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Rule 5.500 Application for Interconnection of Distributed Energy Resources Up To 150 kW

This form may be made available in an electronically fillable format and it is permissible to submit the form with electronic signatures.

Preamble and Instructions:
An owner of a distributed energy resource who requests interconnection to a State-regulated distribution or transmission facility must submit an application to the Interconnecting Utility. An application is accepted as complete when it provides all applicable information required.

1. Applicant:

Name: _____

Address [eSITE ID]: _____

City:_____ State:_____ Zip: _____

Telephone (Day): _____ (Alternate):_____

Email: _____

Utility Consumption Meter Number (if applicable): _____

Name of Utility:_____

Representative: (e.g., System installation Contractor or coordinating company, if appropriate)

Name: _____

Address: _____

City:_____ State:_____ Zip: _____

Telephone (Day): _____ (Alternate): _____

Email: _____

Will the Generation Resource be used for any of the following? Check all that apply

Net-Metering?	Yes☐	No☐
Group Net-Metering? (If yes, please provide group information directly to your utility)	Yes☐	No☐
Non-Exporting?	Yes☐	No☐
To participate in the Standard Offer Program?	Yes☐	No☐
Participate in the wholesale electricity market?	Yes☐	No☐
Qualifying Facility[1] where 100% of output will be sold to Interconnecting Utility?	Yes☐	No☐
Qualifying Facility[1] intending to sell power at wholesale to an entity other than Interconnecting Utility?	Yes☐	No☐

Other (describe): _____

For an energy storage system, check the mode of operation below: (Check all that apply)

☐ Peak Shaving
☐ Retail Demand Management
☐ Emergency/Back-up
☐ Frequency Regulation
☐ Wholesale market participation(describe)_____
☐ Other (describe)_____

[1] Evidence of FERC QF Certification will be required prior to commercial operation

2. Project Specifications:

All power ratings should be listed in AC throughout unless otherwise noted

Physical Address [eSITE ID] : ☐ Same as above

_____

City:_____State:_____Zip: _____

Is this an amendment to an existing system? Check One: Yes☐ No☐

If YES, what is existing CPG# _____

Please describe the proposed amendment:

Energy Source: Check all that apply

☐ Solar ☐Wind ☐Hydro

☐ Energy Storage ☐Other: _____

Interconnection Configuration? Check One

☐ Generation Meter ☐Behind Consumption Meter

Total number of inverters to be interconnected pursuant to this Application:_____

Total Aggregate Nameplate Rating for all generators (kW):_____

Total Generating Export Capacity [2] Requested (kW):_____

Individual Generator Data:

Provide for each Generator, use additional sheets if needed.

Type of Generator: Check One:

☐ DC Generator or Solar (Inverter) ☐Synchronous ☐Induction ☐Other_____

If SYNCHRONOUS or INDUCTION generator (rotating machine), fill out Generator Technical Information in "Application for Interconnection of Distributed Energy Resources greater than 150 kW"

Photovoltaic (PV) Data

Panel Manufacturer_____Model_____

Quantity of PV panels_____ Power Rating per panel (DC Watts)_____

Total Power Rating (DC Watts)_____

☐ Roof Mount

☐ Ground Mount

☐ Other

System Orientation: ☐fixed mount ☐1-axis tracking ☐ 2-axis tracking

[2] As limited by any export controls

PV Individual Inverter Data :

Provide for each inverter, use additional sheets if needed.

Inverter Manufacturer: _____

Model Name & Number: _____

Version Number: _____

Nameplate Rating: (kW) _____ (kVA) _____ (AC Volts) _____

If Power Factor not Unity:

Rated Power Factor: (Underexcited) _____ (Overexcited) _____

Minimum Power Factor: (Underexcited) _____ (Overexcited) _____

☐ Single phase ☐ Three phase (Check one)

Do export controls apply to this inverter? (Check one) Yes☐ No☐

- Is the inverter UL 1741 / IEEE 1547.1 Compliant?

  Yes☐ No☐

- Is the inverter certified per UL 1741-SA and compliant with ISO-NE's Inverter Source Requirements Document (ISO-NE SRD)?

  Yes☐ No☐

- Is the inverter certified per UL 1741-SB and compliant with ISO-NE's Default IEEE 1547-2018 Setting Requirements?

  Yes☐ No☐

If Yes to any of above bullets, include documentation provided by the inverter manufacturer describing the inverter's UL 1741/IEEE 1547.1 listing.

Battery Storage/Backup Information

Is this Battery an add-on to an existing customer-generator facility? Yes ☐ No ☐

If Yes, existing CPG #: _____

Is this Battery: Battery (DC Coupled – No Export) + Solar Yes ☐ No ☐

Battery (AC Coupled - Export) + Solar Yes ☐ No ☐

Battery Only (AC Coupled - Export) Yes ☐ No ☐

Battery Only (AC Coupled – No Export) Yes ☐ No ☐

Will the battery share an inverter with a Renewable Energy system? Yes ☐ No ☐

If Yes, can the battery be charged from the Electric Utility electric distribution grid? Yes ☐ No ☐

If No, how is the battery Energy Storage System prevented from being charged by the electric distribution system?

Shared Inverter Information (DC coupled inverters with multiple sources)

Quantity: _____

Battery System Manufacturer: _____Model:_____ Battery Type:_____

Battery Charge/Discharge Rating (kW AC): _____Battery Energy Capacity (kWh):_____

PF Setting:_____ DC Source/Prime Mover: _____

Do export controls apply to this inverter? (Check one) Yes☐ No☐

- Is the inverter UL 1741 / IEEE 1547.1 Compliant?

  Yes☐ No☐

- Is the inverter certified per UL 1741-SA and compliant with ISO-NE's Inverter Source Requirements Document (ISO-NE SRD)?

  Yes☐ No☐

- Is the inverter certified per UL 1741-SB and compliant with ISO-NE's Default IEEE 1547-2018 Setting Requirements?

  Yes☐ No☐

If Yes to any of above bullets, include documentation provided by the inverter manufacturer describing the inverter's UL 1741/IEEE 1547.1 listing.

Dedicated Inverter Information (inverters with only batteries for DC source)

Quantity:_____

Battery System Manufacturer: _____Model:_____ Battery Type:_____

Battery Charge/Discharge Rating (kW AC): _____Battery Energy Capacity (kWh):_____

PF Setting:_____ DC Source/Prime Mover: _____

Do export controls apply to this inverter? (Check one) Yes☐ No☐

- Is the inverter UL 1741 / IEEE 1547.1 Compliant?

  Yes☐ No☐

- Is the inverter certified per UL 1741-SA and compliant with ISO-NE's Inverter Source Requirements Document (ISO-NE SRD)?

  Yes☐ No☐

- Is the inverter certified per UL 1741-SB and compliant with ISO-NE's Default IEEE 1547-2018 Setting Requirements?

  Yes☐ No☐

If Yes to any of above bullets, include documentation provided by the inverter manufacturer describing the inverter's UL 1741/IEEE 1547.1 listing.

Battery Intended Use and Operation

Please provide a sequence of operations explaining how the system will operate under normal and off-grid conditions (explain how the battery will disconnect and reconnect to the grid). Please provide the type of switching and indicate if it is self-contained or utilizes separate components. An example would be self-contained device with DC to AC inverter, battery charger, and integrated AC transfer switch. On your one-line diagram please label the various equipment (inverter(s), charge controllers, switches, etc.) so that your written operational equipment discussion matches the one-line diagram. If your system rated kW outflow to the grid is restricted by control logic (outflow kW is less than inverter total capacity), then indicate the worst case outflow capacity.

Limited-Export / Non-Export / Limited-Import Data:

If multiple export control systems are used, provide for each control system and use additional sheets if needed.

Is export controlled to less than the Total Aggregate Nameplate Rating? Yes ☐ No ☐

Method of export limitation:

☐Power Control System ☐Reverse Power Protection

☐Minimum Power Protection ☐Other (describe):_____

Export controls are applied to how many generators? ☐Multiple ☐One

If Power Control System is used, open loop response time: _____(s)

Power Control System output limit setting: (kW) _____(kVA) _____

Energy Storage System Power Control System operating mode:

☐Unrestricted ☐Export Only ☐Import Only ☐No Exchange

Describe which Generators the export control system controls:

3. Applicant Signature (may be electronic)

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

Signed: _____

Title: _____

Date: _____

Operation is contingent on Utility approval to interconnect the Project and receipt of all other required regulatory approvals.