

**Just a reminder for June 1st- Rhode Island and Massachusetts ONLY**

**All inverter-based solar PV projects 100 kw or less with applications submitted on or after June1, 2018 are subject to ISO-NE Ride through Requirements.**

To comply with the ISO-NE Ride-through requirements, inverters in solar PV installations shall be certified per the requirements of UL 1741 SA as a grid support utility interactive inverter, and have the voltage and frequency trip settings and ride-through capability described in the ISO-NE Inverter Sources Requirements Document.

<https://www9.nationalgridus.com/non_html/ISO-NE%20Ride-through%20Requirements%20Memo%202-14-18%20Final.pdf>

<https://www9.nationalgridus.com/non_html/ISO%20New%20England%20Source%20Requirement%20Document-2018-02-06.pdf>

Site to locate list of UL 1741 SA inverters:

<http://www.gosolarcalifornia.org/equipment/inverters.php>

**\*\*\*\*VERY IMPORTANT**

**In addition to the application, one line and as built containing the correct inverter YOU WILL NEED TO ADD the 4 requirements below in this format to your Commissioning Memos as of June 1st for any jobs submitted on June 1st 2018 or later.**

**\*\*\*\*We will be looking for ‘yes’ in each line in the tables, and ‘yes’ on #’s 1 and 4.**

**Requirement 1: Verify Inverter is certified per UL 1741 SA as a “grid support utility interactive inverter” and has been verified by a NRTL to meet the ISO NE SRD requirements per ESB 756 section 7.8.1.**

1. *Nameplate Shows UL 1741 SA* “Grid Support Interactive Inverter“ or “Grid Support Utility Interactive Inverter” (Yes/No) \_\_\_

**Requirement 2: Verify the Inverter TRIP settings are shown on the one line and set in the inverter per the ISO NE SRD and ESB 756 section 7.6.11 (defaults from section 7.6.11 shown simplified below).**

1. Trip settings Table:

| **DEVICE** | **PICKUP SETTING (DEFAULTS)** | **DEFAULT CLEARING TIME (seconds)** | **Pickups and Clearing Times Adhere to Required Defaults (Yes/No):** |
| --- | --- | --- | --- |
| Under Frequency (81U) | **56.5 Hz** | **0.16** |  |
| Under Frequency (81U) | **58.5 Hz** | **300** |  |
| Over Frequency (81O) | **61.2 Hz** | **300** |  |
| Over Frequency (81O) | **62.0 Hz** | **0.16** |  |
| Under Voltage (27) | **50%** of Nominal | **1.1** |  |
| Under Voltage (27) | **88%** of Nominal | **2** |  |
| Over Voltage (59) | **110%** of Nominal | **2** |  |
| Over Voltage (59) | **120%** of Nominal | **0.16** |  |

**Requirement 3: Verify the Inverter Grid Support Functions are set according to the Advanced Functions Activation Table below per section 7.8.2 of ESB 756 and the ISO NE SRD:**

Verify that ISO NE SRD group settings have been confirmed by the manufacturer AND that ISO NE SRD group setting is ENABLED (if available), OR manually check the following states are applied in the inverter:

1. Advanced Functions Activation Table:

| **Function** | **Default Activation State** | **Set to Required Default State? Yes/No** |
| --- | --- | --- |
| SPF, Specified Power Factor | OFF[[1]](#footnote-1) |  |
| Q(V), Volt-Var Function with Watt or Var Priority | OFF |  |
| SS, Soft-Start Ramp Rate | ONDefault value: 2% of maximum current output per second |  |
| FW, Freq-Watt Function OFF | OFF |  |

Footnote 1: OFF and operating at unity PF, Or set to ON with unity PF.

**Requirement 4: Per National Grid ESB 756 section 7.8.1:**

*4. In the Permissive Operation region above 1.1 p. u. voltage, the inverter(s) will ride-through in Momentary Cessation mode as defined in the* [*NE ISO SRD*](https://www9.nationalgridus.com/masselectric/home/energyeff/4_interconnection-documents.asp)*. (Yes/No)\_\_\_\_*

1. [↑](#footnote-ref-1)