Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

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FreeState Electric Cooperative, Inc.
Your Touchstone Energy® Cooperative

Table of Contents

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1.0 Construction of the Facility

The Interconnection Member (the "Member") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when FreeState Electric Cooperative, Inc. ("FEC") approves the *Application for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW* (the "Application") and returns it to the Member.

2.0 Timeline

FEC shall have 30 days to evaluate and notify the Member of approval or denial of a completed Application.

3.0 Facility Qualification

In order to interconnect to FEC's system, the Small Generating Facility must be powered by a Renewable Energy Resource as defined by Kansas state statute K.S.A 17-4652 or be defined as a Qualifying Facility as defined by the Public Utility Regulatory Policies Act of 1978 (PURPA). Refer to CFR Title 26, Volume 4, Sec. 292.204.

4.0 Interconnection and Operation

The Member may operate the Small Generating Facility (SGF) and interconnect with FEC's electric system once all of the following have occurred:

4.1 Upon completing construction, the Member has arranged for the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector as required by local code or by a Professional Engineer or electrician licensed in the state of Kansas if local code does not require an inspection (see paragraph 15.2 for electrician licensing requirements), and

4.2 The Member returns the Certificate of Completion to FEC, and

4.3 FEC has either:

4.3.1 Completed its inspection of the Small Generating Facility to ensure that all disconnecting equipment has been appropriately installed and that all electrical connections to FEC's facilities have been made in accordance with applicable codes. All inspections must be conducted by FEC, at its own expense, within a reasonable amount of time after receipt of the Certificate of Completion and shall take place at a time agreeable to the Member and FEC. FEC shall notify the Member of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or

4.3.2 FEC waives the right to inspect the Small Generating Facility, and

4.4 FEC returns a signed copy of the Certificate of Completion to the Member signifying that the Small Generating Facility has passed inspection, and

4.5 Revenue quality metering equipment capable of properly recording delivered and received energy has been installed and tested in accordance with applicable ANSI standards.

5.0 Safe Operations and Maintenance

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

6.0 Access

FEC shall have access to the disconnect switch and metering equipment of the Small Generating Facility at all times.

6.1 The Disconnect Switch and Metering Equipment shall be readily accessible meaning it is capable of being reached quickly for operation or inspection without requiring tools. For unscheduled outages or emergency conditions.

6.2 It does not require climbing over, under, or around obstacles, nor does it require removing obstacles. It does not require a ladder to access.

6.3 The member may not lock or obstruct access to disconnect or metering equipment in anyway.

6.4 Disconnects or metering equipment that becomes in accessible will result in the service being disconnected at the location.

7.0 Disconnection

FEC may temporarily disconnect the Small Generating Facility upon the following conditions:

7.1 For scheduled outages upon reasonable notice.

7.2 For unscheduled outages or emergency conditions.

7.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.

7.4 FEC shall inform the Member in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

8.0 Indemnification

The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

9.0 Insurance

Members are encouraged to carry no less than $250,000 of liability insurance that provides for

coverage of all risk of liability for personal injuries (including death) and damage to property arising out of or caused by the operation of the Member's Generating Facility.

10.0 Limitation of Liability

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 8.0.

11.0 Termination

The agreement to operate in parallel may be terminated under the following conditions:

11.1 **By the Member**

By providing written notice to FEC.

11.2 **By FEC**

If the Small Generating Facility fails to operate for any consecutive 12 month period or the Member fails to remedy a violation of these Terms and Conditions.

11.3 **Permanent Disconnection**

In the event this Agreement is terminated, FEC shall have the right to disconnect its facilities or direct the Member to disconnect its Small Generating Facility.

11.4 **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.

12.0 Assignment/Transfer of Ownership of the Facility

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

13.0 Output Requirements

The Small Generating Facility (SGF) shall comply with the technical specifications set forth below:

13.1 *15 percent of line section annual peak load* - For interconnection of a proposed Small Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Small Generating Facility, on the circuit shall not exceed 15 percent of the line section annual peak load as most recently measured at the substation. A line section is that portion of FEC's electric system connected to a member bounded by automatic sectionalizing devices or the end of the distribution line.

13.2 *Limit 10 percent contribution to maximum fault current* - The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10 percent to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

13.3 *The Member's Small Generating Facility shall not cause any protective device to exceed 87.5 percent of the short circuit interrupting capability* - The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Member equipment on the system to exceed 87.5 percent of the short circuit interrupting capability; nor shall the interconnection proposed for a circuit that already exceeds 87.5 percent of the short circuit interrupting capability.

13.4 *Voltage per ANSI C84.1 Range A* - Member's Small Generating Facility will generate power at the nominal voltage of FEC's system at the point of interconnection as defined by ANSI C84.1 Range A.

13.5 *Frequency per IEEE 1547* – The Member's Small Generating Facility will generate power at a frequency within the tolerances defined by IEEE 1547.

13.6 *Power factor* – The SGF shall produce power at a minimum 95% power factor, leading or lagging.

13.7 *Power quality* – The SGF will be in accordance with the power quality limits specified in IEEE 519.

13.8 *Overall quality* – The overall quality of the power provided by the SGF including, but not limited to, the effects of harmonic distortion, voltage regulation, voltage flicker, switching surges, and power factor, will be such that FEC's system is not adversely affected in any manner.

13.9 *Adverse effects on FEC's system* – In the event that operation of the SGF is detrimental to FEC's system, the Member will correct the cause of the issue within 30 days or will be disconnected.

14.0 Disconnecting Means

The following means of disconnecting all output of the Small Generating Facility from FEC's system are required:

14.1 A meter base containing a load side disconnect; and

14.2 A lockable, visible open disconnect device that is accessible to FEC personnel at all times. This device shall be able to completely isolate the Small Generating Facility from FEC's

system.

15.0 Pre-Energization Inspection

Before interconnection and energization, the SGF must be inspected by the following:

15.1 A local electrical inspector as required by local code; or

15.2 If an inspection is not required by local code, an electrician holding a valid license from some Kansas jurisdiction, subject to K.S.A. 12-1525; or

15.3 A Professional Engineer with a valid license in the state of Kansas; and

15.4 A representative from FEC.

15.4.1 FEC reserves the right, but does not assume the duty, to inspect, test, or check Member's equipment in any way deemed appropriate to confirm operation and verify power output and system protection characteristics. FEC does not assume any responsibility in connection with such Member's equipment or the inspection thereof.

16.0 Fees and Deposits

The following fee and deposit will be assessed at the time a completed Application is submitted to FEC.

16.1 Application and Processing Fee

Each submitted Application shall require a non-refundable application and processing fee of $325. This fee is required in order to cover upfront administrative costs incurred by FEC. The costs include reviewing the application and inspecting the installed facilities for Net Metering Installation no larger than 10KW. An Engineering Deposit may be required for individuals desiring to install facilities larger than 10KW.