

Cherokee Electric Cooperative



**ONSITE GENERATION
INSTALLATION PROCEDURES**

Initial Approval Date:

July, 2021

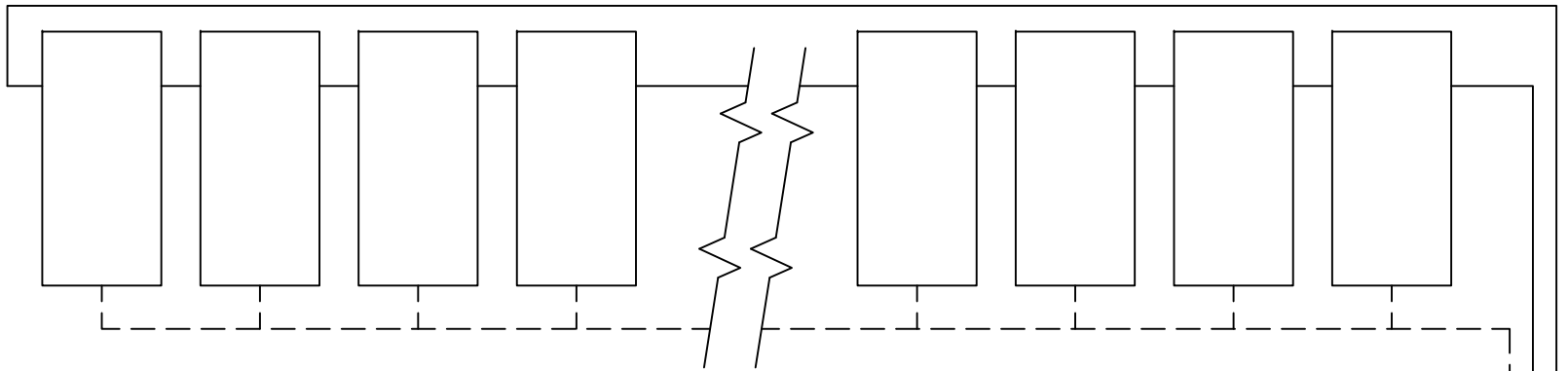
GENERAL PROCEDURES

Cherokee Electric Cooperative (CEC) currently has no Program or Policy in place which would allow a Member to connect any form of onsite generation to the CEC Distribution System.

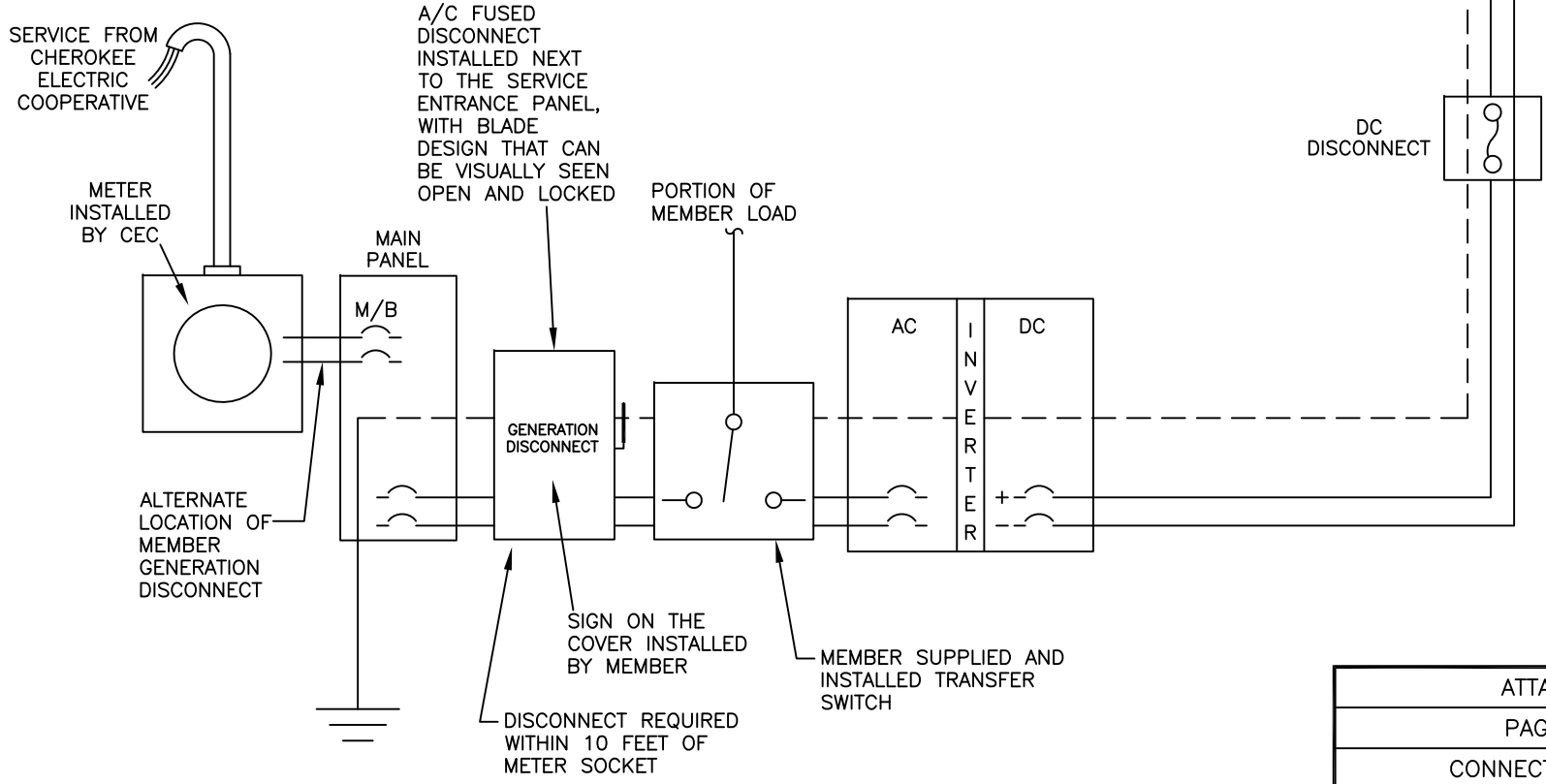
CEC will not purchase any energy generated by any Member.

Any form of onsite generation must be designed to feed only onsite loads (or a portion thereof). There must be an onsite disconnect as shown on Attachment 1. This disconnect must be fully accessible to CEC, at all times. It must be labeled as shown on Attachment 1, and lockable (via a padlock). Prior to utilizing onsite generation of any type to feed all, or any portion, of the Member's onsite loads, Member shall have this switch in the Open Position, locked, so as to prevent any connection to the CEC Distribution System. Attachment 1, although showing a solar installation, is applicable for any source of onsite generation.

CEC must be fully aware of, and approve, any Member owned onsite generation. Therefore, prior to installation of any onsite generation, the Member must apply, using Attachment 2 or 3 as applicable. Only after the proposed installation has been approved, in writing, by CEC, can the Member install the onsite generation. If approval is not given by CEC, then CEC may disconnect electric service to Member until such approval is provided by CEC.



TYPICAL ARRAY OF SOLAR MODULES



NOTE:
 IF MEMBER GENERATION DISCONNECT IS INSTALLED AT THE ALTERNATE LOCATION SHOWN ABOVE, MEMBER MAY FEED ALL ONSITE LOAD FROM THEIR ONSITE GENERATION.

ATTACHMENT 1
PAGE 1 OF 1
CONNECTION DIAGRAMS
TYPICAL SINGLE LINE
SOLAR PV INSTALLATION
WITHOUT PARALLELING

CHEROKEE ELECTRIC COOPERATIVE
APPLICATION FOR INSTALLATION OF ONSITE GENERATION

Tier 1 (1 kW – 50 kW)

This Application is considered complete when it provides all applicable and correct information required below.

Member Information

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Location of Proposed Generation (if different): _____
Telephone (Day): _____ (Evening): _____
E-Mail Address: _____
Electric Service Account Number: _____

ELECTRICAL CONTRACTOR

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone Number: _____ Representative: _____
Email Address: _____
Contractor's License #: _____ City/County/State: _____

GENERATING FACILITY INFORMATION

Inverter Manufacturer: _____ Model _____ Qty _____
Nameplate Rating: _____ (kW) _____ (kVA) _____ (AC Volts)
Single Phase _____ Three Phase _____
System Design Capacity: _____ (kW) _____ (kVA)
Energy Source: Solar Wind Hydro Other (describe) _____

Attach support information to show testing and listing by a Nationally Recognized Laboratory for compliance with applicable codes and standards.

Estimated Installation Date: _____ Estimated In-Service Date: _____

List components of the Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

ADDITIONAL INFORMATION – Single Line Diagram

In addition to the items listed above, attach a detailed single-line diagram of the proposed facility, all applicable elementary diagrams, major equipment, (generators, transformers, inverters, circuit breakers, protective relays, batteries, number and location of PV Panels, meter, disconnect switch, etc.) specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper installation. Also provide the address or grid coordinates of the facility.

Note: Basic examples of single line diagram can be seen in Attachment 1. However, Member must provide much more detail on items being supplied and installed, as discussed above.

NO INTERCONNECTION PERMITTED

Member must not operate its generating facility in parallel with CEC’s system. Parallel operation could result in injury to persons and /or damage to equipment and/or property for which the Member shall be liable.

MEMBER SIGNATURE

I hereby certify that, to the best of my knowledge, the information provided in this Application is true.

Signed: _____

Title: _____ Date: _____

CHEROKEE ELECTRIC COOPERATIVE
APPLICATION FOR INSTALLATION OF ONSITE GENERATION
Tier 2 (Greater than 50 kW)

This Application is considered complete when it provides all applicable and correct information required below.

Member Information

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Location of Proposed Generation (if different): _____
Telephone (Day): _____ (Evening): _____
E-Mail Address: _____
Electric Service Account Number: _____

PROJECT DESIGN/ENGINEERING (as applicable)

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Phone Number: _____ Representative: _____
Email Address: _____
PE License: _____ State: _____

ELECTRICAL CONTRACTOR

Name: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Phone Number: _____ Representative: _____
Email Address: _____
Contractor's License #: _____ City/County/State: _____

GENERATING FACILITY INFORMATION

Photovoltaic: _____ Wind: _____ Other _____
 System Rating: _____ (kW) Annual Estimated Generation: _____ (kWh)

(Copy this page as required for additional generators)

SYNCHRONOUS GENERATOR DATA (if applicable)

Identification per Single Line Drawing: _____
 Total number of units with listed specifications on site: _____
 Manufacturer: _____
 Type: _____ Date of Manufacture: _____
 Serial Number (each): _____
 Phases: Single _____ Three _____ R.P.M.: _____ Frequency (Hz): _____
 Rated Output (for one unit): _____ Kilowatt _____ Kilovolt-Ampere
 Rated Power Factor (%): _____ Rated Voltage (Volts): _____ Rated Amperes: _____
 Field Volts: _____ Field Amps: _____ Motoring power (kW): _____
 Synchronous Reactance (Xd): _____ % on _____ KVA base
 Transient Reactance (X'd): _____ % on _____ KVA base
 Negative Sequence Reactance (Xs): _____ % on _____ KVA base
 Sequence Reactance (Xo): _____ % on _____ KVA base
 Neutral Grounding Resistor Size (if applicable): _____
 I₂²t or K (heating time constant): _____
 Additional information: _____

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INDUCTION GENERATOR DATA (if applicable)

Rotor Resistance (Rr): _____ ohms Stator Resistance (Rs): _____ ohms
 Rotor Reactance (Xr): _____ ohms Stator Reactance (Xs): _____ ohms
 Magnetizing Reactance (Xm): _____ ohms Short Circuit Reactance (Xd''): _____ ohms
 Design letter: _____ Frame Size: _____
 Exciting Current: _____ Temp Rise (deg C°): _____
 Reactive Power Required: _____ VARS (no load): _____
 VARS (full load) Additional information: _____

PRIME MOVER (if applicable)

Identification per Single Line Diagram _____ Unit Number: _____
 Type: _____
 Manufacturer: _____
 Serial Number: _____ Date of manufacture: _____
 H.P. Rated: _____ H.P. Max.: _____ Inertia Constant: _____ lb.-ft.²
 Energy Source (hydro, wind, etc.) _____

INVERTER DATA (if applicable)

Manufacturer: _____ Model: _____
 Rated Power Factor (%): _____ Rated Voltage (Volts): _____ Rated Amperes: _____
 Inverter Type (ferroresonant, step, pulse-width modulation, etc): _____
 Single or Three Phase _____ Type commutation: _____ forced line _____
 Harmonic Distortion: Maximum Single Harmonic (%) _____ Maximum Total Harmonic (%) _____

POWER CIRCUIT BREAKER (if applicable)

Manufacturer: _____ Model: _____
 Rated Voltage (*kilovolts*): _____ Rated ampacity (*Amperes*): _____
 Interrupting rating (*Amperes*): _____ BIL Rating: _____
 Interrupting medium / insulating medium (ex. Vacuum, gas, oil _____ / _____
 Control Voltage (Closing): _____ (Volts) AC DC
 Control Voltage (Tripping): _____ (Volts) AC DC Battery Charged Capacitor
 Close energy: Spring Motor Hydraulic Pneumatic Other: _____
 Trip energy: Spring Motor Hydraulic Pneumatic Other: _____
 Bushing Current Transformers: _____ (Max. ratio) Relay Accuracy Class: _____
 Multi ratio? No Yes: (Available taps) _____
 Description of Control System _____

Attach support information to show testing and listing by a Nationally Recognized Laboratory for compliance with applicable codes and standards.

Estimated Installation Date: _____ Estimated In-Service Date: _____

List components of the Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
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In addition to the items listed above, attach a detailed single-line diagram of the proposed facility, all applicable elementary diagrams, major equipment, (generators, transformers, inverters, circuit breakers, protective relays, batteries, number and location of PV Panels, meter, disconnect switch, etc.) specifications, test reports, etc., and any other applicable drawings or documents necessary for the proper installation. Also provide the address or grid coordinates of the facility.

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Title: _____ Date: _____