## PSC NO: 119 ELECTRICITY NEW YORK STATE ELECTRIC & GAS CORPORATION Initial Effective Date: 09/01/03

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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.)

## H. Test Requirements

This section describes two separate and distinct tests, which together constitute the necessary and sufficient SIR testing requirements. The first test is the design test and the second is the verification test. The purpose of the design test is to ensure that devices and systems used in a proposed application meet the necessary technical and functional requirements. The purpose of the verification test is to ensure that the devices and systems, which have displayed conformance with the design testing requirements, have been properly installed and are operating properly following installation at the site.

Two paths are possible to the achievement of an accepted installation. The first path requires that the design test and verification test methodologies be reviewed and accepted by NYSEG. The second path allows the design test and the verification test procedure to be reviewed and conducted by an independent testing laboratory. The second path is referred to as type testing. Type testing is performed or witnessed once by a nationally recognized independent testing laboratory for a specific protection device or system and the results recorded in the "New York State Standardized Interconnection Requirements Checklist for Type Testing of Distributed Generation Protection Equipment" (Checklist) (see Section V). Once the device or system meets the type test criteria described in this section, the design and verification test procedure is accepted by all New York State utilities. If any changes are made to the hardware, software, firmware, or the verification test procedure, the manufacturer must notify the independent testing laboratory to determine what, if any, parts of the type-testing must be repeated (this includes modifications to devices already in service). Failure of the manufacturer to notify the independent test laboratory of changes may result in withdrawal of approval and disconnection of units installed since the change was made. Utility grade relays (see Section IV: Glossary of Terms for definition) need not be type tested per the requirements of this section. Manufacturers may elect to have systems comprised of utility grade relays and other devices type tested as complete systems to avoid the NYSEG review required of a non-type tested system.

All interface equipment must include a verification test procedure (unless otherwise noted in this document) as part of the documentation. Except for the case of small single-phase inverters as discussed later, the verification test must establish that the protection settings meet the SIR requirements. The verification testing may be site-specific and is conducted periodically to assure continued acceptable performance.

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