will be used to determine the cost responsibility for the upgrades necessary to accommodate the interconnection. At the utility's option, interconnection applications may be studied serially or in clusters for the purpose of the system impact study.

[17.9.568.9 NMAC - N, 10/15/08]

17.9.568.10 INTERCONNECTION APPLICATION REVIEW PROCESS: The utility shall utilize the interconnection screening process and the screen criteria described in the **manual**. That screening process results in the application of one of the three general review paths described as follows:

A. simplified interconnection: for certified inverter-based facilities with a power rating of 10 kilowatts (kW) or less on radial or network systems under certain conditions;

B. fast track: for certified generating facilities that pass certain specified screens; or

C. full interconnection study: for generating facilities that have a power rating of 10 megawatts (MW) or less and do not qualify for the screens under the simplified interconnection process or fast track process.

[17.9.568.10 NMAC - N, 10/15/08]

17.9.568.11 INTERCONNECTION APPLICATION REVIEW FLOW CHART AND SCREEN CRITERIA: Utilities shall use the screen criteria described in the **manual** to evaluate all interconnection applications.

[17.9.568.11 NMAC - N, 10/15/08]

17.9.568.12 GENERAL PROVISIONS APPLICABLE TO INTERCONNECTION APPLICATIONS:

A. An interconnection customer shall pay the following application fee to the utility at the time it delivers its interconnection application to the utility:

(1) \$50 if the proposed generating facilities will have a rated capacity less than or equal to 10 kW;

(2) \$100 if the proposed generating facilities will have a rated capacity greater than 10 kW and less than or equal to 100 kW; or

(3) \$100 + \$1 per kW if the proposed generating facilities will have a rated capacity greater than 100 kW.

B. In addition to the fees authorized by this rule, a small utility may collect from the interconnection customer the reasonable costs incurred to obtain necessary expertise from consultants to review interconnection applications for generating facilities with rated capacities greater than 10 kW. A small utility shall provide a good faith estimate of the costs of such consultants to an interconnection customer within ten (10) business days of the date the interconnection application is delivered to the utility.

C. Commissioning tests of the interconnection customer's installed equipment shall be performed pursuant to applicable codes and standards, including IEEE 1547.1 "IEEE standard conformance test procedures for equipment interconnecting distributed resources with electric power systems." A utility must be given at least five (5) business days written notice of the tests, or as otherwise mutually agreed to by the parties, and may be present to witness the commissioning tests. An interconnection customer shall reimburse a utility for its costs associated with witnessing commissioning tests performed pursuant to the **manual** except that a utility may not charge a fee in addition to the application fee for the cost of witnessing commissioning tests for inverter-based generating facilities that have rated capacities that are less than or equal to 25 kW.

D. If an interconnection customer requests an increase in capacity for an existing generating facility, the interconnection application shall be evaluated on the basis of the new total capacity of the generating facility. If an interconnection customer requests interconnection of a generating facility that includes multiple energy production devices at a site for which the interconnection customer seeks a single point of common coupling, the interconnection application shall be evaluated on the basis of the aggregate capacity of the multiple devices.

F. All interconnection applications shall be evaluated using the maximum rated capacity of the proposed generating facility.

G. The commission may designate a facilitator to assist the parties in resolving disputes related to this rule and the **manual**. The parties to a dispute will be responsible for the costs of dispute resolution, if any, as determined by the facilitator subject to review by the commission.

H. Confidential information shall remain confidential unless otherwise ordered by the commission. Confidential information shall mean any confidential and proprietary information provided by one party to the other party that is clearly marked or otherwise designated "confidential".
[17.9.568.12 NMAC - N, 10/15/08]

17.9.568.13 GENERAL PROVISIONS APPLICABLE TO UTILITIES:

A. A utility shall interconnect any interconnection customer that meets the interconnection criteria set forth in this rule and in the **manual**. A utility shall make reasonable efforts to keep the interconnection customer informed of the status and progress.

B. Utilities shall reasonably endeavor to aid and assist interconnection customers to insure that a proposed generating facility's interconnection design, operation, and maintenance are appropriate for connection to the utility's system. This may include consultations with the interconnection customer and its engineering and other representatives.

C. Utilities shall make reasonable efforts to meet all time frames provided for in this rule unless a utility and an interconnection customer agree to a different schedule. If a utility cannot meet a deadline provided herein, it shall notify the interconnection customer, explain the reason for its inability to meet the deadline, and provide an estimated time by which it will complete its activity.

D. Utilities shall use the same reasonable efforts in processing and analyzing interconnection applications from all interconnection customers, whether the generating facility is owned or operated by the utility, its subsidiaries or affiliates, or others.

E. Utilities shall maintain records for three years of each interconnection application received, the times required to complete each interconnection application approval or disapproval, and justification for the utility's disapproval of any interconnection application.

F. Utilities shall maintain current, clear and concise information regarding this rule including the name, telephone number, and email address of contact persons. The information shall be easily accessible on the utility's website beginning within one month of the effective date of this rule, or the information may be provided in bill inserts or separate mailings sent no later than one month after the effective date of this rule and no less often than once each year thereafter. Each utility shall maintain a copy of this rule and the **manual** at its principal office and make the same available for public inspection and copying during regular business hours.

G. A small utility that uses a consultant to review a proposal to interconnect a generating facility with the small utility's system may extend each of the time deadlines for review of the fast track process by a period not to exceed twenty (20) business days provided that the small utility shall make a good faith effort to complete the review sooner.

H. Compliance with this interconnection process does not constitute a request for, nor provision of any transmission delivery service, or any local distribution delivery service. Interconnection under this rule does not constitute an agreement by the utility to purchase or pay for any energy, inadvertently or intentionally exported.
[17.9.568.13 NMAC - N, 10/15/08]

17.9.568.14 GENERAL PROVISIONS APPLICABLE TO INTERCONNECTION CUSTOMERS:

A. The cost of utility system modifications required pursuant to the fast track process or the full interconnection study process shall be borne by the interconnection customer unless otherwise agreed by the parties.

B. An interconnection customer shall have thirty (30) business days (or other mutually agreeable period) following receipt of an interconnection agreement to execute the agreement and return it to the utility. If the interconnection customer does not execute the interconnection agreement and return it to the utility within the applicable period, the interconnection application shall be deemed withdrawn. After all parties execute an interconnection agreement, interconnection of the generating facility shall proceed under the provisions of the interconnection agreement.

C. An interconnection customer is responsible for the prudent maintenance and upkeep of its interconnection equipment.

D. Upon the petition of a utility, for good cause shown, the commission may require a customer with a generating facility with a rated capacity of 250 kW or less to obtain general liability insurance prior to connecting with a public utility. A utility may require that an interconnection customer proposing to connect a generating facility with a rated capacity greater than 250 kW provide proof of insurance with reasonable limits not to exceed \$1,000,000 or other reasonable evidence of financial responsibility.
[17.9.568.14 NMAC - N, 10/15/08]

17.9.568.15 SAFETY PROVISIONS:

A. An interconnection customer shall separate from the utility system in the event of any one or more of the following conditions:

- (1) a fault on the generating facility's system; or
- (2) a generating facility contribution to a utility system emergency; or
- (3) abnormal frequency or voltage conditions on the utility's system; or
- (4) any occurrence or condition that will endanger utility employees or customers; or
- (5) a generating facility condition that would otherwise interfere with a utility's ability to provide safe and reliable electric service to other customers; or
- (6) the sudden loss of the utility system power.

B. A visible-open, load break disconnect switch between the generating facility and the utility system that is visibly marked "generating facility generation disconnect" and is accessible to and lockable by the utility is required for all generating facilities except for those generating facilities with a maximum capacity rating of 10 kW or less that use a certified inverter including a self-contained renewable energy certificate (REC) meter and either:

- (1) a utility accessible AC load break disconnect; or
- (2) a utility accessible DC load break disconnect where there is no other source of generated or stored energy connected to the system.

C. Interconnection customers shall post a permanent and weather proof one-line electrical diagram of the generating facility located at the point of service connection to the utility. Generating facilities where the disconnect switch required by Subsection B of 17.9.568.15 NMAC is not located in close proximity to the utility meter must post a permanent and weather proof map showing the location of all major equipment including the utility meter point, the generating facility generation disconnect, and the generating facility generation breaker. Non-residential generating facilities larger than 10 kW shall include with or attached to the map the names and current telephone numbers of at least two persons authorized to provide access to the generating facility and who have authority to make decisions regarding the generating facility interconnection and operation.

D. If the generating facility interconnection equipment package is not certified or if a certified equipment package has been modified, the generating facility interconnection equipment package shall be reviewed and approved by a professional electrical engineer, registered in the state of New Mexico.

[17.9.568.15 NMAC - N, 10/15/08]

17.9.568.16 VARIANCES: A party may file a request for a variance from the requirements of this rule. Such application shall describe the reasons for the variance; set out the effect of complying with this rule on the parties and the utility's customers if the variance is not granted; identify the section(s) of this rule for which the variance is requested; describe the expected result which the request will have if granted; and state how the variance will aid in achieving the purposes of this rule. The commission may grant a request for a procedural variance through an order issued by the chairman, a commissioner or a designated hearing examiner. Other variances shall be presented to the commission as a body for determination.

[17.9.568.16 NMAC - N, 10/15/08]

HISTORY OF 17.9.568 NMAC: [RESERVED]