

## **Section I. Application Process**

### **New York State Standardized Interconnection Requirements and Application Process for New Distributed Generators 2 MW or Less Connected in Parallel to Utility Distribution Systems**

#### **A. Introduction**

This section provides a framework for processing applications to:

- interconnect new distributed generation facilities with a nameplate rating of 2 MW or less [aggregated on the customer side of the point of common coupling (PCC)], and
- review any modifications affecting the interface at the PCC to existing distributed generation facilities with a nameplate rating of 2 MW or less (aggregated on the customer side of the PCC) that have been interconnected to the utility distribution system and where an existing contract between the applicant and the utility is in place.

Generation neither designed to operate, nor operating, in parallel with the utility's electrical system is not subject to these requirements. This section will ensure that applicants are aware of the technical interconnection requirements and utility interconnection policies and practices. This section will also provide applicants with an understanding of the process and information required to allow utilities to review and accept the applicants' equipment for interconnection in a reasonable and expeditious manner.

The time required to complete the process will reflect the complexity of the proposed project. Projects using previously submitted designs certified per the requirements of Section II.H will move through the process more quickly, and several steps may be satisfied with an initial application depending on the detail and completeness of the application and supporting documentation submitted by the applicant. Applicants submitting systems utilizing certified equipment however, are not exempt from providing utilities with complete design packages necessary for the utilities to verify the electrical characteristics of the generator systems, the interconnecting facilities, and the impacts of the applicants' equipment on the utilities' systems.

The application process and the attendant services must be offered on a non-discriminatory basis. The utilities must clearly identify their costs related to the applicants' interconnections, specifically those costs the utilities would not have incurred but for the applicants' interconnections. The utilities will keep a log of all applications,

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milestones met, and justifications for application-specific requirements. The applicants are to be responsible for payment of the utilities' costs, as provided for herein.

Staff of the Department of Public Service (Staff) will monitor the application process to ensure that applications are addressed in a timely manner. To perform this monitoring function, Staff will meet periodically with utility and applicant representatives.

## **B. Application Process Steps**

### **STEP 1: Initial Communication from the Potential Applicant.**

Communication could range from a general inquiry to a completed application.

### **STEP 2: The Inquiry is Reviewed by the Utility to Determine the Nature of the Project.**

Technical staff from the utility discusses the scope of the project with the potential applicant (either by phone or in person) to determine what specific information and documents (such as an application, contract, technical requirements, specifications, listing of qualified type-tested equipment/systems, application fee information, applicable rate schedules, and metering requirements) will be provided to the potential applicant. The preliminary technical feasibility of the project at the proposed location may also be discussed at this time. All such information and a copy of the standardized interconnection requirements must be sent to the applicant within three (3) business days following the initial communication from the potential applicant, unless the potential applicant indicates otherwise. A utility representative will be designated to serve as the single point of contact for the applicant (unless the utility informs the applicant otherwise) in coordinating the potential applicant's project with the utility.

### **STEP 3: Potential Applicant Files an Application.**

The potential applicant submits an application to the utility. The submittal must include the completed standard application form and, for systems with a contractual total aggregate nameplate rating exceeding 15 kW, and a non-refundable \$350 application fee, except that the fee shall be refunded to net metering customer-generators unless applied toward the cost of installing a dedicated transformer. If the applicant proceeds with the project to completion, the application fee will be applied as a payment to the utility's total cost for interconnection, including the cost of processing the application. Within five (5) business days of receiving the application, the utility will notify the applicant of receipt and whether the application has been completed adequately. It is in the best interest of the applicant to provide the utility with all pertinent technical information as early as possible in the process. If the required documentation is presented in this step, it will allow the utility to perform the required reviews and allow the process to proceed as expeditiously as possible.

### **STEP 4: Utility Conducts a Preliminary Review and Develops a Cost Estimate**

## **for the Coordinated Electric System Interconnection Review (CESIR).**

The utility conducts a preliminary review of the proposed system interconnection. Upon completion of the preliminary review, the utility will inform the applicant as to whether the proposed interconnection is viable or not, and provide the applicant with an estimate of costs associated with the completion of the CESIR. The preliminary review shall be completed and a written response detailing the outcome of the preliminary review shall be sent to the applicant within five (5) business days of the completion of Step 3. For aggregate DG systems above 300 kW and up to 2 MW, and interconnections to network systems, the Preliminary Review shall be completed and a written response detailing the outcome of the Preliminary Review shall be sent to the applicant within fifteen (15) business days of the completion of Step 3. The utility's response to applicants proposing to interconnect aggregate DG systems above 300 kW and up to 2 MW, or proposing to interconnect to network systems, will include preliminary comments on requirements for protective relaying, metering and telemetry.

For systems of 15 kW or less, no costs may be charged by the utility to the applicant for completion of the Preliminary Review or the CESIR.

### **STEP 5: Applicant Commits to the Completion of the CESIR**

Prior to commencement of the CESIR, the applicant shall provide the following information to the utility:

- a complete detailed interconnection design package,
- the name and phone number of the individual(s) responsible for addressing technical and contractual questions regarding the proposed system, and
- if applicable, advanced payment of the costs associated with the completion of the CESIR

The complete detailed interconnection design package shall include:

- (1) Electrical schematic drawing(s) reflecting the complete proposed system design which are easily interpreted and of a quality necessary for a full interconnection. The drawings shall show all electrical components proposed for the installation, and their connections to the existing on-site electrical system from that point to the PCC.
- (2) A complete listing of all interconnection devices proposed for use at the PCC. A set of specifications

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<sup>2</sup> See Section III: Glossary of Terms for definition.

for this equipment shall be provided by the applicant upon request from the utility.

- (3) The written verification test procedure provided by the equipment manufacturer, if such procedure is required by this document.

For aggregate DG systems above 300 kW and up to 2 MW, and interconnections to network systems, the complete detailed interconnection design package shall include, where applicable, three (3) copies of the following information

Proposed single line diagram of the generation system showing the interconnection of major electrical components within the system. This single line indicating proposed equipment ratings clearly needs to indicate:

- 1) number, individual ratings, and type of units comprising the above rating;
- 2) general high voltage bus configuration and relay functions.
- 3) proposed generator step-up transformer MVA ratings, impedances, tap settings and winding voltage ratings

Electrical studies as requested by the utility to demonstrate that the design is within acceptable limits, inclusive and limited to the following: system fault, relay coordination, flicker, voltage drop, and harmonics

#### **STEP 6: Utility Completes the CESIR**

The CESIR will consist of two parts:

- (1) a review of the impacts to the utility system associated with the interconnection of the proposed system, and
- (2) a review of the proposed system's compliance with the applicable criteria set forth below.

A CESIR will be performed by the utility to determine if the proposed generation on the circuit results in any relay coordination, fault current, and/or voltage regulation problems. A full CESIR may not be needed if the aggregate generation is less than: 50 kW on a single-phase branch of a radial distribution circuit; or 150 kW on a single distribution feeder.

The CESIR shall be completed within 4 weeks (20 business days) of receipt of the information set forth in Step 5 for systems of 300 kW or less and within 12 weeks (60

business days) for systems larger than 15 kW. For systems utilizing type-tested equipment, the time required to complete the CESIR may be reduced.

Upon completion of the CESIR, the utility will provide the applicant, in writing, the following:

- (1) utility system impacts, if any;
- (2) notification of whether the proposed system meets the applicable criteria considered in the CESIR process;
- (3) if applicable, a description of where the proposed system is not in compliance with these requirements;
- (4) Subject to subsections (a) through (d) below, a good faith, detailed estimate of the total cost of completion of the interconnection of the proposed system and/or a statement of cost responsibility for a dedicated transformer(s):
  - (a) with respect to an applicant that is not to be net-metered, an estimate shall be provided and shall include the costs associated with any required modifications to the utility system, administration, metering, and on-site verification testing;
  - (b) with respect to an applicant that is to be net-metered and that is either a Farm Wind or Residential Wind applicant intending to install wind electric generating equipment with a rated capacity of more than 10 kW, an estimate shall be provided and (i) shall include the costs associated with any required modifications to the utility system, administration, metering, and on-site verification testing, and such applicant shall be informed that it is responsible for one-half of such costs, and (ii) shall include the applicant's responsibility for the actual cost of installing any dedicated transformer(s) up to the maximum set forth in subsection (e) below;
  - (c) with respect to an applicant that is to be net-metered (but not a Farm Wind or Residential Wind applicant covered in subsection (b) above), such applicant shall have no responsibility for the interconnection costs described in subsection (b)(i) above, and a statement shall be provided showing the applicant's responsibility for the actual cost of installing any dedicated transformer(s) up to the maximum set forth in subsection (e) below;

(d) with respect to an applicant that is to be net-metered, if the electric corporation determines that it is necessary to install a dedicated transformer(s) to protect the safety and adequacy of electric service provided to other customers, the applicant shall be informed of its responsibility for the actual costs for installing the dedicated transformer(s). The following table reflects the maximum responsibility each designated applicant shall have with respect to the actual cost of the dedicated transformer(s):

Maximum Expense for Dedicated Transformer for Net Metered Customers

Generator Type	Generator Size	Maximum Transformer Responsibility
Residential Solar	Up to 10 kW	\$350
Residential Wind or Farm Wind	Up to 25 kW	\$750
Farm Wind	26 kW up to 125 kW	\$1,000
Farm Waste	Up to 400 kW	\$3,000

**STEP 7: Applicant Commits to Utility Construction of Utility’s System Modifications.**

The applicant will:

- execute a standardized contract for interconnection; and
- provide the utility with an advance payment for the utility’s estimated costs as identified in STEP 6 (estimated costs will be reconciled with actual costs in STEP 11).

**STEP 8: Project Construction.**

The applicant will build the facility in accordance with the utility-accepted design. The utility will commence construction/installation of system modifications and metering requirements as identified in STEP 6. Utility system modifications will vary in construction time depending on the extent of work and equipment required. The schedule for this work is to be discussed with the applicant in STEP 6.

**STEP 9: The Applicant’s Facility is Tested in Accordance With the Standardized Interconnection Requirements.**

The verification testing will be performed in accordance with the written test procedure provided in STEP 5 and any site-specific requirements identified by the utility in STEP 6. The final testing will be conducted at a mutually agreeable time, and the utility shall be given the opportunity to witness the tests. Single-phase inverter-based systems rated 15

kW or less will be allowed to interconnect to the utility system prior to the verification test for a period not to exceed two hours, for the sole purpose of assuring proper operation of the installed equipment.

**STEP 10: Interconnection.**

The applicant's facility will be allowed to commence parallel operation upon satisfactory completion of the tests in STEP 9. In addition, the applicant must have complied with and must continue to comply with the contractual and technical requirements.

**STEP 11: Final Acceptance and Utility Cost Reconciliation.**

Within 60 days after interconnection, the utility will review the results of its on-site verification and issue to the applicant a formal letter of acceptance for interconnection. At this time, the utility will also reconcile its actual costs related to the applicant's project against the application fee and advance payments made by the applicant. The applicant will receive either a bill for any balance due or a reimbursement for overpayment as determined by the utility's reconciliation, except that a net metering applicant may not be charged in excess of the cost of installing the dedicated transformer described above. The applicant may contest the reconciliation with the utility. If the applicant is not satisfied, a formal complaint may be filed with the Commission.