PUBLIC SERVICE COMPANY OF NEW MEXICO

APPLICATION FOR INTERCONNECTION FOR GENERATORS, COGENERATORS AND SMALL POWER PRODUCERS RATED GREATER THAN 10 kW UP TO 10 MW [1]

An application fee must accompany this Application for Interconnection. Please attach a check made payable to PNM in the appropriate amount at the time this Application for Interconnection is submitted.

Submit application to:

PNM Interconnection Department
414 Silver Ave. SW - ES10
Albuquerque, NM 87102

CHECK ONE

☐ Application for interconnection of a generator, cogenerator, or small power producer with a rated capacity greater than 10 kW and less than or equal to 100 kW - $ 100.00

☐ Application for interconnection of a generator, cogenerator, or small power producer with a rated capacity greater than 100 kW and less than or equal to 10 MW - $ 100.00 + $1.00 for every kW above 100 kW

An Application is complete when it provides all applicable information required below. Additional information to evaluate an Application for Interconnection may be required and will be requested from the Interconnection Applicant if necessary.

IT IS STRONGLY RECOMMENDED THAT THE APPLICANT OBTAIN PNM'S APPROVAL OF THE FINAL DESIGN PRIOR TO PURCHASING EQUIPMENT.

If additional space is required, please attach documentation to this Application.

APPLICANT INFORMATION	
LEGAL NAME OF INTERCONNECTING APPLICANT	
MAILING ADDRESS (STREET, CITY, STATE, ZIP CODE)	
FACILITY ADDRESS (IF DIFFERENT FROM ABOVE)	
PHONE (DAYTIME) ( )	PHONE (EVENING) ( )
FAX ( )	EMAIL
EXISTING ACCOUNT NUMBER (IF GENERATOR WILL BE INTERCONNECTED ON THE CUSTOMER SIDE OF A UTILITY REVENUE METER)	
TYPE OF INTERCONNECTION SERVICE APPLIED FOR (CHOOSE ONE): NETWORK RESOURCE ☐ ENERGY ONLY ☐ LOAD RESPONSE (NO EXPORT) ☐ NET METERING ☐	

[1] This Application may be adapted for use in the case of Applications for other particularized systems, e.g. cogenerators and small power producers rated 10 kW or less that do not utilize a certified inverter.

CONTACT PERSON (If different from Applicant)	
NAME	
ADDRESS (STREET, CITY, STATE, ZIP CODE)	
PHONE (DAYTIME) ( )	PHONE (EVENING) ( )
FAX ( )	EMAIL

CONTRACTOR/ENGINEERING FIRM	
FIRM:	
CONTACT PERSON NAME:	
ADDRESS (STREET, CITY, STATE, ZIP CODE):	
INSTALLING ELECTRICIAN:	LICENSE NUMBER:
PHONE (DAYTIME): ( )	PHONE (EVENING): ( )
FAX: ( )	EMAIL:

CONSTRUCTION DATES	
ESTIMATED START DATE:	ESTIMATED COMPLETION DATE:

GENERATOR QUALIFICATIONS

GENERATING FACILITY	
ENERGY SOURCE: SOLAR ☐ WIND ☐ HYDRO ☐ DIESEL ☐ NATURAL GAS ☐ FUEL OIL ☐ OTHER ☐ (STATE TYPE):	
IF HYDRO, STATE TYPE:	
PRIME MOVER: FUEL CELL ☐ RECIP. ENGINE ☐ GAS TURBINE ☐ STEAM TURBINE ☐ MICROTURBINE ☐ PV ☐ OTHER ☐ (STATE TYPE):	
IS THE PRIME MOVER COMPATIBLE WITH THE CERTIFIED PROTECTIVE RELAY PACKAGE? YES ☐ NO ☐	
TYPE OF GENERATOR: SYNCHRONOUS ☐ INDUCTION ☐ INVERTER ☐	
GENERATOR FACILITY RATED CAPACITY: kW (TYPICAL)	GENERATOR FACILITY NAMEPLATE: kVA
INTERCONNECTION CUSTOMER OR CUSTOMER-SITE LOAD: kW (if none, so state)	
TYPICAL REACTIVE LOAD (IF KNOWN):	
MAXIMUM PHYSICAL EXPORT CAPABILITY REQUESTED: kW	

IF APPLICABLE:

Federal Energy Regulatory Commission Notice of Qualifying Facility Status docket number (please attach letter of notification)

Federal Energy Regulatory Commission Application for Qualifying Facility status docket number (please attach letter of application)

GENERATING FACILITY EQUIPMENT LIST COMPONENTS THAT ARE CURRENTLY CERTIFIED	
EQUIPMENT TYPE	CERTIFYING ENTITY
1.	
2.	
3.	
4.	
5.	

FOR EACH GENERATOR PROVIDE THE FOLLOWING INFORMATION	
MANUFACTURER, MODEL NAME & NUMBER:	
VERSION NUMBER:	
NAMEPLATE OUTPUT POWER RATING IN kW: (SUMMER) ; (WINTER)	
GENERATOR RATED CAPACITY: kW (TYPICAL)	GENERATOR NAMEPLATE: kVA
NAMEPLATE OUTPUT POWER RATING IN kVA: (SUMMER) ; (WINTER)	
INDIVIDUAL GENERATOR POWER FACTOR: RATED POWER FACTOR: LEADING LAGGING	
TOTAL NUMBER OF GENERATORS TO BE INTERCONNECTED PURSUANT TO THIS INTERCONNECTION APPLICATION: SINGLE PHASE ; THREE PHASE	
ELEVATION:	
INVERTER MANUFACTURER, MODEL NAME, & NUMBER (IF USED):	
LIST OF ADJUSTABLE SET POINTS FOR THE PROTECTIVE EQUIPMENT OR SOFTWARE:	

GENERATING FACILITY CHARACTERISTICS DATA (FOR INVERTER-BASED MACHINES)
MAXIMUM DESIGN FAULT CONTRIBUTION CURRENT:
INSTANTANEOUS OR RMS?
HARMONICS CHARACTERISTICS:
START-UP REQUIREMENTS:

GENERATING FACILITY CHARACTERISTIC DATA (FOR ROTATING MACHINES)
RPM FREQUENCY:
NEUTRAL GROUNDING RESISTOR (IF APPLICABLE):

SYNCHRONOUS GENERATORS	
DIRECT AXIS SYNCHRONOUS REACTANCE, Xd:	P.U.
DIRECT AXIS TRANSIENT REACTANCE, X'd:	P.U.
DIRECT AXIS SUBTRANSIENT REACTANCE, X"d:	P.U.
NEGATIVE SEQUENCE REACTANCE, X2:	P.U.
ZERO SEQUENCE REACTANCE, X0:	P.U.
KVA BASE:	
FIELD VOLTS:	
FIELD AMPERES:	

INDUCTION GENERATORS
MOTORING POWER (kW):
I2T or K (HEATING TIME CONSTANT):
ROTOR RESISTANCE, Rr:
STATOR RESISTANCE, Rs:
STATOR RESISTANCE, Xs:
ROTOR REACTANCE, Xr:
MAGNETIZING REACTANCE, Xm:
SHORT CIRCUIT REACTANCE, 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: PER UNIT ON Kva BASE:

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.

INTERCONNECTION FACILITIES INFORMATION

Will a transformer be used between the generator and the Point of Common Coupling?
☐ Yes ☐ No

If interconnecting at an existing meter, please provide meter number:_____

TRANSFORMER DATA

(IF APPLICABLE, FOR INTERCONNECTION CUSTOMER-OWNED TRANSFORMER)

IS THE TRANSFORMER: ☐ SINGLE PHASE ☐ THREE PHASE? SIZE: kVA

TRANSFORMER IMPEDANCE: PERCENT ON kVA BASE

IF THREE PHASE:

TRANSFORMER PRIMARY: _____ VOLTS ☐ DELTA (☐ OPEN, ☐ CLOSE) ☐ WYE ☐ WYE GROUNDED

TRANSFORMER SECONDARY: _____ VOLTS ☐ DELTA (☐ OPEN, ☐ CLOSE) ☐ WYE ☐ WYE GROUNDED

TRANSFORMER TERTIARY: _____ VOLTS ☐ DELTA (☐ OPEN, ☐ CLOSE) ☐ WYE ☐ WYE GROUNDED

TRANSFORMER FUSE DATA

(IF APPLICABLE, FOR INTERCONNECTION CUSTOMER-OWNED FUSE)

MANUFACTURER: TYPE: SIZE: SPEED:

INTERCONNECTING CIRCUIT BREAKER

(IF APPLICABLE)

MANUFACTURER: TYPE: LOAD RATING (AMPS):

INTERRUPTING RATING (AMPS): TRIP SPEED (CYCLES):

INTERCONNECTION PROTECTIVE RELAYS

(IF APPLICABLE)

IF MICROPROCESSOR-CONTROLLED:
LIST OF FUNCTIONS AND ADJUSTABLE SETPOINTS FOR THE PROTECTIVE EQUIPMENT OR SOFTWARE:

SETPOINT FUNCTION	MINIMUM	MAXIMUM
1.		
2.		
3.		
4.		
5.		
6.		

INTERCONNECTION PROTECTIVE RELAYS

(IF APPLICABLE)

IF DISCRETE COMPONENTS:
(ENCLOSE COPY OF ANY PROPOSED TIME-OVERCURRENT COORDINATION CURVES)

MANUFACTURER	TYPE	STYLE/CATALOG NO.	PROPOSED SETTING
1.			
2.			
3.			
4.			
5.			
6.			

CURRENT TRANSFORMER DATA (IF APPLICABLE)			
ENCLOSE COPY OF MANUFACTURER'S EXCITATION AND RATIO CORRECTION CURVES			
MANUFACTURER	TYPE	ACCURACY CLASS	PROPOSED RATIO CONNECTION
1.			
2.			
3.			

POTENTIAL TRANSFORMER DATA (IF APPLICABLE)			
ENCLOSE COPY OF MANUFACTURER'S EXCITATION AND RATIO CORRECTION CURVES			
MANUFACTURER	TYPE	ACCURACY CLASS	PROPOSED RATIO CONNECTION
1.			
2.			
3.			

GENERAL INFORMATION

Please attach to this Application:

- A one-line and a three-line electrical diagram of the facility and its interconnection to the utility system showing the electrical components, protective devices, manufacturer model numbers and electrical ratings.
- For generators with a design capacity greater than 50kW, unless otherwise required by state or local code or ordinance, the diagrams must be stamped or sealed by a New Mexico Licensed Professional Electrical Engineer certifying that the design of the generator and its interconnection equipment complies with prudent electrical engineering practices and the New Mexico Interconnection Manual and NMPRC Rule 568, copies of which are available at http://www.pnm.com/customers/pv/program.htm.
- If the generating facility interconnection equipment package is not certified or if a certified equipment package has been modified, the generating facility interconnection equipment package must be reviewed and approved by a professional electrical engineer, registered in the state of New Mexico.
- A copy of any site documentation that describes and details the operation of the protection and control schemes.
- Copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and if applicable alarm/monitoring circuits, and a three-line electrical diagram that shows the three-phase connection of all the protective devices.
- The proposed operating procedure for the facility. The proposed operating procedure should describe the intended step-by-step sequence for connecting and/or disconnecting breakers and disconnects from PNM's system under normal operating conditions and contingency conditions.
- A list of the protective devices and their proposed settings.
- A copy of any site documentation that indicates the precise physical location of the proposed Generation Facility including the Point of Common Coupling (e.g. USGS topographic map of other diagram or documentation).

NOTE: The above requested attachments, in addition to the other information on this Application, represent the minimum information required by PNM to furnish the Applicant a good faith, detailed list of required modifications, Interconnection Facilities and an itemized estimate of the costs that the Applicant will have to pay PNM for interconnection. The completed Application with the above requested attachments is not sufficient for authorizing interconnected, parallel operation of the generator. Prior to authorizing parallel

operation of the generator, PNM must observe and participate in the pre-parallel inspection of the generator interconnection facilities.

A permanent and weatherproof one-line diagram and permanent and weatherproof map of the facility must be installed at the point of service connection to PNM.

Upon PNM's acceptance of the pre-parallel inspection, written authorization to operate in parallel will be provided pursuant to the interconnection agreement between the applicant and PNM.

No information in this Application will be considered confidential unless a written agreement is made with PNM prior to the submission of the Application. In no event will information on the Application, which is required by the NMPRC, be withheld from the NMPRC.

Applicant certifies that to the best of its knowledge all the information in the Application is correct.

Applicant agrees that if any material information required on this Application is missing, is incorrect, is materially changed, or is falsified, the Application may be rejected by PNM.

All Appendices and other supplemental attachments are made a part of this Application.

Applicant agrees to supply further information as PNM may reasonably require consistent with NMPRC Rule 568 and the New Mexico Interconnection Manual to determine the necessary interconnection facilities or costs.

Any additional system study that may be required will be conducted consistent to the screening process set forth in the New Mexico Interconnection Manual. PNM agrees not to perform, or contract to have a specialized engineering study performed, until Applicant is notified and pays the cost of the study.

Applicant shall be responsible for payment of all costs of interconnection. If PNM incurs any costs associated with the interconnection, Applicant shall reimburse PNM for all such costs consistent with the New Mexico Interconnection Manual.

The Interconnection Customer shall install, operate, and maintain the generating facility and the interconnection equipment in a safe manner in accordance with the rules for safety and reliability set forth in the latest editions of the *National Electrical Code*, other applicable local, state, and federal electrical codes, and prudent electrical practices.

Acceptance of this Application or any future actions by PNM are not and shall not be construed to be an endorsement or warranty of the facility, its equipment, operation, safety, or reliability.

NOTE: THIS APPLICATION DOES NOT CONSTITUTE A CONTRACT BETWEEN APPLICANT AND PNM WITH RESPECT TO THE INTERCONNECTION OF APPLICANT'S FACILITY. NO SUCH CONTRACT SHALL EXIST UNTIL AN INTERCONNECTION AGREEMENT IS EXECUTED BY APPLICANT AND PNM.

APPLICANT SIGNATURE

I hereby certify that, to the best of my knowledge and belief, all the information provided in this Interconnection Application is true and correct. I also agree to install a warning label provided by PNM 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: _____

Title:_____

Date: _____

PNM RECEIVED THIS APPICATION ON:

Received By: _____

Date: _____ Time: _____