PRELIMINARY APPLICATION FOR DER INTERCONNECTIONFACILITIES SCHEDULE:

[The following information is to be specified for each Point of Interconnection, if applicable]

PART 1

1. NAME:
2. FACILITIES LOCATION:
3. DELIVERY VOLTAGE:
4. METERING (VOLTAGE, LOCATION, LOSS ADJUSTMENT DUE TO LOCATION, AND OTHER):
LREC WILL PROVIDE ALL NECESSARY METERING EQUIPMENT FOR 120/240 VOLT
INSTALLATIONS. NO LOSS ADJUSTMENT REQUIRED FOR 120/240 VOLT INSTALLATIONS
5. NORMAL OPERATION OF INTERCONNECTION:
6. ONE LINE DIAGRAM ATTACHED (CHECK ONE): No_____ Yes_____
7. FACILITIES TO BE FURNISHED BY LREC:
2 WAY REGISTER METER AND APPROPRIATE LABLES
8. FACILITIES TO BE FURNISHED BY DG OWNER/OPERATOR:
9. COST RESPONSIBILITY:
ALL COSTS ARE THE RESPONSIBILITY OF THE OWNER/MEMBER

PRELIMINARY DER INFORMATION FORM

This application should be completed as soon as possible and returned to LREC's Customer Service representative in order to begin processing the request. *This application is used by LREC to determine the required equipment configuration for the Customer interface. Every effort should be made to supply as much information as possible.*

PART 2

OWNER/MEMBER INFORMATION

Company:			
Mailing Address:			
County:	City:	State:	Zip:
Representative:		Phone Number:	

PROJECT DESIGN/ENGINEERING (as applicable)

Company:			
Mailing Address:			
County:	City:	State:	Zip:
Representative:		Phone Number:	

ELECTRICAL CONTRACTOR (as applicable)

Company:			
Mailing Address:			
County:	City:	State:	Zip:
Representative:		Phone Number:	

TYPE OF GENERATOR

Photovoltaic No_____ Yes_____	Wind: No_____ Yes_____	Micro turbine: No_____ Yes_____
Diesel Engine: No_____ Yes_____	Gas Engine: No_____ Yes_____	Turbine Other: No_____ Yes_____

ESTIMATED LOAD INFORMATION

Total Site Load _____ (kW) Total DG Output _____ (kW)

Mode of Operation (check all that apply)

Isolated _____ Paralleling _____ Power Export _____

DESCRIPTION OF PROPOSED INSTALLATION AND OPERATION

Give a general description of the proposed installation, including when you plan to operate the generator.

PART 3

SYNCHRONOUS GENERATOR DATA

Unit Number:	Total number of like units on site:
Manufacturer:	
Type:	Date of manufacture:
Serial Number(s):	
Single Phase: No_____ Yes_____	Three Phase: No_____ Yes_____
RPM:	Frequency (Hz):
Rated Output (each) (kW):	Rated Output (each) (kVA):
Rated Voltage (V):	Rated Amperes (A):
Field Voltage (V):	Field Amperes (A):
Rated Power Factor (%):	Motoring Power (kW):
Synchronous Reactance (X_d') (%):	kVA base:
Transient Reactance (X_d') (%):	kVA base:
Sub-transient Reactance (X_d') (%):	kVA base:
Negative Sequence Reactance (X_s) (%):	kVA base:
Zero Sequence Reactance (X_o) (%):	kVA base:
Neutral Grounding Resistor (if applicable):	
I_2^2t of K (heating time constant):	
Additional Information:	

INDUCTION GENERATOR DATA

Rotor Resistance (R_r) (ohms):	Stator Resistance (R_s) (ohms):
Rotor Reactance (X_r) (ohms):	Stator Reactance (X_s) (ohms):
Magnetizing Reactance (X_m) (ohms):	Short Circuit Reactance (X_d") (ohms):
Design letter:	Frame Size:
Exciting Current:	Temp Rise (°C):
Reactive Power Required	
var (no load):	var (full load):
Additional Information:	

PRIME MOVER (Complete all applicable items)

Unit Number:	Type:
Manufacturer:	Serial Number:
Date of manufacturer:	Inertia Constant (lb-ft^2):
Horsepower Rating:	Horsepower Max.:
Energy Source (hydro, steam, wind, etc.):	

PART 4

GENERATOR TRANSFORMER (Complete all applicable items)

TRANSFORMER (between generator and utility system)

Generator unit number:	Date of manufacturer:
Manufacturer:	Serial Number:
High Voltage (kV):	Low Voltage (kV):
Connection: Delta_____ Wye_____	Connection: Delta_____ Wye_____
Neutral Grounding: Solid_____ Other_____	Neutral Grounding: Solid_____ Other_____
Neutral Grounding Resistor (if applicable):	
Transformer Impedance (Z) (%):	kVA base:
Transformer Resistance (R) (%):	kVA base:
Transformer Reactance (X) (%):	kVA base:

INVERTER DATA (if applicable)

Manufacturer:	Model:
Rated Voltage (Volts):	Rated Amperes:
Rated Power Factor (%):	Type commutation: Forced_____ Line_____
Inverter Type (Ferro-resonant, step, pulse-width modulation, etc.):	
Harmonic Distortion	
Maximum Single Harmonic (%):	Maximum Total Harmonic (%):

Note: Attach all available calculations, test reports, and oscillographic prints showing inverter output voltage and current waveforms.

POWER CIRCUIT BREAKER

Manufacturer:	Model:
Rated Voltage (kV):	BIL Rating:
Rated ampacity (A):	Interrupting rating (kA):
Interrupting Medium/Insulating Medium (Vacuum, gas, oil, etc.):	
Control Voltage (Closing): AC____ DC____	Control Voltage (Tripping): AC____ DC____
Current Transformers Ratio:	Relay Accuracy Class:
Multi Ratio: No_____ Yes_____	Available Taps:

ADDITIONAL INFORMATION

In addition to the items listed above, please attach a detailed one-line diagram of the proposed facility, all applicable elementary diagrams, major equipment (generators, transformers, inverters, circuit breakers, protective relays, etc.), specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper design of the interconnection.

PRELIMINARY DER INFORMATION FORM **SIGN OFF AREA**

The customer agrees to provide LREC with any additional information required to complete the interconnection. The customer shall operate his equipment within the guidelines set forth by LREC.

Lake Region Electric Cooperative	[DG OWNER/OPERATOR NAME]
SIGN: _____	SIGN: _____
PRINT: _____	PRINT: _____
TITLE: _____	TITLE: _____
DATE: _____	DATE: _____

LAKE REGION ELECTRIC COOPERATIVE CONTACT FOR SUBMISSION AND FOR MORE INFORMATION:

LREC contact:
LREC
C/O ENGINEERING
516 South Lake Region Rd.
P.O. Box 127
Hulbert, OK 74441-0127

Phone: 918-772-2526
Fax: 918-772-2828