

THE NEW MEXICO INTERCONNECTION MANUAL

*(To be Used in Conjunction with New Mexico Public
Regulation Commission Rule 17.9.568 NMAC,
Interconnection of Generating Facilities with a Rated Capacity
Up to and Including 10 MW Connecting to a Utility System)*

New Mexico Public Regulation Commission

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1. OVERVIEW

1.1 Objective:

The purpose of 17.9.568 NMAC and this 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 in a safe and reliable manner.

1.2 Applicability:

The interconnection standards and procedures described in this Manual apply to Generating Facilities with a Rated Capacity up to and including 10 MW. The interconnection standards and procedures described in 17.9.569 NMAC apply only to Generating Facilities with a Rated Capacity greater than 10 MW. The Parties shall use the procedures and forms described in this Manual and 17.9.568 NMAC for interconnections of Generating Facilities with rated capacities up to and including 10 MW unless the Parties mutually agree to use a different procedure or form consistent with the Public Utility Act.

1.3 Definitions:

Capitalized terms used in this Manual shall have the meanings specified in Section 12.

1.4 Applicable Requirements:

The Generating Facility shall be designed to conform with all of the applicable requirements in this Manual, including Exhibit 2. In the event of a conflict between Commission Rule 17.9.568 NMAC and this Manual, the provisions of the rule shall control.

2. APPLICATION INSTRUCTIONS:

2.1. References:

References in this Manual to Interconnection Agreement are to the generator interconnection agreements in the Exhibits to this Manual.

2.2. Pre-Application:

It is recommended that an Interconnection Customer have a pre-application discussion with the Utility. Each Utility shall designate an employee or office from which information on the application process and on the Utility System can be obtained through informal requests from the Interconnection Customer presenting a proposed Generating Facility for a specific site. The Utility shall comply with reasonable requests for information. If the information requested is proprietary or confidential, the Utility shall provide the information after the Interconnection Customer making the request enters into a confidentiality agreement. The Utility shall not provide confidential or proprietary information that it is prohibited from providing even if it is party to a confidentiality agreement.

2.3 **Interconnection Application:**

A. The Interconnection Customer shall submit an Interconnection Application to the Utility (see Exhibits 1A or 1B), together with the fees or deposit required by this Manual or 17.9.568.12(A) NMAC. The Interconnection Application shall be dated and time-stamped upon receipt by the Utility. The original date-and time-stamp applied to the Interconnection Application at the time of its original submission shall be accepted as the qualifying date- and time-stamp for the purposes of any timetable in this Manual.

B. The Interconnection Customer shall be notified of receipt by the Utility within **three (3) Business Days** of such receipt. Notification may be to an e-mail address or fax number provided by the Interconnection Customer. The Utility shall notify the Interconnection Customer within **ten (10) Business Days** of the receipt of the Interconnection Application as to whether the Interconnection Application is complete or incomplete.

C. If the Interconnection Application is incomplete, the Utility shall provide, along with the notice that the Interconnection Application is incomplete, a written list detailing all information that must be provided to complete the Interconnection Application. The Interconnection Customer shall have **ten (10) Business Days** after receipt of the notice to submit the listed information or to request an extension of time to provide such information. If the Interconnection Customer does not provide either the listed information or a request for an extension of time within the deadline, the Interconnection Application will be deemed to be withdrawn. An Interconnection Application will be deemed complete upon submission of the listed information to the Utility.

D. **Queue Position:** The Utility shall place Interconnection Applications in a first come, first served order per feeder and per substation based upon the date- and time-stamp of the Interconnection Application. 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.

3. GENERAL REVIEW OF THE PROCESS:

3.1 Review Process:

This review process allows for rapid approval for the interconnection of those Generating Facilities that do not require an interconnection study. The review process includes a screening by the Utility to determine if a Supplemental Review is required. The general guidelines for the interconnection review process are shown in Table 1.

Table 1 - General Guidelines for the Interconnection Process

<u>Interconnection Review Process*</u>	<u>Application Type</u>	<u>Likely DG System Size</u>
<i>Simplified Interconnection Process</i>	Simplified Application (See Exhibit 1A)	0 ≤ 10 kW
<i>Fast Track Process with or without Supplemental Review</i>	Standard Application (See Exhibit 1B)	>10 kW & ≤ 2.0 MW
<i>Full Interconnection Study Process</i>	Standard Application (See Exhibit 1B)	>2.0 MW & ≤ 10 MW
<i>Case Specific Study Process</i>	Standard Application (See Exhibit 1B)	>10 MW

*These guidelines are provided to indicate the review process that most applications will follow. The technical requirements in the screening process will determine which review process must be followed. Neither the type of application nor the system size will guarantee a specific interconnection review process.

3.2 Description of General Review Path:

The Utility shall utilize the interconnection screening process shown in Figure 1 that results in four general review paths for proposed interconnection of Generating Facilities:

- A. **Simplified Interconnection** - For Certified Inverter-based Generating Facilities with a power rating of 10 kilowatts (kW) or less on radial or Network Systems under certain conditions;
- B. **Fast Track with or without Supplemental Review** - For certified Generating Facilities that pass certain specified screens and likely would have a power rating of 2.0 megawatts (MW) or less, 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 Simplified or Fast Track process.
- D. **Case Specific Review Process**: For Generating Facilities with a Rated Capacity greater than 10 megawatts (MW), which shall be conducted pursuant to 17.9.569 NMAC.

3.3 Determinations for Further Review:

Failure to pass any screen of the review process means only that further review and/or studies are required before the Generating Facility can be approved to interconnect to the utility's Distribution System. It does not mean that the Generating Facility cannot be interconnected.

3.4 Review Process Determination:

These guidelines are provided to indicate the review process that most applications will follow. The technical requirements in the screening process will determine which review process must be followed. Neither the type of application submitted nor the size of the Generating Facility will guarantee a specific interconnection review process.

3.5 Supplemental Review:

Supplemental Review is not a Full Interconnection Study. Supplemental Review is a process wherein the Utility further reviews an Interconnection Application that fails one or more of the initial review screens. Under some circumstances, Supplemental Review may be unnecessary. See section 7 of this Manual.

4. UTILITY REVIEW FLOW CHART:

The flow charts provided in Figure 1 and 2 are illustrations of the review process to be used by the Utility to evaluate Interconnection Applications. Detail about the screens is described in Section 6, Screening Criteria.

FIGURE 1: UTILITY REVIEW PROCESS FOR INTERCONNECTION

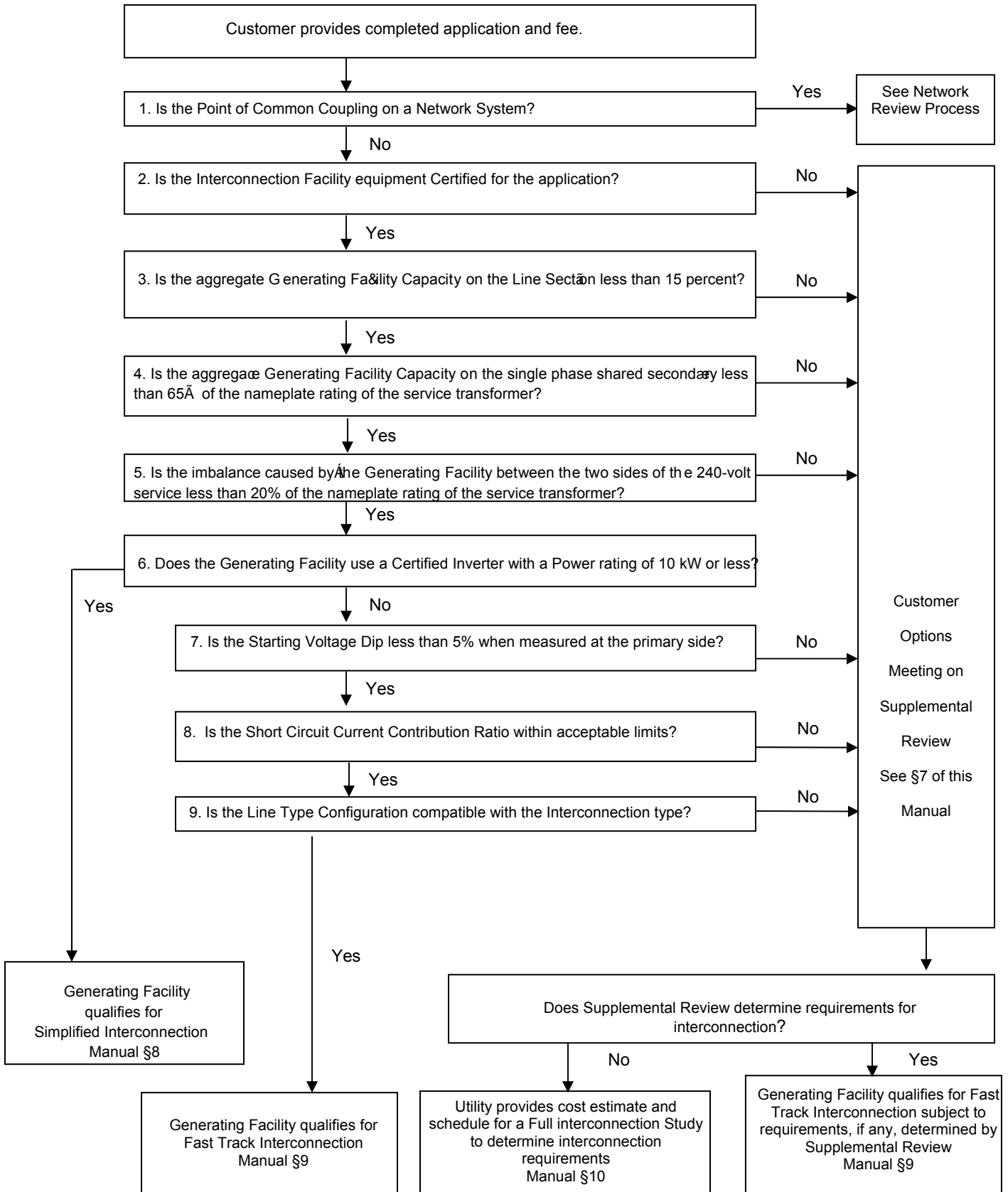
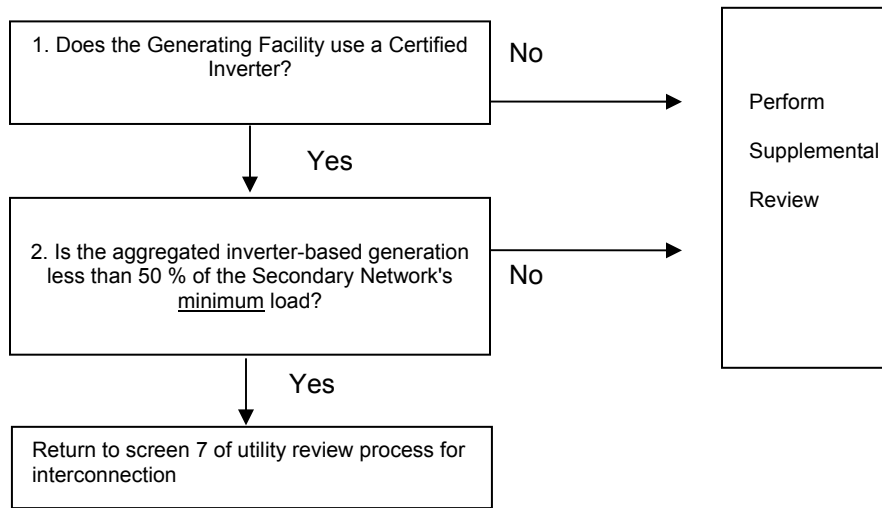


Figure 2: Utility Review Process for Interconnection to Network Systems



Screens 4 and 5 apply only to single-phase interconnections.

5. SCREEN CRITERIA:

Utilities shall use the following screen criteria as applicable, to evaluate Interconnection Applications.

Screen 1: Is the Point of Common Coupling on a Network System?

- If Yes, the Utility will review the proposed interconnection to a Network System as shown in the flowchart in Figure 2.
- If No, continue to next screen.

The significance of Screen 1: Special considerations must be given to Generating Facilities proposed to be installed on networked Distribution Systems because of the design and operational aspects of network protectors. There are no such considerations for radial Distribution Systems

Screen 2: Is the Interconnection Facility equipment certified for the application?

- If Yes, continue to next screen.
- If No, the Generating Facility or Interconnection Facilities do not qualify for Simplified Interconnection. Perform Supplemental Review.

Screen 3: Is the aggregate Generating Facility capacity on the Line Section less than 15% of Line Section peak load?

- If Yes, continue to next screen.
- If No, the Generating Facility does not qualify for Simplified Interconnection.

Perform Supplemental Review to determine cumulative impact on Line Section.

A. For interconnection of a proposed Generating Facility to a distribution circuit, the “aggregate Generation Facility capacity” includes the proposed Generating Facility but excludes generation that does not run in parallel with the utility for greater than 10 minutes.

B. For interconnection of a proposed Generating Facility to a distribution circuit, the “aggregate Generation Facility capacity”, including the proposed Generating Facility, on the Line Section shall not exceed 15% of the Line Section’s annual peak load as most recently measured at the substation or calculated for the Line Section.

C. For Highly Seasonal Circuits only, the “aggregate Generation Facility capacity”, including the proposed Generating Facility, on the Line Section shall not exceed 15% of two times the Minimum Daytime Loading.

The significance of Screen 3:

1. *Low penetration of Generating Facility installations will have a minimal impact on the operation and load restoration efforts of the utility’s Distribution System.*

2. *The operating requirements for a high penetration of Generating Facilities may be different since the impact on utility’s Distribution System will no longer be minimal and, therefore, require additional study or controls.*

3. *In Line Sections that are not highly seasonal, there will be minimal impact on the operation and load restoration efforts of the utility’s Distribution System when aggregate Generating Facility capacity is less than 15%. For penetration in excess of 15%, the impact on the Utility’s Distribution System operating requirements may no longer be minimal, and therefore, may require additional study.*

4. *Highly Seasonal Circuits include those with heavy irrigation loads in the summer or snowmaking loads in the winter. In Highly Seasonal Circuits, the 15% of Line Section annual peak load criterion could result in aggregate Generating Facility capacity exceeding load on the Line Section at times. Therefore, a lower threshold is applied for Highly Seasonal Circuits.*

5. *Aggregate Generating Facility capacity does not include generators that rarely run in parallel with the utility’s Distribution System, such as back-up and emergency generators, because those generators have minimal impact on the Distribution System.*

Screen 4: For single phase interconnections only -- Is the aggregate generation capacity on the Shared Secondary, including the proposed Generating Facility, less than 65% of the nameplate rating of the service transformer?

- If Yes, continue to next screen.
- If No, the Generating Facility does not qualify for Simplified Interconnection. Perform Supplemental Review.

If the proposed Generating Facility is to be interconnected on a single-phase Shared Secondary, the aggregate Generating Facility capacity on the Shared Secondary, including the proposed Generating Facility, shall not exceed 65% of the transformer nameplate rating.

Screen 5: For single phase interconnections only -- Is the imbalance between the two sides of the 240 volt service less than 20% of the nameplate rating of the service transformer?

- If Yes, continue to next screen.
- If No, the Generating Facility does not qualify for Simplified Interconnection. Perform Supplemental Review.

If the proposed Generating Facility is single-phase and is to be interconnected on a center tap of a 120/240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

Screen 6: Does the Facility use a Certified Inverter with a capacity rating of 10 kW or less?

- If Yes, the Generating Facility qualifies for Simplified Interconnection. Skip remaining screens.
- If No, continue to next screen.

Screen 7: Is the starting voltage dip less than 5% and have the flicker requirements of IEEE 519 been met?

- If Yes, continue to next screen.
- If No, perform Supplemental Review.

The Generating Facility must conform with two tests to pass Screen 7.

1. The first test is for starting voltage dip. The Utility has two options for determining whether the starting voltage dip is acceptable. The option to be used is at the Utility's discretion:

a. Option 1: The Utility may determine that the Generating Facility's starting in-rush current is equal to or less than the continuous ampere rating of the Interconnection Customer's service equipment.

b. Option 2: The Utility may determine the impedances of the service distribution transformer (if present) and the secondary conductors to the Interconnection Customer's service equipment and perform a voltage dip calculation. Alternatively, the Utility may use tables or nomographs to determine the voltage dip. Voltage dips caused by starting a Generating Facility must be less than 5%, when measured at the primary side (high side) of a dedicated distribution transformer serving the Generating Facility, for primary interconnections. The 5% voltage dip limit applies to the distribution transformer low side if the low side is shared with other customers and to the high side if the transformer is dedicated to the Interconnection Customer.

2. The second test is conformance with the relationship between voltage fluctuation and starting frequency presented in the table for flicker requirements in IEEE 519.

The significance of Screen 7:

1. *This Screen addresses potential voltage fluctuation problems that may be caused by Generating Facilities that start by motoring or large induction generators.*

2. *When starting, the Generating Facility should have minimal impact on the service voltage to other utility customers.*

3. *Properly designed inverter-based Generating Facilities should conform with the requirements of this screen.*

Screen 8: Is the Short Circuit Current Contribution Ratio within acceptable limits?

- If Yes, continue to next screen.
- If No, Perform Supplemental Review.

Screen 8 consists of two criteria; both of which must be met when applicable:

1. When measured at the primary side (high side) of a dedicated distribution transformer serving a Generating Facility, the sum of the Short Circuit Current Contribution Ratios of all Generating Facilities connected to utility's Distribution System circuit that serves the Generating Facility must be less than or equal to 0.1, and

2. When measured at the secondary side (low side) of a shared distribution transformer, the short circuit current contribution of the proposed Generating Facility must be less than or equal to 2.5% of the interrupting rating of the Generating Facility's service equipment. Total fault current cannot exceed interrupting capability of service equipment.

The significance of Screen 8: If the Generating Facility passes this screen it should have minimal impact on the utility Distribution System's short circuit duty, fault detection sensitivity, relay coordination or fuse-saving schemes.

Screen 9: Is the Line Type Configuration compatible with the interconnection type?

- If Yes, the Generating Facility qualifies for Fast Track Interconnection.
- If No, Perform Supplemental Review.

The purpose of Screen 9 is to identify the primary distribution line configuration that will serve the Generating Facility. Based on the type of interconnection to be used for the Generating Facility, the utility will determine from Table 2 if the proposed Generating Facility passes the screen.

Table 2

Primary Distribution Line Type Configuration	Type of Interconnection to be Made to Primary Distribution Line	Results/Criteria
Three-phase, three wire	Any type	Pass Screen
Three-phase, four wire	Single-phase, line-to-neutral	Pass Screen
Three-phase, four wire (For any line that has such a section OR mixed three wire and four wire)	All others	To pass, aggregate GF Nameplate Rating must be less than or equal to 10% of Line Section peak load

The significance of Screen 9: If the primary distribution line serving the Generating Facility is of a “three-wire” configuration, or if the Generating Facility's distribution transformer is single-phase and connected in a line-to-neutral configuration, then there is no concern about over-voltages to the utility’s, or other customers’ equipment caused by loss of system neutral grounding during the operating time of the non-islanding protective function.

6. NETWORK SCREENING PROCESS:

Notwithstanding Network Screens 1-2 below, each Utility may incorporate into its interconnection standards, any change in interconnection guidelines related to Network Systems pursuant to standards developed under IEEE 1547 and subparts when applicable for interconnections to Network Systems. To the extent the new IEEE standards or guides conflict with the interconnection standards set forth in this Section 6, the new standards or guides shall apply.

Network Screen 1: Does the Generating Facility use a Certified Inverter?

- If Yes, continue to next screen.
- If No, the Generating Facility does not qualify for Simplified Interconnection. Perform Supplemental Review.

Network Screen 2: Is the aggregated inverter-based generation less than 50% of the Secondary Network's minimum load?

- If Yes, the Generating Facility qualifies for Fast Track Process.
- If No, the Generating Facility does not qualify for Fast Track Process. Perform Supplemental Review.

The significance of Network Screen 2: For interconnection of a proposed Generating Facility to the load side of network protectors, the proposed Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed 50% of the Secondary Network's minimum load.

7. CUSTOMER OPTIONS MEETING AND SUPPLEMENTAL REVIEW:

7.1 Customer Options Meeting:

Within **ten (10) Business Days** of the Utility's completion of its initial review, the Utility shall offer to convene a Customer Options Meeting with the Utility to review possible Interconnection Customer facility modifications or the screen analysis and related results to determine what further steps are needed to permit the Generating Facility to be connected safely and reliably. At the time of notification of the Utility's determination, or at the Customer Options Meeting, the Utility shall:

A. Offer to perform facility modifications or minor modifications to the Utility's electric System (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Utility's electric System and offer to continue the screening process; or

B. Offer to perform a Supplemental Review if the Utility concludes that the Supplemental Review might determine that the Generating Facility could continue to qualify for interconnection pursuant to the Fast Track Process, and provide a non-binding good faith estimate of the costs and time of such review; or

C. Offer to continue evaluating the Interconnection Application under the Full Interconnection Study Process.

7.2 Supplemental Review:

A. If the Interconnection Customer agrees to a Supplemental Review, as described in this Section, the Interconnection Customer shall agree in writing within **fifteen (15) Business Days** of the offer, and submit a deposit for the estimated costs provided by the utility. The Interconnection Customer shall be responsible for the Utility's actual costs for conducting the Supplemental Review. The Interconnection Customer shall pay any review costs that exceed the deposit within **twenty (20) Business Days** of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the Utility will return such excess within **twenty (20) Business Days** of the invoice without interest. Within **ten (10) Business Days** following receipt of the deposit for a Supplemental Review, the Utility will complete the Supplemental Review. A Small Utility that uses a consultant to review an Interconnection Application 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.

B. If the Generating Facility can be interconnected safely and reliably, the Utility shall forward an executable interconnection agreement to the Interconnection Customer within **five (5) Business Days**.

1. If Interconnection Customer facility modifications are required to allow the Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under this Manual, the Utility shall forward an executable interconnection agreement to the Interconnection Customer within **five (5) Business Days** after confirmation that the Interconnection Customer has agreed to make the necessary changes at the Interconnection Customer's cost.

2. If minor modifications to the Utility's electric System are required to allow the Generating Facility to be interconnected consistent with safety, reliability, and power quality standards under the Fast Track Process, the Utility shall forward an executable interconnection agreement to the Interconnection Customer **within ten (10) Business Days** that requires the Interconnection Customer to pay the costs of such System modifications prior to interconnection.

C. If the Utility cannot determine within **ten (10) Business Days** that the Generating Facility can be interconnected safely and reliably, the Utility shall, if the Interconnection Customer agrees, continue to evaluate the Interconnection Application using the Full Interconnection Study Process.

8. SIMPLIFIED INTERCONNECTION-10 KW INVERTER PROCESS:

8.1 Availability:

The Simplified Interconnection process is available to an Interconnection Customer proposing to interconnect its Generating Facility to a non-Network System using a Certified Inverter that is 10 kW or smaller. The application process uses an all-in-one document that includes a simplified Interconnection Application, simplified procedures, and a brief set of terms and conditions.

8.2 Interconnection Application:

The Interconnection Customer completes the applicable Interconnection Application set forth in the Exhibits to this Manual, and submits it to the Utility.

8.3 Contact Information:

The Interconnection Customer must provide its contact information. If another Person is responsible for interfacing with the Utility, that contact information must be provided on the Application.

8.4 Notification of Receipt:

The Utility acknowledges to the Interconnection Customer receipt of the Interconnection Application within **three (3) Business Days** of receipt.

8.5 Notification of Application Status:

The Utility evaluates the Interconnection Application for completeness and notifies the Customer within **ten (10) Business Days** of receipt that the Interconnection Application is or is not complete and, if not, advises the Interconnection Customer what material is missing.

8.6 Initial Review:

Within **fifteen (15) Business Days** of receipt of a complete Interconnection Application, the Utility shall conduct an initial review, which shall include the following criteria:

A. Applicable Screens: Screens 1 through 6. For interconnections to a Utility's Network System, the proposed Generating Facilities must also pass the Network Screening Process in Section 6, above.

B. No construction of facilities by the Utility on its own system shall be required to accommodate the Generating Facility.

8.7 Completed Application:

Unless the Utility determines and demonstrates that the Generating Facility cannot be interconnected safely and reliably, the Utility will provide the Interconnection Customer the

completed Interconnection Application in the form of Exhibit 1A, subject to the terms and conditions for simplified interconnections provided in Exhibit 3A.

8.8 Testing and Certification of Completion:

A. Following receipt of the completed Interconnection Application, Exhibit 1A, the Interconnection Customer may proceed with operational testing not to exceed two hours.

B. Upon completion, the Interconnection Customer provides written notice of completion to the Utility. Prior to parallel operation, the Utility may inspect the Generating Facility for compliance with standards, which may include a witness test, and may schedule appropriate metering replacement, if necessary. If the inspection is not satisfactory, the Utility has the right to disconnect the Generating Facility. The Utility is obligated to complete the inspection within **ten (10) Business Days** of the receipt of the notice of completion.

C. Within five (5) Business Days of the Utility's completion of inspection and testing or the Utility's waiver of the right to inspect and test, the Utility notifies the Interconnection Customer in writing, which may be delivered by fax or e-mail, that interconnection of the Generating Facility is authorized.

9. FAST TRACK PROCESS:

9.1 Availability:

The Fast Track Process is available to an Interconnection Customer if the Generating Facility is generally no larger than 2.0 MW and if the Interconnection Customer's proposed Generating Facility meets the codes, standards, and certification requirements of this Manual.

9.2 Notification of Receipt:

A Utility will acknowledge to the Interconnection Customer receipt of the Interconnection Application within **three (3) Business Days** of receipt.

9.3 Initial Review:

Within **fifteen (15) Business Days** after the Utility notifies the Interconnection Customer that it has received a complete Interconnection Application, the Utility shall perform an initial review using the screens set forth below and shall notify the Interconnection Customer of the results. A Small Utility that uses a consultant to review an Interconnection Application 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.

9.4 Applicable Screens:

All Screens 1-9. For interconnections to a Utility's Network System, the proposed Generating Facilities must also pass the network screening criteria.

A. If the proposed interconnection passes the screens, the Interconnection Application shall be approved and the Utility will provide the Interconnection Customer an executable interconnection agreement in the form of **Exhibit 3B within five (5) Business Days** after the determination.

B. If the proposed interconnection fails the screens, but the utility determines that the Generating Facility may nevertheless be interconnected the Utility will provide the Interconnection Customer an executable interconnection agreement in the form of Exhibit 3B within **five (5) Business Days** after the determination.

C. If the proposed interconnection fails the screens, but the Utility does not or cannot determine from the initial review that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the utility shall provide the Interconnection Customer with the opportunity to attend a Customer Options Meeting.

D. The Utility shall notify the Interconnection Customer and provide copies of the data and analyses underlying its conclusion within **five (5) Business Days**, if the Utility makes any of the following determinations:

1. The Interconnection Application cannot be approved without minor modifications at minimal cost,
2. The Interconnection Application cannot be approved without a Supplemental Review or other additional studies or actions by the Utility, or
3. The Interconnection Application may result in a significant cost to address safety, reliability, or power quality problems.

9.5 Inspection and Notification:

A. Following receipt of the completed executable Interconnection Agreement, the Interconnection Customer may proceed with operational testing not to exceed two hours.

B. Upon completion, the Interconnection Customer provides written notice of completion to the Utility. Prior to parallel operation, the Utility shall inspect the Generating Facility for compliance with standards and the Utility may attend any required commissioning tests pursuant to IEEE 1547.1. If the inspection is not satisfactory, the Utility has the right to disconnect the Generating Facility. The Utility is obligated to complete the inspection within **ten (10) Business Days** of the receipt of the notice of completion.

C. Within **five (5) Business Days** of the Utility's completion of inspection and testing or the Utility's waiver of the right to inspect and test, the Utility notifies the Interconnection Customer in writing, which may be delivered by fax or e-mail, that interconnection of the Generating Facility is authorized.

D. The Interconnection Customer shall notify the Utility if there is any anticipated change in the proposed date of initial interconnected operations of the Generating Facility.

10. FULL INTERCONNECTION STUDY:

10.1 Availability:

The Full Interconnection Study process shall be used for an Interconnection Customer proposing to interconnect its Generating Facility with the Utility's System if the Generating Facility is not larger than 10 MW and (1) does not include a Certified Equipment Package, or (2) includes a Certified E quipment Package but did not pass the Fast Track Process or the Simplified Interconnection 10 kW Inverter Process. A Full Interconnection Study shall provide an in-depth engineering review of the interconnection addressing all aspects of generator performance and grid interaction and take into account the unique circumstances that require the Full Interconnection Study

10.2 Notification of Receipt:

The Utility shall notify the Interconnection Customer of the receipt of the Interconnection Application or the transfer from the Simplified or Fast Track interconnection procedures within **three (3) Business Days**.

10.3 Notification of Application Status:

The Utility shall evaluate the Interconnection Application and notify the Interconnection Customer within **ten (10) Business Days** of receipt that the Interconnection Application is complete or incomplete. If the Interconnection Application is incomplete, the Utility shall provide notice to the Interconnection Customer and a written list that describes all information that must be provided to complete the Interconnection Application. When the Interconnection Application is complete, the Utility shall assign a queue position based on the date of receipt of the completed Interconnection Application.

10.4 Scoping Meeting:

The Utility will conduct an initial review that includes a scoping meeting with the Interconnection Customer, if applicable, within **ten (10) Business Days** of determination that an Interconnection Application is complete. At the scoping meeting the Utility shall provide pertinent information such as: the available fault current at the proposed location, the existing peak loading on the lines in the general vicinity of the proposed Generation Facility, and the configuration of the distribution lines at the proposed Point of Common Coupling. By mutual agreement of the Parties, the Feasibility Study, Impact Study or Facilities Study may be waived.

10.5 Feasibility Study:

At the Interconnection Customer's request and within **five (5) Business Days** of the scoping meeting, the Utility will provide a good faith estimate of the cost and time to undertake a Feasibility Study that provides a preliminary review of the potential impacts on the Distribution System from the proposed interconnection and a proposed Feasibility Study agreement. The Feasibility Study will provide a preliminary review of short circuit currents, including

contribution from the proposed Generation Facility, and coordination and potential overloading of distribution circuit protection devices. If the Interconnection Customer agrees to the Feasibility Study, the Interconnection Customer shall provide an executed agreement and a deposit for the estimated costs provided by the Utility.

10.6 Impact Study:

If the Feasibility Study determines that an Impact Study is not required, the Impact Study may be waived by mutual agreement. If an Impact Study is required, within **ten (10) Business Days** of the completion of the Feasibility Study, the Utility shall provide to the Interconnection Customer an Impact Study agreement, including a cost estimate for the Impact Study. Once the Interconnection Customer executes the Impact Study agreement and pays a deposit pursuant to the good faith estimate contained therewith, the Utility shall conduct the Impact Study.

10.7 Interconnection Equipment:

For Generating Facilities that use certified interconnection equipment, no review of the interconnection equipment is required.

10.8 Utility System Modifications:

A. If the Utility determines that the Utility's electric System modifications required to accommodate the proposed interconnection are not substantial, the Impact Study will identify the scope and cost of the modifications as defined in the Impact Study results and no Facilities Study shall be required.

B. If the Utility determines that the System modifications to the utility's electric System are substantial, the results of the Impact Study will provide a good faith estimate for the modification costs (within ± 25 percent). The detailed costs of, and the electric System modifications necessary to interconnect the proposed Generating Facility shall be identified in a Facilities Study to be completed by the Utility.

10.9 Facilities Study:

A Facilities Study agreement, with a good faith estimate of the cost of completing the Facilities Study, shall be submitted to the Interconnection Customer for approval. Once the Interconnection Customer executes the Facilities Study agreement and pays pursuant to the terms thereof, the Utility shall conduct the Facilities Study.

10.10 Interconnection Agreement:

Within **five (5) Business Days** of completion of the Impact Study and/or Facilities Study, the Utility shall send the Interconnection Customer an executable interconnection agreement including a quote for any required electric System modifications. Within **thirty (30) Business Days** of the receipt of an interconnection agreement, the Interconnection Customer shall execute and return the interconnection agreement.

10.11 Interconnection Milestones:

The Facilities Study shall indicate the milestones for completion of the Interconnection Customer's installation of its Generation Facility and the Utility's completion of any electric System modifications, and the milestones from the Facilities Study (if any) shall be incorporated into the interconnection agreement.

10.12 Generating Facility Installation Compliance:

The Utility shall inspect the completed Generating Facility installation for compliance with requirements and attend any required commissioning tests pursuant to IEEE Standard 1547.1. Provided that any required commissioning tests are satisfactory, the Utility shall notify the Interconnection Customer in writing that operation of the Generating Facility. The Interconnection Customer shall notify the Utility if there is any anticipated change in the proposed date of initial interconnected operations of the Generating Facility.

11. OPERATING REQUIREMENTS:

11.1 Power Quality:

Power quality, including but not limited to harmonic limits and flicker requirements, shall be consistent with recommendations in IEEE 1547.

11.2 Disconnection:

If the Utility determines that any equipment connected to the Utility's System is problematic or unsafe, the Utility may disconnect the Generating Facility from the Utility's System and provide the Interconnection Customer with written justification for its determination.

12. DEFINITIONS:

Business Day means Monday through Friday, excluding holidays observed by the Utility.

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 test performed to certify the package under 1547.1.

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.

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.

Distribution Upgrades 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.

Facility Study means the facilities study that specifies and estimates the cost of the equipment, engineering, procurement, and construction work (including overheads) needed to implement the conclusions of the System Impact Study.

Feasibility Study means the study that identifies any potential adverse System impacts that would result from the interconnection of the Generating Facility.

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.

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.

Highly Seasonal Circuit means a circuit with a ratio of annual peak load to off-season peak load greater than six (6).

Impact Study means a System impact 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. A System Impact Study shall evaluate the impact of the proposed interconnection on the reliability of the electric System.

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.

Interconnection Costs means the reasonable costs of connection, switching, metering, transmission, distribution, safety provisions, and administration incurred by the Utility which are directly related to the installation and maintenance of the physical facilities necessary to permit

interconnected operations with a Generating facility to the extent such costs are in excess of the corresponding costs which the Utility would have incurred if it had not engaged in interconnected operations but instead generated an equivalent amount of power itself or purchased an equivalent amount of power from other sources. Interconnection costs do not include any costs included in the calculation of avoided costs pursuant to 17.9.570 NMAC.

Interconnection Customer means any person that proposes to interconnect its Generating Facility with the Utility's System.

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.

Line Section means that portion of a Utility's System connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

Minimum Daytime Loading means the lowest daily peak in the year on the Line Section.

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.

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

Party means the Utility and the Interconnection Customer separately or in combination.

Person for purposes of this Manual 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.

Point of Common Coupling means the point where the Interconnection Facilities connect with the Utility's System.

Power Conversion Unit (PCU) means an inverter or AC generator, not including the energy source.

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.

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.

Rated Capacity. means the total AC nameplate rating of the Power Conversion Unit(s) at the Point of Common Coupling.

Secondary Network means the low-voltage circuits supplied by the network units (the Network Transformer and its associated network protector).

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.

Shared Secondary means any connection on the secondary side of a distribution transformer that serves more than one customer.

Short Circuit Current Contribution Ratio means the ratio of the Generating Facility's short circuit contribution to the short circuit contribution provided through the Utility's Distribution System for a three-phase fault at the high voltage side of the distribution transformer connecting the Generating Facility to the Utility's System.

Small Utility means a Utility that serves less than 50,000 customers.

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.

Study Process means the procedure for evaluating an Interconnection Application that includes the Full Interconnection Study scoping meeting, Feasibility Study, System Impact Study, and Facilities Study.

System means the facilities owned, controlled, or operated by the Utility that are used to provide electric service under a Utility's tariff.

System Emergency means a condition on a Utility's System that is likely to result in imminent significant disruption of service to customers or is imminently likely to endanger life or property.

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.

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.

EXHIBIT 2

Certification Codes and Standards

IEEE 1547-2003 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

IEEE 1547.1-2005 ---

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2005), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withst and Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

EXHIBIT 3A

Simplified Interconnection

Terms and Conditions for

Generating Facilities With a Rated Capacity up to and Including 10kW

1.0 Construction of the Facility

The Interconnection Customer (the "Customer") may proceed to construct the Generating Facility when the utility approves the Interconnection Application (the "Application") and returns it to the Customer.

2.0 Interconnection and Operation

The Customer may operate Generating Facility and interconnect with the utility's electric system once all of the following have occurred:

- 2.1 Upon completing construction, the Customer will cause the Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2 The Customer returns the Certificate of Completion to the utility, and
- 2.3 The utility has completed its inspection of the Generating Facility. All inspections must be conducted by the utility, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The utility shall provide a written statement that the Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place.
- 2.4 The utility has the right to disconnect the Generating Facility in the event of improper installation or failure to return the Certificate of Completion.

3.0 Safe Operations and Maintenance

The Customer shall be fully responsible to operate, maintain, and repair the Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

4.0 Access

The utility shall have access to the disconnect switch and metering equipment of the Generating Facility at all times. The utility shall provide reasonable notice to the Customer when possible prior to using its right of access.

5.0 Disconnection

The utility may temporarily disconnect the Generating Facility upon the following conditions:

- 5.1 For scheduled outages per notice requirements in the utility's tariff or Commission rules.
- 5.2 For unscheduled outages or emergency conditions pursuant to the utility's tariff or Commission rules.
- 5.3 If the Generating Facility does not operate in the manner consistent with these Terms and Conditions.
- 5.4 The utility shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

6.0 Indemnification [Optional]

The Interconnection Customer shall indemnify and hold harmless the Utility against all damages, expenses and other obligations to third parties attributable to the negligence, strict liability or intentional acts of the Interconnection Customer. The Utility shall indemnify and hold harmless the Interconnection Customer against all damages, expenses and other obligations to third parties attributable to the negligence, strict liability or intentional acts of the Utility. The terms "Utility" and "Interconnection Customer," for purposes of this indemnification provision, include their officers, directors, trustees, managers, members, employees, representatives, affiliates, successors and assigns.

7.0 Insurance

All Generating facilities with a rated capacity of 10kW or less are strongly urged to obtain liability insurance to cover risks, liabilities, and consequences which may arise as a result of interconnection with the Utility System.

8.0 Limitation of Liability

Except in the event of acts of willful misconduct, each Party's liability to the other Party for failure to perform its obligations under this Agreement, shall be limited to the amount of direct damage actually incurred. Neither Party shall be liable to the other Party for any punitive, incidental, indirect, special, or consequential damages of any kind whatsoever, including for loss of business opportunity or profits, regardless of whether such damages were foreseen.

Notwithstanding any other provision in this Agreement, with respect to Utility's provision of electric service to any customer including the Interconnection Customer, the Utility's liability to such customer shall be limited as set forth in the Utility's tariffs and terms and conditions for electric service, and shall not be affected by the terms of this Agreement.

9.0 Termination

The agreement to interconnect may be terminated under the following conditions:

- 9.1 **By the Customer:** By providing written notice to the utility.
- 9.2 **By the utility:** If the Generating Facility fails to operate for any consecutive 12 month period or the Customer fails to remedy a violation of these Terms and Conditions.
- 9.3 **Permanent Disconnection:** In the event the is Agreement is terminated, the utility shall have the right to disconnect its facilities or direct the Customer to disconnect its Generating Facility.
- 9.4 **Survival Rights:** This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

10.0 Assignment/Transfer of Ownership of the Facility

This Agreement shall survive the transfer of ownership of the Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the utility.

EXHIBIT 3B

Interconnection Agreement

Generating Facilities With a Rated Capacity No Greater than 10 MW and Not Qualified for Simplified Interconnection

This Generating Facility Interconnection Agreement (“Agreement”) is entered into by and between _____ (“Utility”) and _____ (“Interconnection Customer”). The Interconnection Customer and the Utility are sometimes referred to in this Agreement jointly as “Parties” or individually as a “Party”.

In consideration of the mutual promises and obligations stated in this Agreement and its appendices, the Parties agree as follows:

I. SCOPE AND PURPOSE

- A) This Agreement is intended to provide for the Interconnection Customer to interconnect and operate the Generating Facility in parallel with the Utility’s System. Appendix A provides a one-line diagram of the Generating Facility and the Point of Common Coupling. Appendix B provides a description of the Generating Facility and its location.
- B) This Agreement contains the terms and conditions under which the Interconnection Customer may interconnect the Generating Facility to the Utility. This Agreement does not authorize the Interconnection Customer to export power or constitute an agreement to purchase or wheel the Interconnection Customer’s power. Other services that the Interconnection Customer may require from the Utility, or others, may be covered under separate agreements.
- C) This Agreement allows for the occasional and inadvertent export of energy to the Utility, though it does not constitute an agreement by the Utility to purchase or pay for any energy, inadvertently or intentionally exported.
- D) This Agreement does not constitute a request for, nor the provision of any transmission delivery service or any local distribution delivery service.
- E) The technical requirements for interconnection are provided in New Mexico Administrative Code 17.9.568, which incorporates by reference the New Mexico Interconnection Manual (“Manual”). Rule 17.9.568 and the Manual are incorporated and made part of this Agreement by this reference.

II. DEFINITIONS

“**Agreement**” means this Generating Facility Interconnection Agreement and its appendices.

“**Business Day**” means Monday through Friday, excluding holidays observed by the Utility.

- “Commission”** means the New Mexico Public Regulation Commission.
- “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.
- “Generator”** means any device producing electrical energy, including rotating generators driven by wind, steam turbines, internal combustion engines, hydraulic turbines, solar panels, fuel cells, or any other electric producing device, including energy storage technologies.
- “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.
- “Interconnection Customer”** is the person or entity so defined in the first paragraph of this Agreement.
- “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.
- “Manual”** is the New Mexico Interconnection Manual incorporated by reference into New Mexico Administrative Code 17.9.568.
- “Point of Common Coupling”** means the point where the Interconnection Facilities connect with the Utility's System.
- “Rated Capacity”** when used with respect to solar PV systems means 85% of the combined DC name plate rating of the solar panels. When used with respect to any other Generating Facility, Rated Capacity means the name plate rating of the Generating Facility.
- “System”** means the facilities owned, controlled, or operated by the Utility that are used to provide electric service under a Utility's tariff.
- “System Emergency”** means a condition on the Utility's System that is likely to result in imminent significant disruption of service to customers or is imminently likely to endanger life or property.
- “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.
- “Utility”** is the entity so defined in the first paragraph of this Agreement.

III. GENERATING FACILITY DESCRIPTION

- A) A single-line diagram of the Generating Facility is attached to and made part of this Agreement as Appendix A. The single line diagram shows the general arrangement of how the Generating Facility is interconnected with the Utility's System and shows all major equipment, including visual isolation equipment, Point of Common Coupling, ownership of equipment and meter location(s).
- B) A description of the Generating Facility is attached to and made a part of this Agreement as Appendix B. Appendix B is standard form that provides the engineering and operating information about the Generating Facility, including the Generating Facility's Rated Capacity and scheduled operational (on-line) date.

IV. RESPONSIBILITIES OF THE PARTIES

- A) The Parties shall perform all obligations of this Agreement in accordance with all applicable laws and regulations.
- B) The Interconnection Customer shall design, construct, operate and maintain the Generating Facility in accordance with the equipment manufacturers' recommended maintenance schedules, the Manual and applicable laws and regulations, including local building codes and other applicable ordinances.
- C) Interconnection of the Generating Facility in no way effects the Utility's obligation to serve the Utility's customer at whose location the Generating Facility is sited pursuant to the tariffs applicable to the customer's class of service.
- D) The Interconnection Customer is responsible for the actual costs to interconnect and test the Generating Facility with the Utility to the extent required by the Manual. Estimates of these costs are outlined in Appendix C. While estimates, for budgeting purposes, have been provided in Appendix C, the actual costs are still the responsibility of the Interconnection Customer, even if they exceed the estimated amount(s). All costs, for which the Interconnection Customer is responsible, must be reasonable under the circumstances of the design and construction.
- E) The Inter connection Customer shall grant to the Utility, at no expense to the Utility, all easements and rights-of-way necessary for the Utility to install, operate, maintain, replace, and remove the Utility's Interconnection Facilities and Upgrades, including, but not limited to, adequate and continuous access rights to property owned or controlled by the Interconnection Customer. If any part of the Interconnection Facilities or Upgrades is to be installed on property owned by any person who is not a party to this Agreement, the Interconnection Customer shall, at no expense to the Utility, obtain from the owner of the property all such necessary easements and rights-of-way for the Utility. The Utility has no obligation to commence procurement, installation or construction of the Utility's Interconnection Facilities or Upgrades until the Interconnection Customer has provided all documents the Utility deems necessary to enable the Utility to obtain and record such easements and rights-of-way.
- F) Upgrades:
 - a) The Utility shall design, construct, operate and maintain the Upgrades outlined in Appendix C in a good and workmanlike manner, and in

accordance with standard design and engineering practices, the Manual and applicable laws and regulations, including local building codes and other applicable ordinances.

- b) Once installed, the Upgrades shall be owned and operated by the Utility and all costs associated with the operating and maintenance of the Upgrades, after the Generating Facility is operational, shall be the responsibility of the Utility, unless otherwise agreed.
- c) The Interconnection Customer grants permission for the Utility to begin construction and to procure the necessary facilities and equipment to complete the installation of the Upgrades, as outlined in Appendix C. The Interconnection Customer may, for any reason, cancel or modify the Generating Facility project, so that any or all of the Upgrades are not required to be installed. If for any reason, the Generating Facility project is canceled or modified, so that any or all of the Upgrades are not required, the Interconnection Customer shall be responsible for all costs incurred by the Utility, including, but not limited to the additional costs to remove and/or complete the installation of the Upgrades. The Interconnection Customer shall provide written notice to the Utility of cancellation or modification. Upon receipt of a cancellation or modification notice, the Utility shall take reasonable steps to minimize additional costs to the Interconnection Customer, where reasonably possible.

G) Payments:

- 1) The Interconnection Customer shall provide for the payment of its obligations under this Agreement in one of the following ways:
 - i. The Interconnection Customer may pay the Utility the costs identified in Appendix C at the time the Parties execute this Agreement; or
 - ii. The Interconnection Customer may pay the Utility in accordance with Section IV.G(2) if, at the time the Parties execute this Agreement, the Interconnection Customer provides reasonably adequate assurance of its creditworthiness to the Utility. Reasonably adequate assurance may be satisfied by evidence of the Interconnection Customer's creditworthiness, or a letter of credit in an amount sufficient to cover the costs identified in Appendix C, or a guaranty from another entity accompanied by evidence of that entity's creditworthiness.
- 2) If the Interconnection Customer provides for assurance of creditworthiness in accordance with Section I V.G(1)(ii), the Utility will invoice the Interconnection Customer monthly for all amounts expended and all amounts for which the Utility has become obligated since the execution of this Agreement or the prior monthly invoice. The Interconnection Customer will pay each such invoice within 20 days.

V. TERM AND TERMINATION

- A) This Agreement becomes effective when the Interconnection Customer and the Utility have both signed this Agreement. The Agreement shall continue in full force and effect until the earliest date that one of the following events occurs:
 - 1) The Parties agree in writing to terminate the Agreement;

- 2) The Interconnection Customer terminates this Agreement by written notice to the Utility prior to the completion of the final acceptance testing of the Generating Facility by the Utility;
 - 3) The Utility terminates this Agreement after 30 days written notice to the Interconnection Customer if the Interconnection Customer has failed to comply with the payment or creditworthiness terms of Section IV.G and has not taken appropriate corrective action;
 - 4) The Utility terminates this Agreement after three days written notice to the Interconnection Customer if the Interconnection Customer does not obtain and deliver the easements and rights-of-way described in Section IV.E to the Utility within 90 days of the Utility's request for such easements and rights-of-way;
 - 5) Once the Generating Facility is operational, the Interconnection Customer terminates this Agreement after 30 days written notice to the Utility, unless otherwise agreed; or,
 - 6) The Utility terminates this Agreement after 30 days written notice to the Interconnection Customer if the Interconnection Customer fails to:
 - i. take all corrective actions specified in the Utility's written notice that the Generating Facility is out of compliance with the terms of this Agreement or the Manual within the time frame set forth in such notice, provided that the terms and timeframes stated by the Utility conform to this Agreement and the Manual; or
 - ii. to complete construction of the Generating Facility within 24 months of the date of this Agreement or as otherwise agreed.
- B) Upon termination of this Agreement the Utility may disconnect the Generating Facility from the Utility's System. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing, at the time of the termination.

VI. OPERATIONAL ISSUES

- A) Costs: Each Party will, at its own cost and expense, operate, maintain, repair and inspect, and shall be fully responsible for, the facilities which it now or hereafter may own, unless otherwise specified.
- B) Right of Access: At all times, the Utility's personnel shall have access to the disconnect switch of the Generating Facility for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement, to meet its obligation to operate the Utility safely and to provide service to its customers. If necessary for the purposes of this Agreement, the Interconnection Customer shall allow the Utility access to the Utility's equipment and facilities located on the premises.
- C) Cooperation and Coordination: Both the Utility and the Interconnection Customer shall communicate and coordinate their operations, so that the normal operation of the Utility does not unduly effect or interfere with the normal

operation of the Generating Facility and the Generating Facility does not unduly effect or interfere with the normal operation of the Utility. Under abnormal operations of either the Generating Facility or the Utility system, the responsible Party shall provide timely communication to the other Party to allow mitigation of any potentially negative effects of the abnormal operation of their system.

- D) Disconnection of Unit: The Utility may disconnect the Generating Facility as reasonably necessary for the following reasons: termination of this Agreement; non-compliance with this Agreement; System Emergency, and routine maintenance, repairs and modifications to the Utility's System. When reasonably possible the Utility shall provide prior notice to the Interconnection Customer explaining the reason for the disconnection. If prior notice is not reasonably possible the Utility shall after the fact, provide information to the Interconnection Customer as to why the disconnection was required. The Utility shall expend reasonable effort to reconnect the Generating Facility in a timely manner and to mitigate damages and losses to the Interconnection Customer.
- E) Modifications to the Generating Facility: The Interconnection Customer shall notify the Utility in writing of any proposed modifications to the Generating Facility that could affect the Utility's System, providing twenty (20) Business Days notice or as many days notice as is reasonably possible. The notice shall provide all information needed by the Utility as part of the review described in this paragraph. Modifications that could affect the Utility's System include any change affecting the Generating Facility's Rated Capacity and any modification of Interconnection Facilities, which include without limitation: protective systems, generation control systems, transfer switches/breakers, voltage transformers and current transformers. When reasonably possible the Interconnection Customer agrees not to make any material modifications to the Generating Facility until the Utility has approved the modifications, in writing, which approval shall not be unreasonably withheld. The Utility shall not take longer than ten (10) Business Days to review and respond to the proposed modifications after the receipt of the information required to review the modifications, and if the Utility fails to respond within ten (10) Business Days, the modification(s) shall be considered to be approved by the Utility. When it is not reasonably possible for the Interconnection Customer to provide prior written notice of modifications, the Interconnection Customer shall provide written notice to the Utility as soon as reasonably possible after the modifications have been made.
- F) Permits and Approvals: The Interconnection Customer shall obtain all environmental and other permits lawfully required by governmental authorities prior to the construction of the Generating Facility. The Interconnection Customer shall also maintain these applicable permits and compliance with these permits during the term of this Agreement.

VII. INDEMNIFICATION AND LIMITATION OF LIABILITY

- A) The Interconnection Customer shall indemnify and hold harmless the Utility against all damages, expenses and other obligations to third parties attributable to the negligence, strict liability or intentional acts of the Interconnection Customer. The Utility shall indemnify and hold harmless the Interconnection Customer against all damages, expenses and other obligations to third parties attributable to the negligence, strict liability or intentional acts of the Utility. The terms "Utility" and "Interconnection Customer," for purposes of this indemnification provision, include their officers, directors, trustees, managers, members, employees, representatives, affiliates, successors and assigns.
- B) Except in the event of acts of willful misconduct, each Party's liability to the other Party for failure to perform its obligations under this Agreement, shall be limited to the amount of direct damage actually incurred. Neither Party shall be liable to the other Party for any punitive, incidental, indirect, special, or consequential damages of any kind whatsoever, including for loss of business opportunity or profits, regardless of whether such damages were foreseen.
- C) Notwithstanding any other provision in this Agreement, with respect to Utility's provision of electric service to any customer including the Interconnection Customer, the Utility's liability to such customer shall be limited as set forth in the Utility's tariffs and terms and conditions for electric service, and shall not be affected by the terms of this Agreement.

VIII. DISPUTE RESOLUTION

- A) Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.
- B) In the event a dispute arises under this Agreement, the Parties may mutually agree to submit the dispute to mediation by a mutually acceptable mediator or either party may request that the New Mexico Public Regulatory Commission designate a facilitator to assist the Parties to resolve their dispute.

IX. INSURANCE

[This Section shall either state that "the Interconnection Customer is not required to maintain insurance unless so ordered by the Commission for good cause upon the petition of a Utility" or, for Generating Facilities with Rated Capacity greater than 250 kW, the Utility may include the following provisions:

- A) *The Interconnection Customer shall maintain, during the term of the Agreement, general liability insurance from a qualified insurance agency with a B+ or better rating by "Best" and with a combined single limit of not more than one million dollars (\$1,000,000). Such general liability insurance shall include coverage against claims for damages resulting from (i) bodily injury, including wrongful death; and (ii) property damage arising out of the Interconnection Customer's ownership and/or operation of the Generating Facility under this Agreement.*
- B) *The general liability insurance required by Section IX.A shall, by endorsement to the policy or policies, (a) include the Utility as an additional insured; (b) contain a severability of interest clause or cross-liability clause; (c) provide*

that the Utility shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for the payment of premium for such insurance; and (d) provide for thirty (30) calendar days written notice to the Utility prior to cancellation, termination, alteration, or material change of such insurance.

- C) *The Interconnection Customer shall furnish the insurance certificates and endorsements required by Sections IX.A and IX.B to the Utility prior to the initial operation of the Generating Facility. Thereafter, the Utility shall have the right to periodically inspect or obtain a copy of the original policy or policies of insurance.*
- D) *The general liability insurance required by Section IX.A shall state that coverage provided is primary and is not excess to or contributing with any insurance or self-insurance maintained by the Utility.*
- E) *The Interconnection Customer may elect to self-insure rather than complying with Sections IX.A through IX.D if:*
 - 1) *The Interconnection Customer provides to the Utility, at least thirty (30) days prior to the date of initial operation, a plan reasonably acceptable to the Utility to self-insure to a level of coverage equivalent to that required under Section IX.A; and,*
 - 2) *The Interconnection Customer agrees to immediately obtain the coverage required under Section IX.A if the Interconnection Customer fails to comply with its self-insurance plan.*
- F) *Failure of the Interconnection Customer or Utility to enforce the minimum levels of insurance does not relieve the Interconnection Customer from maintaining such levels of insurance or relieve the Interconnection Customer of any liability.*
- G) *All insurance certificates, statements of self-insurance, endorsements, cancellations, terminations, alterations, and material changes of such insurance shall be issued and submitted to the following address:*

*[Utility]
Attention: Manager of Generation Insurance*

X. MISCELLANEOUS

- A) **Force Majeure:** Force majeure shall mean any cause beyond the control of the Party affected, including, but not limited to, failure of or threat of failure of facilities, flood, earthquake, tornado, storm, fire, lightning, epidemic, war, riot, civil disturbance or disobedience, [labor dispute,] labor or material shortage, sabotage, restraint by court order or public authority, and action or non-action by or failure to obtain the necessary authorizations or approvals from any governmental agency or authority, which by exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence, it shall be unable to overcome. If either Party, because of force majeure, is rendered wholly or partly unable to perform its obligations

under this Agreement, except for the obligation to make payments of money, that Party shall be excused from whatever performance is affected by the force majeure to the extent so affected, provided that:

- 1) the nonperforming Party, within a reasonable time after the occurrence of the force majeure, gives the other Party written notice describing the particulars of the occurrence;
- 2) the suspension of performance is of no greater scope and of no longer duration than is required by the force majeure; and
- 3) the nonperforming Party uses its best efforts to remedy its inability to perform. [This subparagraph shall not require the settlement of any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the party involved in the dispute, are contrary to its interest. It is understood and agreed that the settlement of strikes, walkouts, lockouts or other labor disputes shall be entirely within the discretion of the Party involved in the disputes.]

B) Notices: Any written notice, demand, or request required or authorized in connection with this Agreement shall be deemed properly given if delivered in person, sent by first class mail with postage prepaid, or sent by electronic mail as specified below:

1) To the Utility:

Email: _____

2) To the Interconnection Customer:

Email: _____

- 2) A Party may change its address for notices at any time by providing the other Party written notice of the change, in accordance with this Section.
- 3) The Parties may also designate operating representatives to conduct the daily communications, which may be necessary or convenient for the administration of this Agreement. Such designations, including names, addresses, phone numbers and electronic mail addresses may be communicated or revised by one Party's notice to the other Party.

C) Assignment: The Interconnection Customer shall not assign its rights nor delegate its duties under this Agreement without the Utility's written consent.

Any assignment or delegation the Interconnection Customer makes without the Utility's written consent shall not be valid. The Utility shall not unreasonably withhold its consent to the Generating Entities assignment of this Agreement.

- D) Non-waiver: None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect.
- E) Governing Law and Inclusion of Utility's Tariffs and Rules:
- 1) This Agreement shall be interpreted, governed and construed under the laws of the State of New Mexico as if executed and to be performed wholly within the State of New Mexico without giving effect to choice of law provisions that might apply to the law of a different jurisdiction.
 - 2) The interconnection and services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the tariff schedules and Commission rules applicable to the electric service provided by the Utility, which tariff schedules and Commission rules are hereby incorporated into this Agreement by this reference.
 - 3) Notwithstanding any other provisions of this Agreement, the Utility shall have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff or rule or any agreement relating thereto.
- F) Amendment and Modification: This Agreement can only be amended or modified by a writing signed by both Parties.
- G) Entire Agreement: This Agreement, including its Appendices, constitutes the entire Agreement between the Parties with regard to the interconnection of the Generating Facility of the Parties at the Point(s) of Common Coupling expressly provided for in this Agreement and supersedes all prior agreements or understandings, whether verbal or written. It is expressly acknowledged that the Parties may have other agreements covering other services not expressly provided for herein, which agreements are unaffected by this Agreement. Each Party also represents that in entering into this Agreement, it has not relied on the promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement or in the incorporated attachments and appendices.
- H) Confidential Information: Except as otherwise agreed or provided herein, each Party shall hold in confidence and shall not disclose confidential information, to any person (except employees, officers, representatives and agents, who agree to be bound by this section). Confidential information shall be clearly marked as such on each page or otherwise affirmatively identified. If a court, government agency or entity with the right, power, and authority to do so, requests or requires either Party, by subpoena, oral disposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose

confidential information, that Party shall provide the other Party with prompt notice of such request(s) or requirements(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. In the absence of a protective order or waiver the Party shall disclose such confidential information which, in the opinion of its counsel, the party is legally compelled to disclose. Each Party will use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any confidential information so furnished.

I) Non-warranty: Neither by inspection, if any, or non-rejection, nor in any other way, does the Utility give any warranty, expressed or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer or leased by the Interconnection Customer from third parties, including without limitation the Generating Facility and any structures, equipment, wires, appliances or devices appurtenant thereto.

J) No Partnership: This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

XI. SIGNATURES

IN WITNESS WHERE OF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the last date set forth below.

Interconnection Customer

By: _____

Name: _____

Title : _____

Date: _____

Utility

By: _____

Name: _____

Title: _____

Date: _____

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]