

PSC NO: 119 ELECTRICITY  
NEW YORK STATE ELECTRIC & GAS CORPORATION  
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## GENERAL INFORMATION

9. Distributed Generation Interconnection Requirements (Cont'd.)
- F. II. Interconnection Requirements for New Distributed Generators 300 kVA or Less, or Farm Waste Generators of 400 kW or Less, Connected to Radial Distribution Lines (Cont'd.)
1. Type Testing (Cont'd.)
- a. Single-Phase Inverters and Relay Packages (Cont'd.)

**Reset Timer:** These tests shall also verify the inverter or power-producing facility shall not automatically reconnect to the waveform generator until after five (5) minutes of continuous normal voltage and frequency. The manufacturer may supply a special production sample with the reset timer disabled or otherwise temporarily reduce or eliminate the delay in software to minimize the waiting time during type testing. At least three of the 60 total tests (6 waveforms, 10 times each) must be performed on a sample with the reset timer set to the required delay time to verify the function and accuracy of the timer. The test will be considered a failure if, in any one of the tests, the inverter automatically reconnects to the NYSEG system prior to the required time interval. Once the delay timer has been tested three times, the phrase "...and resumes to XX for five minutes..." at the end of the test procedures may be ignored.

The voltage magnitudes listed below are given in percent of rms voltage rating of the inverter, followed in parentheses by the rms voltage magnitude on a 120 V basis:

**Waveform 1:** A 100% of rated voltage (120 V rms) 60 Hz sinusoidal that drops in voltage to 49% of rated (59 V rms) for six (6) cycles beginning and ending at a zero crossing and resuming to 100% of rated voltage (120 V rms) for five minutes.

**Waveform 2:** A 100% of rated voltage (120 V rms) 60 Hz sinusoidal that drops in voltage to 88 % of rated (105 V rms) for 120 cycles beginning and ending at a zero crossing and resuming to 100% of rated voltage (120 V rms) for five minutes.

**Waveform 3:** A 100% of rated voltage (120 V rms) 60 Hz sinusoidal that rises in voltage to 111% of rated (133 V rms) for 120 cycles beginning and ending at a zero crossing and resuming to 100% of rated voltage (120 V rms) for five minutes.

**Waveform 4:** A 100% of rated voltage (120 V rms) 60 Hz sinusoidal that rises in voltage to 138 % of rated (166 volts) for two (2) cycles beginning and ending at a zero crossing and resuming to 100% of rated voltage (120 V rms) for five minutes.

**Waveform 5:** A 100% of rated voltage (120 V rms) 60 Hz sinusoidal that drops in frequency at a rate of 0.2 Hz/second to 59.2 Hz for six (6) cycles beginning and ending at a zero crossing and then returning to 60 Hz at a rate of 0.2 Hz/second for five minutes.

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