

Sierra Electric Cooperative, Inc.

610 Hwy 195 • P.O. Box 290 • Elephant Butte, New Mexico 87935 575-744-5231 • Fax: 575-744-5819 www.sierraelectric.org

Dear Prospective Renewable Energy Generator/Net Metering Member:

Thank you for your interest in renewable energy generation and net metering. To assist you in this process, Sierra Electric has assembled this information packet designed to get you started. It includes:

Overview of Sierra Electric Cooperative Interconnection Procedures

Simplified Interconnection Application

Interconnection and Safety Standards

Standard Metering Configurations

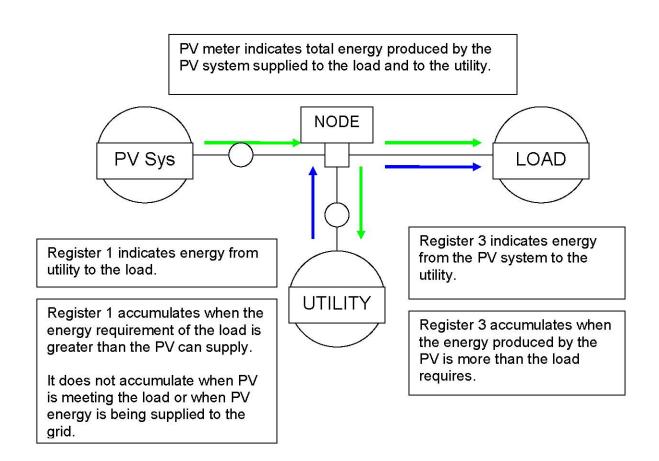
New Mexico PRC Interconnection Manual

The NM Interconnection Manual was prepared by the New Mexico Public Regulation Commission (NMPRC) for use in conjunction with the NMPRC Rule 17.9.568 NMAC - "Interconnection of Generating Facilities with a Rated Capacity Up to and Including 10 MW Connecting to a Utility System". Please review this manual carefully, as it should answer the most frequently asked questions. Additional information can be obtained by visiting the NMPRC's website, and clicking on Utility Division, then Renewable Energy.

If you require further assistance, please call us at (575) 744-5231, and ask for the General Manager or the Operations Manager.

Overview Of Sierra Electric Cooperative, Inc. Interconnection Procedures

- 1. The Member applying for interconnection will need to complete an interconnection application for each system. This application will become Exhibit A in the Interconnection Agreement.
- 2. Supply a one line diagram of the planned system including all components (this diagram must include Location of Load Break Disconnect Switch), and Physical Address.
- 3. There is a \$50.00 fee for each application.
- 4. Complete the Standard Interconnection Agreement prior to interconnecting.
- 5. The Generation System has to be inspected and approved by the State Electrical Inspector.
- 6. A Non-fused disconnect switch must be provided by the Member and connected so that it will isolate the generating system from the co-op. The disconnect switch has to be locked by Sierra Electric Cooperative.
- 7. A standard meter socket needs to be provided to measure the total output of the generation system. Sierra Electric will install and maintain the meter in that socket. This meter will register the total amount of energy the qualifying facility produces.
- 8. Sierra Electric will install meters at the expense of the cooperative. SEC meters have two registers. Register 1 measures energy delivered from the co-op. Register 2 measures energy delivered to the co-op. Any special meter requirements including time of use metering by the member will be at the member's expense.



Sierra Electric Cooperative, Inc. NMPRC RULE 568 EXHIBIT 1A Simplified Interconnection Application Certified Inverter-Based Generating Facilities With a Rated Capacity up to and including 10kW AC

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required.

Processing Fee

A fee of \$50 must accompany this Application.

Contact Person:		
Address:		
City, State, Zip:		
Telephone (Day):	(Evening):	
Fax:	E-Mail Address:	
ngineering Firm (If Applic	able)	
Contact Person:		
Address:		
City, State, Zip:		
Telephone:	Fax:	
E-Mail Address:		
ontact (if different from In	terconnection Customer)	
•		
Telephone (Day):	(Evening):	
	E-Mail Address:	

Generating Facility Information	
Location (if different from above):	
Electric Service Company:	
Account Number:	
Generator 10 kW Inverter Process:	
Inverter Manufacturer: Model :	
Nameplate Rating: (kW) (kVA) (AC Volts)	
Single Phase Three Phase System Design Capacity: (kW) (kVA)	
Prime Mover: Photovoltaic □ Reciprocating Engine □ Fuel Cell □ Turbine □	
Other (describe)	
Energy Source: Solar □ Wind □ Hydro□ Diesel □ Natural Gas □ Fuel Oil □	
Other (describe)	
Is the equipment UL1741 Listed? Yes No If Yes, attach manufacturer's cut-sheet showing UL1741 listing Estimated Installation Date: Estimated In-Service Date:	l
The 10 kW Inverter Process is available only for inverter-based Generating Facilities no larger than 10 kW that meet the standards, and certification requirements of Attachment 3 of the Generator Interconnection Procedures (SGIP), or the QR reviewed the design or tested the proposed Generating Facility and is satisfied that it is safe to operate.	
List components of the Generating Facility equipment package that are currently certified:	
Equipment Type Certifying Entity	
1	
2	
3	
4	
E	

Interconnection Customer Signature

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Generating Facility No Larger than 10kW contained in the New Mexico Interconnection Manual, Exhibit 3A and return the notice of completion when the Generating Facility has been installed.

Signed:	_
Title:	-
Date:	-
Utility Signature	
The undersigned Utility agrees to abide by the Terms and Cor Manual, Exhibit 3A and that optional paragraph 6.0 Indemnifica	
Signed:	_
Title:	_
Date:	

Measurement of energy from a grounded neutral -120/240 volt single phase, three-wire supply

3-wire service

Exhibit E

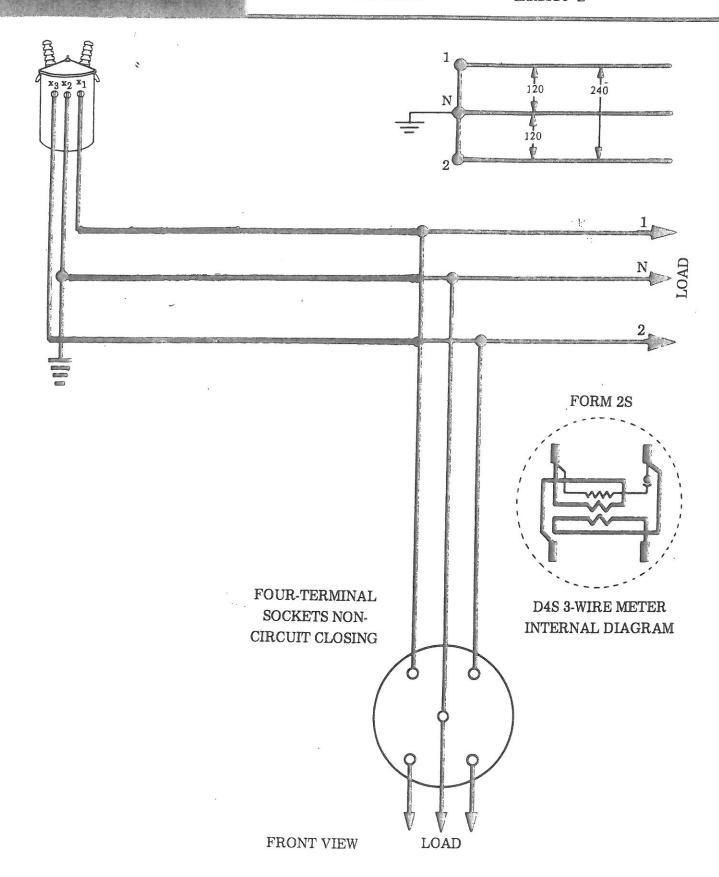


EXHIBIT D

Interconnection and Safety Standards

IEEE1547-2003 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 Withstand 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

STANDARD INTERCONNECTION AGREEMENT FOR QUALIFYING FACILITIES WITH A DESIGN CAPACITY OF 100 KILOWATTS OR LESS:

	A.	Preamble.									
		(1)	This	AGREEMENT	is	made	as	of	the	day	O
			, 20	_, by and betwee	า						_
						Name as	it appe	ars on	Member A	ccount	

hereafter, referred to as "producer" and Sierra Electric Cooperative hereinafter referred to collectively as "parties" and singularly as "party";

- (2) WHEREAS, the producer receives electric service from Sierra Electric Cooperative, Inc., which is a member of Tri-State and receives its full requirements wholesale electric service from Tri-State and has retained all rights and obligations concerning continued electric service to the producer;
- (3) WHEREAS, Sierra Electric Cooperative is subject to the jurisdiction of the New Mexico Public Regulation Commission ("NMPRC"), and Sierra Electric Cooperative desires to purchase and the producer desires to sell all the electric energy produced by the Qualifying Facility ("QF") that is not consumed by the producer, and the NMPRC has adopted 17.9.570 NMAC governing this transaction and Sierra Electric Cooperative has filed its tariff hereunder, a copy of which is annexed hereto and incorporated herein by reference and is subject to change by the NMPRC; and
- (4) WHEREAS, the producer represents and warrants that the facility is a QF as defined by 17.9.570 NMAC having an installed capacity of 100 kilowatts or less.
- (5) NOW, THEREFORE, for and in consideration of the mutual undertakings herein contained and for other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the producer Sierra Electric Cooperative agree as follows:
- **B. Definitions**. Whenever used in the agreement, the following words and phrases shall have the following meanings:
- (1) **agreement** shall mean this agreement and all schedules, tariffs, attachments, exhibits, and appendices attached hereto and incorporated herein by reference:
- (2) **interconnection facilities** shall mean all machinery, equipment, and fixtures required to be installed solely to interconnect and deliver power from the QF to the utility's system, including, but not limited to, connection, transformation, switching, metering, relaying, line and safety equipment and shall include all necessary additions to, and reinforcements of, the utility's system;
- (3) **prudent electrical practices** shall mean those practices, methods and equipment, as changed from time to time, that are commonly used in prudent electrical engineering and operations to operate electric equipment lawfully, and with safety, dependability, efficiency and economy;

- (4) **qualifying facility (QF)** means a cogeneration facility or a small power production facility of an installed capacity of 100 kilowatts or less which meets the criteria for qualification contained in 18 C.F.R. Section 292.203:
- (5) **interconnection costs** mean those costs set forth in Subsection C of 17.9.570 NMAC;
- (6) **point of delivery** means the geographical and physical location described on Exhibit B hereto; such exhibit depicts the location of the QF's side of interconnection facilities where producer is to sell and deliver electric energy pursuant to this agreement or pursuant to a separate wheeling agreement;
- (7) **termination** means termination of this agreement and the rights and obligations of the parties under this agreement, except as otherwise provided for in this agreement;
- (8) **suspension** means suspension of the obligation of Sierra Electric Cooperative to interconnect with and purchase electricity from the producer.

C. Facilities to be Provided.

- (1) Unless otherwise provided for herein, Sierra Electric Cooperative will purchase and the producer will sell all the electric energy produced by the QF that is not consumed by the producer. Upon execution of this agreement, the producer shall, at its expense, design, construct, install, operate, and maintain to and at the point of delivery the QF which is described in Exhibit A, attached hereto and hereby incorporated by reference.
- (2) The point of delivery located and described on Exhibit B, attached hereto and hereby incorporated by reference, shall include the following information: Physical address of QF, and One-Line Diagram
- (3) The QF shall meet all applicable federal, state and local code, all provisions of the national electrical code and the national electrical safety code, as such codes now exist, and all prudent electrical practices.
- (4) The producer shall submit all specifications and drawings of its proposed QF to Sierra Electric Cooperative for tentative written approval prior to connecting the QF to the Sierra Electric Cooperative system. Sierra Electric Cooperative's review of the producer's specifications and drawings will be provided within a reasonable time.
- (5) Tentative approval shall not be construed as permission to operate the facilities without written authorization from Sierra Electric Cooperative after inspection of the completed facilities.
- (6) Within 60 days of the execution of this agreement and receipt of necessary rights-of-way, easements and materials, unless such period is extended by the NMPRC, Sierra Electric Cooperative shall design, construct, install, operate, and maintain the interconnection facilities described on Exhibit C, attached hereto and hereby incorporated by reference. The producer shall reimburse Sierra Electric Cooperative for all costs incurred by Sierra Electric Cooperative for interconnection costs, an estimate of which costs is set out on

Exhibit C attached hereto. Estimated costs of interconnection are \$0.00. Terms of reimbursement shall be N/A.

- (7) The producer shall furnish, install and maintain a clearly labeled load break disconnect switch in a visible, outside, readily accessible location for the purpose of isolating producer's generation from the Sierra Electric Cooperative system. The load break disconnect switch must disconnect the producer's generator from Sierra Electric Cooperative system without interrupting other types of service to the producer. The producer shall provide a map of suitable scale showing the exact location of the switch. Such map shall be included in Exhibit B attached hereto and incorporated herein by reference. The switch shall be a securable type switch. Ingress and egress to this switch by Sierra Electric Cooperative personnel shall be provided at all times by the producer. The load break disconnect switch must comply with the Interconnection and Safety Standards attached as Exhibit D hereto and incorporated herein by reference.
- (8) Sierra Electric Cooperative's review of the producer's specifications, drawings and maps, inspection of or authorization to operate the QF or approval of any modification thereto shall be construed neither as its confirmation or endorsement of the design of the QF, nor as an endorsement, warranty, guarantee or representation concerning the safety, operating characteristics, durability or reliability of the QF. Notwithstanding such review, inspection, authorization or approval, or the failure to make the same, Sierra Electric Cooperative shall not be responsible or liable for the strength, details of design, defects, outages, adequacy, operation or capacity of the QF to the producer or any third party[ies].
- **D.** Term of Agreement. The original term of this agreement shall be for a period of five (5) years from the date of the execution of this agreement and shall continue thereafter from year to year until terminated as herein provided.
- (1) Termination by the Producer. Termination of this agreement during and after the original term requires written notice to Sierra Electric Cooperative that this agreement will terminate in ninety (90) days. The producer may terminate this agreement without showing good cause.
- (2) Termination by Sierra Electric Cooperative. Termination of this agreement during and after the original term requires written notice to the producer that this agreement will terminate in ninety (90) days, unless otherwise provided. Sierra Electric Cooperative, in the exercise of this right, must show good cause for the termination. Good cause shall include, but is not limited to, the specific provisions contained in Paragraphs (3) and (4) of Subsection D of 17.9.570.15 NMAC and Subsection M of 17.9.570.15 NMAC.
- (3) At any time the QF is sold, leased, assigned, or otherwise transferred, the seller or lessee of the QF shall notify Sierra Electric Cooperative and this agreement may be terminated by Sierra Electric Cooperative's option regardless of whether such transfer occurs during the original term or any renewal thereof. Such termination may be made with five (5) days written notice by Sierra Electric Cooperative.

(4) Should the producer default in the performance of any of the producer's obligations hereunder, Sierra Electric Cooperative may suspend interconnection, purchases, or both; and if the default continues for more than 90 days after written notice by Sierra Electric Cooperative to the producer, Sierra Electric Cooperative may terminate this agreement. Termination or suspension shall not affect the obligation of Sierra Electric Cooperative to pay for energy already delivered or of the producer to reimburse interconnection costs, or any cost then accrued. Upon termination, all amounts owed Sierra Electric Cooperative will become payable immediately.

E. Easements and Right-of-Way.

- (1) The producer hereby agrees to grant at no expense to Sierra Electric Cooperative, all easements and rights-of-way necessary for Sierra Electric Cooperative to install, operate, maintain, replace, and remove Sierra Electric Cooperative metering and interconnection facilities, including, but not limited to, adequate and continuous access rights to property owned by the producer.
- (2) The producer agrees to execute and deliver all documents Sierra Electric Cooperative shall deem necessary to enable Sierra Electric Cooperative to obtain and record such easements and rights-of-way.
- (3) If any part of the interconnection facilities is to be installed on property owned by any person who is not a party to this agreement, the producer shall, at its expense, obtain from the owner of such property in the name of Sierra Electric Cooperative, and in a form satisfactory to Sierra Electric Cooperative, all necessary easements and rights-of-way for Sierra Electric Cooperative to install, operate, maintain, replace, and remove the interconnection facilities.
- (4) Sierra Electric Cooperative shall have no duty or responsibility to acquire any easements or rights-of-way necessary to connect the QF to Sierra Electric Cooperative system. If necessary easements and rights-of-way are not obtained on terms agreeable to Sierra Electric Cooperative, this agreement may be terminated by Sierra Electric Cooperative by giving written notice of such intention to the producer within a reasonable time from the date of this agreement.
- **F. Meter Installation**. The producer will be metered by a meter or meters as determined by Sierra Electric Cooperative who may install, at its option and expense, magnetic tape recorders in order to obtain load research information. The producer shall supply, at its own expense, a suitable location for all meters and associated equipment. Such location must conform to Sierra Electric Cooperative's meter location policy. The following metering options will be offered by Sierra Electric Cooperative:
- (1) **Load Displacement Option.** Sierra Electric Cooperative will interconnect with the customer using a single meter which will be ratcheted and would only measure the flow of energy to the producer. Billing to the producer will be through a Sierra Electric Cooperative approved tariff rate applicable to the

service provided to the QF. There will be no additional customer charge and no payment by Sierra Electric Cooperative for any excess power which might be generated by the QF.

(2) **Net Metering Option.**

- (a) Sierra Electric Cooperative shall install the metering necessary to determine the net energy delivered from producer to Sierra Electric Cooperative or the net energy delivered from Sierra Electric Cooperative to producer for each time-of-use or single rate period, as applicable, during a billing period.
- (b) The net energy delivered from producer to Sierra Electric Cooperative shall be purchased by Sierra Electric Cooperative at Sierra Electric Cooperative's applicable time-of-use or single period energy rate, as described in Subsection B of 17.9.570.11 NMAC, and filed with the NMPRC. Producer shall be billed for all net energy delivered from Sierra Electric Cooperative in accordance with the tariff that is applicable to the producer absent the QF generation. An additional customer charge to cover the added costs of billing and administration may be included in the tariff. At the end of the billing period, Sierra Electric Cooperative shall net all charges owed to Sierra Electric Cooperative by producer and all payments owed by Sierra Electric Cooperative to producer. If a net amount is owed to producer for the billing period, and is less than \$50, the payment amount may be carried over to the following billing period. If a net amount is owed to producer and is \$50 or more, Sierra Electric Cooperative shall make payment to producer prior to the end of the next billing period.
- (c) If provision of the net metering option requires metering equipment and related facilities that are more costly than would otherwise be necessary absent the requirement for net metering, the producer shall pay all incremental costs associated with installing the more costly metering equipment and facilities.

(3) Simultaneous Buy/Sell Option.

- (a) Sierra Electric Cooperative will install the metering necessary to determine separately 1) all of the energy produced by producer's generator and 2) all of the power consumed by the producer's loads. Sierra Electric Cooperative will purchase all energy produced at Sierra Electric Cooperative's applicable time-of-use or single period energy rate, as described in Subsection B of 17.9.570.11 NMAC for such purchases, and as filed with and approved by the NMPRC. The producer shall purchase all power consumed at its normally applicable tariff rate. An additional customer charge to cover the added costs of billing and administration may be included.
- (b) If provision of the simultaneous buy/sell option requires metering equipment and related facilities that are more costly than would otherwise be necessary absent the requirement for simultaneous buy/sell metering, the producer shall pay all incremental costs associated with installing the more costly metering equipment and facilities.
- (4) All meter standards and testing shall be in compliance with Sierra Electric Cooperative rules and regulations as approved by the NMPRC.

The metering configuration shall be one of Sierra Electric Cooperative standard metering configurations as set out in Exhibit E and mutually agreeable to the parties or any other metering configuration mutually agreeable to the parties. The agreed upon configuration is shown on Exhibit B. Service by Sierra Electric Cooperative to the producer shall be in accordance with the Sierra Electric Cooperative's articles, bylaws and regulations and in accordance with its tariffs filed with the NMPRC, the terms and conditions of which shall be unaffected by this agreement.

- G. **Operation.** The producer shall notify Sierra Electric Cooperative before the initial energizing and start-up testing of the facility, and Sierra Electric Cooperative shall have the right to have a representative present at such test. In the event the QF and the producer are in compliance with all provisions of this agreement, Sierra Electric Cooperative shall give written authorization to the producer to operate the QF. Written authorization to operate the QF or approval of any modification thereto shall be construed neither as a confirmation or endorsement of the design of the QF, nor as an endorsement, warranty, guarantee or representation concerning the safety, operating characteristics, durability or reliability of the QF. Notwithstanding such authorization, or the failure to give the same, Sierra Electric Cooperative shall not be responsible or liable for the strength, details of design, defects, outages, adequacy, operation or capacity of the QF to producer or any third party[ies]. Each party shall construct, operate and maintain its system and facilities in compliance with the interconnection and safety standards as set out in Exhibit D.
- (1) Suspension. The load break disconnect switch provided by the producer may be opened and secured with a Sierra Electric Cooperative owned padlock without prior notice to the producer in the event of:
 - (a) a Sierra Electric Cooperative system emergency.
- (b) evidence showing the producer's QF to be hazardous to Sierra Electric Cooperative's system or customers.
- (2) Sierra Electric Cooperative will endeavor to notify the producer of its intent to open the switch if:
- (a) there is evidence that the producer's QF is interfering with service to other Sierra Electric Cooperative customers or interfering with the operation of Sierra Electric Cooperative's equipment. The producer may be reconnected by Sierra Electric Cooperative when the producer makes the necessary changes to comply with the standards required by this agreement.
- (b) there is a failure of the producer to adhere to this agreement.
- (c) it is necessary to assure the safety of Sierra Electric Cooperative personnel.
- (d) suspension of service is otherwise necessary and allowed under Sierra Electric Cooperative's rules and regulations as approved by the NMPRC. The producer shall notify Sierra Electric Cooperative prior to making any modifications to the QF or to the interconnection between the QF and Sierra Electric Cooperative. The producer must receive approval from Sierra

Electric Cooperative prior to proceeding with such modifications. As a result of such modifications, the producer shall permit Sierra Electric Cooperative, at any time, to install or modify any equipment, facility or apparatus necessary to protect the safety of its employees or to assure the accuracy of its metering equipment. The cost of the above shall be borne by the producer. Approval of a modification of a QF shall be construed neither as a confirmation or endorsement of the modification nor as an endorsement, warranty, quarantee or representation concerning the safety, operating characteristics, durability or reliability of the QF. Notwithstanding such approval, or the failure to give the same, Sierra Electric Cooperative shall not be responsible or liable for the strength, details of design, defects, outages, adequacy, operation or capacity of the QF to producer or any third party[ies]. Sierra Electric Cooperative shall have the right to disconnect the QF if it has been modified without Sierra Electric Cooperative authorization. The producer shall cooperate with load management plans and techniques as ordered or approved by the NMPRC and the service to be furnished by Sierra Electric Cooperative hereunder may be modified as required to conform thereto.

- **H. 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 nonaction 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.]

I. Indemnity.

- (1) Each party shall indemnify and save the other party harmless from liability, loss, costs, and expenses on account of death or injury to persons or damage or destruction of property occasioned by the negligence of the indemnifying party or its agents, officers, employees, contractors, licensees or invitees, or any combination thereof, except to the extent that such death, injury, damage, or destruction resulted from the negligence of the other party. [The indemnity in favor of Sierra Electric Cooperative shall extend to and indemnify the distribution cooperative, its officers, directors, agents, employees and contractors.] Provided, however, that:
- (a) each party shall be solely responsible for the claims or any payments to any employee or agent for injuries occurring in connection with their employment or arising out of any Workmen's Compensation Law or Occupational Disease Disablement Law;
- (b) Sierra Electric Cooperative shall **not** be liable for any loss of earnings, revenues, indirect or consequential damages or injury which may occur to the producer as a result of interruption or partial interruption (single-phasing) in delivery of service hereunder to producer or by failure to receive service from Producer by reason of any cause whatsoever, including negligence; and
- (c) the provisions of this subsection on indemnification shall not be construed so as to relieve any insurer of its obligation to pay any insurance proceeds in accordance with the terms and conditions of any valid insurance policy.
- (2) The indemnifying party shall pay all costs and expenses incurred by the other party in enforcing the indemnity under this agreement including reasonable attorney fees.
- **J. Dedication**. An undertaking by one party to another party under any provision of this agreement shall not constitute the dedication of such party's system or any portion thereof to the public or to the other party and any such undertaking shall cease upon termination of the party's obligations herein.
- **K.** Status of Producer. In performing under this agreement, the producer shall operate as or have the status of an independent contractor and shall not act as or be an agent, servant, or employee of Sierra Electric Cooperative.
- **L. Waiver**. Any waiver at any time by either party of its rights with respect to a default under this agreement, or with respect to any other matters arising in connection with this agreement, shall not be deemed a waiver with respect to any subsequent default or other matter.
- **M.** Assignment. This agreement and all provisions hereof shall inure to and be binding upon the respective parties hereto, their personal representatives, heirs, successors, and assigns. Producer shall not assign this

agreement or any part hereof without the prior written consent Sierra Electric Cooperative; otherwise this agreement may be terminated pursuant to Paragraph (3) of Subsection D of this agreement.

N. Notices. Any payments, notices, demands or requests required or authorized by this agreement shall be deemed properly given if personally delivered or mailed postage prepaid to the address provided by producer to Sierra Electric Cooperative for regular account billing purposes and other regular notices, and to or upon Sierra Electric Cooperative at:

Sierra Electric Cooperative 610 Hwy 195 PO Box 290 Elephant Butte, NM 87935

The designation of the persons to be notified, or the address thereof, may be changed by notice in writing by one party to the other. Routine notices and notices during system emergency or operational circumstances may be made in person or by telephone.

- O. Energy Purchase Price and Metering Option. All electric energy delivered and service rendered hereunder shall be delivered and rendered in accordance with the applicable rate schedules and tariffs attached hereto and made a part hereof by reference. Producer has selected the NET METERING option which is more fully explained in Subsection F of 17.9.570.15 NMAC. It is understood and agreed, however, that said rates are expressly subject to change by any regulatory body having jurisdiction over the subject matter of this agreement. If a new rate schedule or tariff is approved by the proper regulatory body, the new rate schedule or tariff shall be applicable to this agreement upon the effective date of such rate schedule or tariff.
- **P.** Insurance. In the event the NMPRC or other regulatory body allows Sierra Electric Cooperative to require the producer to carry liability insurance covering the QF, the producer agrees to obtain such insurance. If insurance is required, the same requirement will be invoked for all producers in a non-discriminatory manner. <u>ALL PRODUCERS ARE STRONGLY URGED TO OBTAIN LIABILITY INSURANCE TO COVER RISKS, LIABILITIES AND CONSEQUENCES WHICH MAY ARISE AS A RESULT OF INTERCONNECTING A QF TO A UTILITY SYSTEM.</u>
- **Q. Miscellaneous**. This agreement and any amendments thereto, including any tariffs made a part hereof, shall at all times be subject to such changes or modifications as shall be ordered from time to time by any regulatory body or court having jurisdiction to require such changes or modification. This agreement (and any tariffs incorporated herein) contains all the agreements and representations of the parties relating to the interconnection and purchases

contemplated and no other agreement, warranties, understandings or representations relating thereto shall be binding unless set forth in writing as an amendment hereto.

NOTE: Section "I. Indemnity" is applicable to all interconnection agreements to the extent permitted by law.

In witness thereof, the parties have executed this agreement on the date set forth herein above.

Date:	PRODUCER	
		Printed Name(s) of Sierra Electric Member
Ву:		
•	Signature of Sierra I	Electric Member(s) as it Appears on Account
Date:	SIERRA ELE	
		Printed Name of Authorized Representative
Ву:		Title:
	Signature	
Account	t # and Map Reference L	Location by Sierra Electric Cooperative:
Account	t No	
GIS Ma	p Reference:	

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
P. O. Box 1269
1120 Paseo de Peralta
Santa Fe, New Mexico 87504

Publication Date: July 29, 2008

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

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 - 11.1 Power Quality
 - 11.2 Disconnection
- 12. Definitions

EXHIBITS

- 1. Interconnection Applications
 - a. Simplified Interconnection Application
 - b. Standard Interconnection Application
- 2. Certification Codes and Standards
- 3. Terms and Conditions for Interconnection
 - a. Terms and Conditions for Simplified Interconnection
 - b. Standard Interconnection Agreement

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

Interconnection Review Process*	Application Type	Likely DG System Size
Simplified Interconnection Process	Simplified Application (See Exhibit 1A)	$0 \le 10 \text{ kW}$
Fast Track Process with or without Supplemental Review	Standard Application (See Exhibit 1B)	$> 10 \text{ kW \& } \le 2.0 \text{ MW}$
Full Interconnection Study Process	Standard Application (See Exhibit 1B)	$>2.0 \text{ MW & } \le 10 \text{ MW}$
Case Specific Study Process	Standard Application (See Exhibit 1B)	>10 MW

^{*}These guidelines are provided to indicate the review process that <u>mos</u>t applications will follow. The technical requirements in the screening process will determine which review process <u>must</u> be followed. Neither the type of application nor the system size <u>will guarantee</u> 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 <u>most</u> applications will follow. The technical requirements in the screening process will determine which review process <u>must</u> 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

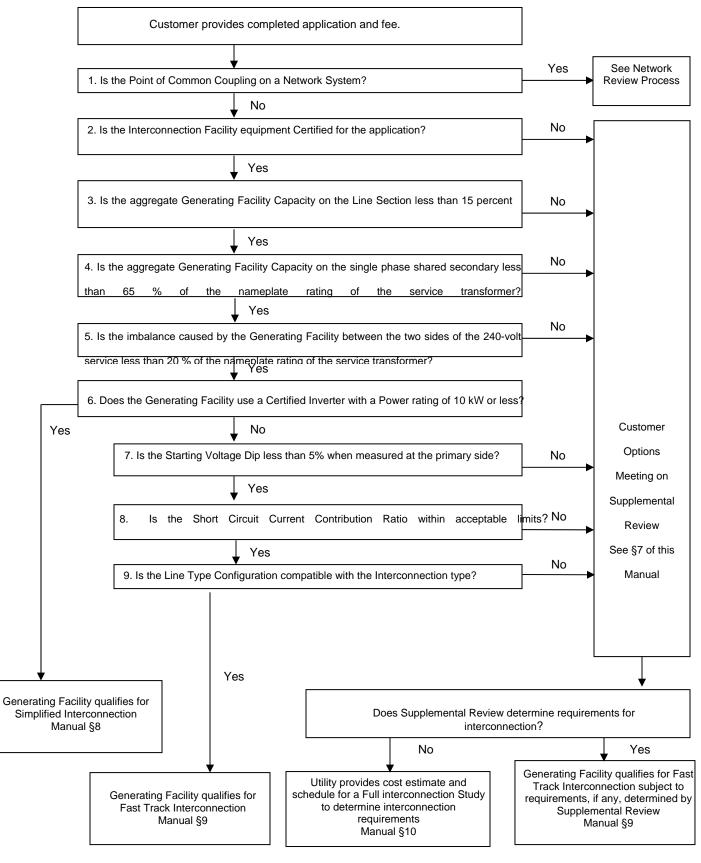
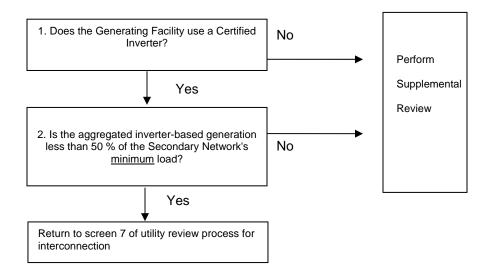


Figure 2: Utility Review Process for Interconnection to Network Systems



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 Equipment 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 \pm 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 1A

Simplified Interconnection Application Certified Inverter-Based Generating Facilities With a Rated Capacity up to and including 10kW AC

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required.

Processing Fee
A fee of \$50 must accompany this Application.
Interconnection Customer
Name:
Contact Person:
Address:
City: State: Zip:
Telephone (Day): (Evening):
Fax: E-Mail Address:
Engineering Firm (If Applicable):
Contact Person:
Address:
City: State: Zip:
Telephone:
Fax: E-Mail Address:
Contact (if different from Interconnection Customer)
Name:
Address:
City: State: Zip:
Telephone (Day): (Evening):

Fax: E-Mail Address:

Owner of the facility (include % ownership by any electric utility):
Generating Facility Information:
Location (if different from above):
Electric Service Company:
Account Number:
Generator 10 kW Inverter Process:
Inverter Manufacturer:Model
Nameplate Rating: (kW) (kVA) (AC Volts)
Single Phase Three Phase
System Design Capacity: (kW) (kVA)
Prime Mover: Photovoltaic, Reciprocating Engine, Fuel Cell, Turbine, Other (describe)
Energy Source: Solar, Wind, Hydro, Diesel, Natural Gas, Fuel Oil, Other (describe)
Is the equipment UL1741 Listed? Yes No
If Yes, attach manufacturer's cut-sheet showing UL1741 listing
Estimated Installation Date: Estimated In-Service Date:

The 10 kW Inverter Process is available only for inverter-based Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Attachment 3 of the Generator Interconnection Procedures (SGIP), or the QRU has reviewed the design or tested the proposed Generating Facility and is satisfied that it is safe to operate.

List components of the Generating Facility equipment package that are currently certified: Equipment Type Certifying Entity 1. 2. 3. 4. 5. Interconnection Customer Signature I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Generating Facility No Larger than 10kW contained in the New Mexico Interconnection Manual, Exhibit 3A and return the notice of completion when the Generating Facility has been installed. Signed: **Utility Signature** The undersigned Utility agrees to abide by the Terms and Conditions contained in the New Mexico Interconnection Manual, Exhibit 3A and that optional paragraph 6.0 Indemnification \square applies \square does not apply. Signed:

EXHIBIT 1B

Standard Interconnection Application Generating Facilities with Rated Capacities Greater Than 10 kW

	Customer-Generator applicant ("Applicant") hereb	
	eater than 10 kW interconnected with the	
	ritten applications should be submitted by mail, e-mail or f lows:	ax to [insert utility name], as
	[Utility]:	
rec	a application is a Complete Application when it provide quired below. (Additional information to evaluate a request quired and will be so requested from the Interconnection application is deemed complete).	t for interconnection may be
SE	CTION 1. APPLICANT INFORMATION	
Le	gal Name of Interconnecting Applicant (or, if an Individua	l. Individual's Name)
	me:	2, 11.01 (10.001 8 1 (0.110)
	ailing Address:	
Cit	ty:; State:;	Zip Code:
	cility Location (if different from above):	
Te	lephone (Daytime):	
Te	lephone (Evening):	
Fa	x Number:	
E-1	Mail Address:	
Ut	ility	
	isting Account Number, if generator to be interconnected the Customer side of a utility revenue meter)	
Ту	pe of Interconnect Service Applied for (choose one): Energy Only, Load Response (no export)	

SECTION 2. GENERATOR QUALIFICATIONS

Individual Generator Power Factor

Data apply only to the Generating Facility, not the Interconnection Facilities. Energy Source: ___ Solar, ___ Wind, ___ Hydro, ___ Hydro Type (e.g. Run-of-_____, ___Diesel, ___ Natural Gas, ___ Fuel Oil, ____ Other (state type) _____ Prime Mover: ___ Fuel Cell, ___ Recip. Engine, ___ Gas Turbine, ___ Steam Turbine, ___ Microturbine, ___ PV, ___ Other Type of Generator: ____Synchronous ____Induction ____ Inverter Generator Nameplate Rating: ____kW (Typical); Generator Nameplate kVA: Interconnection Customer or Customer-Site Load: _____kW (if none, so state) Typical Reactive Load (if known): Maximum Physical Export Capability Requested: _____ kW List components of the Generating Facility Equipment Package that are currently certified: Equipment Type Certifying Entity 1. 2. 3. 4. 5. Is the prime mover compatible with the certified protective relay package? ____Yes ____No Generator (or solar collector) Manufacturer, Model Name & Number: Version Number: Nameplate Output Power Rating in kW: (Summer) _____; (Winter) _____ Nameplate Output Power Rating in kVA: (Summer) _____; (Winter) _____

Rated Power Factor: Leading: _____Lagging: _____

Total Number Application:				-			
Inverter Ma	anufacturer,	Model	Name	&	Number	(if	used):
List of adjus	stable set	points for	the pro	tective	equipment	or	software:
Note: A compl Interconnection		ystems Load	d Flow da	ta sheet	must be su	pplied	l with the
	fault contribut Characteristics	tion current:				S?	
	lity Character ency: Grounding Re		-				
Direct Axis Direct Axis Negative Se Zero Sequer KVA Base: Field Volts:	Synchronous Transient Rea Subtransient I quence Reacta nce Reactance	ctance, X' d: Reactance, X ance, X2: , X0:	:PP.	P.U.			
I2t or K (He Rotor Resist Stator Resist Stator React Rotor React Magnetizing Short Circui Exciting Cur Temperature Frame Size: Design Lette Reactive Por Reactive	rators: Dwer (kW): eating Time Co tance, Rr: tance, Rs: ance, Xr: g Reactance, X t Reactance, X rrent: er Rise: er: wer Required wer Required	Cm: Kd": In Vars (No In Vars (Full					

Note: Please contact the Utility prior to submitting the Interconnection Application to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only:

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

SECTION 3. INTERCONN	ECTION F.	ACILITIES	INFORMAT	ION	
Will a transformer be uYesNo	sed betwe	en the ger	nerator and	the Point of	Common Coupling?
Transformer Data (If Ap	plicable, f	for Interco	nnection Cu	stomer-Owi	ned Transformer):
Is the transformer: _					
Transformer Impeda	nce:	percen	t on	kVA B	lase
If Three Phase:					
Transformer Primary	/: V	olts	_ Delta	Wye	_ Wye Grounded
Transformer Second	ary:	Volts	Delta	Wye	Wye Grounded
Transformer Tertiary					
Transformer Fuse Data (
	manufact	urer's Min	imum Melt	and Total C	Clearing Time-Current
Curves)					
Manufacturer: _			_ Type:		Size:
Speed:					
Interconnecting Circuit	Breaker (it	f applicabl	e):		
				ype:	
Load Rating (Amps):	Interrup	ting Rating	g (Amps): _	Trip Speed
(Cycles):					
Interconnection Protecti	ve Relays	(If Application	able):		
If Microprocessor-Contr	olled:				
List of Functions and Ac	ljustable S	Setpoints fo	or the protec	ctive equipm	ent or software:
Setpoint Function	Min	imum	Max	ximum	
1.					
2.					
3.					
4.					
5.					
6.					
If Discrete Components:					
(Enclose Copy of any Pr		ime-Overc	urrent Coor	dination Cur	rves)
	-				Proposed Setting:

Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting:
Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting:
Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting:
Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting:
Current Transform (Enclose Copy of Manufacturer: Type: Accuracy C Manufacturer: Type: Accuracy C Potential Transfor Manufacturer:	ner Data (If App Manufacturer's Class: Proposed F Class: Proposed F rmer Data (If Ap	licable): Excitation and Ratio Correct Ratio Connection: Ratio Connection:	
Manufacturer:	-	Ratio Connection:	
SECTION 4. GENE	RAL INFORMAT	ION	
1.0		<u>e</u>	g the configuration of all , and protection and control
_	cility is larger th	ned and stamped by a licen an 50 kW. Is One-Line Dia	sed Professional Engineer if gram Enclosed?
			ecise physical location of the map or other diagram or
*	-	interface equipment on p Interconnection	roperty (include address if Customer's address)
	ntrol schemes. Is	entation that describes and s Available Documentation	details the operation of the Enclosed?
	otential circuits, ngs Enclosed?		control circuits, relay current ircuits (if applicable). Are

SECTION 5. APPLICANT SIGNATURE

I hereby certify that, to the best of my knowledge, all the information provided in the Interconnection Application is true and correct. I also agree to install a Warning Label provided by (utility) on or near my service meter location. Generating systems must be compliant with IEEE, NEC, ANSI, and UL standards, where applicable. By signing below, the Applicant also certifies that the installed generating equipment meets the appropriate preceding requirement(s) and can supply documentation that confirms compliance.

Signature of Applicant:	
Date:	
SECTION 6. INFORMATION REQUIRE	D PRIOR TO PHYSICAL INTERCONNECTION
(Not required as part of the application)	ation, unless available at time of application.)
	Firm:
License No.:	
Mailing Address:	
City: State:	
Telephone:	
Installation Date:	
Interconnection Date:	
Signed (Inspector – if required):	
Date:	_
	a copy of the final inspection certificate may be

EXHIBIT 2

Certification Codes and Standards

IEEE1547-2003 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 Withstand 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 this 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 ("Agreem	nent") is entered	into by
and	between				("Utility")	and
				("Interconnection	Customer").	The
Inter	connection (Custome	r and the Utility	are sometimes referr	ed to in this Agi	reement
jointl	y as "Parties	or indi	vidually as a "Pa	arty".		

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 purchased 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 Interconnection 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 IV.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 disconnected 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) <u>Costs:</u> 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) <u>Cooperation and Coordination:</u> 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) <u>Disconnection of Unit</u>: 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) <u>Permits and Approvals:</u> 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 Regulation 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) <u>Assignment:</u> 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) <u>Amendment and Modification:</u> 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) <u>Confidential Information</u>: 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

Interconnection Customer

IN WITNESS WHEREOF, 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.

Sierra Electric Cooperative, Inc. 2nd Revised Form No. 7

NMPRC RULE 568 EXHIBIT 1B Standard Interconnection Application Generating Facilities with Rated Capabilities Greater Than 10 kW

A Customer-Generator applicant ("Applicant") hereby makes application to(utility) to install and operate a generating facility with rated capacity greater than 10 kW interconnected with theutility system.
Written applications should be submitted by mail, e-mail or fax to Sierra Electric Cooperative, Inc., as follows:
Sierra Electric Cooperative, Inc.
PO Box 290, Elephant Butte, NM 87935
Fax: 575-744-5819
E-Mail Address: sierra@secpower.com
Contact Title: Operations Manager
An application is a Complete Application when it provides all applicable information required below (Additional information to evaluate a request for interconnection may be required and will be so requested from the Interconnection Applicant by Utility after the application is deemed complete).
SECTION 1. APPLICATION INFORMATION
Legal Name of Interconnecting Applicant (or if an Individual, Individual's Name)
Name:
Mailing Address:
City, State, Zip:
Facility Location (if different from above):
Telephone (Day): (Evening):
Fax: E-Mail Address
Utility:
(Existing Account Number, if generator to be interconnected on the Customer side of a utility revenue meter)
Type of Interconnect Service Applied for (choose one): Network Resource, Energy Only, Load Response (no export) Net metering

SECTION 2. GENERATOR QUALIFICATIONS

Data ap	oply only to	o the Generating	g Facility, no	ot the Interco	onnection Facilities.		
						g. Run of River):	
	Mover: V, O		Recip.	Engine,	Gas Turbine,	Steam Turbine,	Microturbine
Type of	f Generato	or: Synchi	ronous,	_ Induction,	Inverter		
Genera	itor Name	plate Rating:		kW (Typi	cal); Generator Nam	neplate kVa:	
Intercor	nnection C	Customer or Cus	tomer-Site I	Load:		kW (if none, so	state)
Typical	Reactive	Load (if known):					
Maximu	um Physic	al Export Capab	ility Reques	sted:	k\	W	
List Cor	mponents	of the Generatir	ng Facility E	quipment P	ackage that are curi	rently certified:	
		Equipment Type			Certifying Entity		
_							
					e relay package?		
`	Yes	_ No					
Genera	itor (or sol	ar collector)					
	Manufact	turer, Model Nar	ne & Numb	er:			
	Version N	Number:					
	Namepla	te Output Power	r Rating in k	:W:			
	(Summer	r)	(Winte	er)			
	Namepla	te Output Power	r Rating in k	:Va:			
	Summer))	(Winte	er)			
Individu	ual Genera	ator Power Facto	or				
	Rated Po	ower Factor: Lea	ding:		Laggir	ıg:	

Total Number of Generators to be interconnected purs Elevation:;Single Phase; Three	
Inverter Manufacturer, Model Name & Number (if used):	
List of adjustable set points for the protective equipment of	r software:
Note: A completed Power Systems Load Flow data sheet	must be supplied with the Interconnection Application.
Generating Facility Characteristic Data (for inverter-based	machines):
Max design fault contribution current:Harmonics Characteristics:Start-up Requirements:	
Generating Facility Characteristic Data (for rotating machin	<u>nes):</u>
RPM Frequency:	
(*) Neutral Grounding Resistor (If Applicable):	
Synchronous Generators: Direct Axis Synchronous Reactance, Xd: Direct Axis Transient Reactance X'd: Direct Axis Subtransient Reactance X''d: Negative Sequence Reactance, X2: Zero Sequence Reactance, X0: KVA Base: Field Volts: Field Amperes:	P.U. P.U. P.U. P.U.
Induction Generators:	
Motoring Power (kw):	_
I2t or K (Heating Time Constant):	_
Rotor Resistance, Rr:	_
Stator Resistance Rs:	_
Stator Reactance Xs:	_
Rotor Reactance, Xr:	-
Magnetizing Reactance, Xm:	_
Short Circuit Rectance, Xd"":	_
Exciting Current:	
Temperature Rise:	
Frame Size:	
Design Letter:	
Reactive Power Required in Vars (No Load):	
Reactive Power Required in Vars (Full Load):	
Total Rotating Inertia, H:	

Note: Please contact the Utility prior to submitting the Interconnection Application to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only:

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

SECTION 3. IN	TERCONNECT	ION FACILITIES IN	IFORMATION		
Will a transforme	er be used betv	veen the generator	and the Point of C	ommon Coupling	?
Yes	_ No				
Transformer Date	ta (If Applicable	e, for Interconnection	n Customer –Own	ed Transformer):	
Is the tra	ansformer:	single phase th	rree phase? Size:		kVa
Transfo	rmer Impedend	e: perce	ent on	kVa Base	
If Three	Phase:				
Transfo	rmer Primary: _	Volts	Delta	Wye	Wye Grounded
Transfo	rmer Secondar	y:Volts	Delta	Wye	Wye Grounded
Transfo	rmer Tertiary: _	Volts	Delta	Wye	Wye Grounded
Transformer Fus	se Data (If App	licable, for Interconr	nection Customer-	Owned Fuse):	
(Attach	copy of fuse m	anufacturer's Minim	um Melt and Total	Clearing Time-C	urrent Curves)
Manufad	cturer:		Туре:	Size:	Speed
Interconnecting Manufacturer: (amps)			Load Ratin 	g (amps):	Interrupting Rating
Interconnection	Protective Rela	ays (If Applicable):			
If Microprocesso	or-Controlled:				
List of Functions	and Adjustabl	e Setpoints for the p	orotective equipme	ent or software:	
Setpoint	Function	Minimum	Maximum		
1.					
2.					
3.					
4.					
5.					
6.					
If Discrete Comp	onents:				
(Enclose Copy of	of any Propose	d Time-Overcurrent	Coordination Curv	ves)	
Manufacturer: _		Type:	Style/Ca	talog No.:	Proposed Setting

Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting
Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting
Manufacturer:	Туре:	Style/Catalog No.:	Proposed Setting
Manufacturer:	Type:	Style/Catalog No.:	Proposed Setting
Current Transformer Data (If App	olicable):		
(Enclose Copy of Manufacturer's	Excitation and R	atio Correction Curves)	
Manufacturer:			
Type: Accuracy Class:	Proposed Ra	atio Connection:	
Manufacturer:			
Type: Accuracy Class:	Proposed Ra	atio Connection:	
Potential Transformer Data (If Ap	pplicable):		
Manufacturer:			
Type: Accuracy Class:	Proposed Ra	atio Connection:	
Manufacturer:			
Type: Accuracy Class:	Proposed Ra	atio Connection:	
SECTION 4. GENERAL INFORM	MATION		
Enclose copy of site electrical on current and potential circuits, and		nowing the configuration of all Gencontrol schemes.	erating Facility equipment,
This one-line diagram must be si larger than 50 kW. Is One-Line [ed by a licensed Professional Engird?	neer if the Generating Facility is
Yes No			
Enclose copy of any site docume Facility (e.g. USGS topographic r		ates the precise physical location or documentation).	of the proposed Generating
Proposed location of protective in Interconnection Customer's addr		nt on property (include address if o	different from the
Enclose copy of any site docume schemes. Is Available Documen		ribes and details the operation of t	he protection and control
Yes No			
		ection and control circuits, relay cure). Are Schematic Drawings Enclo	
Yes No			

SECTION 5. APPLICANT SIGNATURE

I hereby certify that, to the best of my knowledge, all the information provided in the Interconnection Application is true and correct. I also agree to install a Warning Label provided by Sierra Electric Cooperative, Inc. on or near my service meter location. Generating systems must be compliant with IEEE, NEC, ANSI, and UL standards, where applicable. By signing below, the Applicants also certifies that the installed generating equipment meets the appropriate preceding requirement(s) and can supply documentation that confirms compliance.

Signature of Applicant:							
Date:							
SECTION 6: INFORMATION REQUIRED PRIOR TO PHYSICAL INTERCONNECTION							
(Not required as part of the application, unle	ess available at tir	me of application.)					
Installing Electrician:		Firm:					
License No.:							
Mailing Address:							
City:	State:	Zip:					
Telephone:							
Installation Date:							
Interconnection Date:							
Signed (Inspector – if required):							
Date:							
(In lieu of signature of Inspector, a copy of the	final inspection cert	tificate may be attached)					