## New York State Public Service Commission

# New York State Standardized Interconnection Requirements and Application Process For New Distributed Generators and Energy Storage Systems 5 MW or Less Connected in Parallel with Utility Distribution Systems

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#### Section I. Application Process

New York State Standardized Interconnection Requirements and Application Process for New Distributed Generators and Energy Storage Systems 5 MW or Less Connected in Parallel with Utility Distribution Systems ("SIR")

#### A. Introduction

This SIR provides a framework for processing applications to:

- interconnect new distributed generation (DG) facilities with an alternating current (AC) generator nameplate rating of 5 MW or less aggregated on the customer side of the point of common coupling (PCC);
- interconnect new energy storage system (ESS) facilities with an AC inverter/converter nameplate rating of 5 MW or less aggregated on the customer side of the PCC that may be stand-alone systems or combined with existing or new DG (Hybrid Projects), however, maximum export capacity onto the utility distribution system is capped at an AC nameplate rating or AC inverter/converter nameplate rating of 5 MW; and,
- review any modifications affecting the interface at the PCC to existing DG and/or ESS facilities with an AC nameplate rating of 5 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.

Distributed Generation or Energy Storage Systems neither designed to operate, nor operating, in parallel with the utility's electrical system are not subject to these requirements. This document will ensure that applicants are aware of the technical interconnection requirements and utility interconnection policies and practices. This SIR 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, Equipment Certification, 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, milestones met, and justifications for application-specific requirements. The applicants are to be responsible for payment of the utilities' costs, as provided for herein. Any unspent project analysis/study fees shall be applied forward to any subsequent analysis applicable to a given application/project.

All application timelines shall commence the next Business Day following receipt of information from the applicant or the utility.

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

A glossary of terms used herein is provided in Section III.

### B. Application Process Steps for Systems 50 kW or Less

**Exception 1:** For inverter based systems above 50 kW up to 300 kW, applicants may follow the expedited application process outlined in this section provided that the inverter based system has been certified and tested in accordance with the most recent revision of UL 1741 and its supplement A (SA), and the utility has approved the project accordingly. The utility has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, project is eligible for the expedited process, and whether it is approved for interconnection if eligible for expedited process. The utility shall notify the applicant in writing of its findings upon review of the application. If the utility determines that the inverter based system is not eligible for the expedited application process, the applicant can:

- Proceed with the remaining steps of Section I.C of the SIR (Systems above 50 kW up to 5 MW); or
- 2) request a review by DPS Staff.

**Exception 2:** For non-inverter based system 50 kW or less, the applicant should be aware that additional information and review time may be required by the utility (refer to Step 3). The applicant must include the items required in Step 5 of the Application Process Steps for Systems above 50 kW up to 5 MW in its original application. This exception should not be considered the rule, but used by the utility only in justified situations. Utilities are encouraged to use the expedited process whenever possible. The utility has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, project is eligible for expedited process, and whether it is approved for interconnection if eligible for expedited process. The utility shall notify the applicant in writing of its findings upon review of the application. If the utility determines that the non-inverter based system is not eligible for the expedited application process, the applicant can:

- Proceed with the remaining steps of Section I.C of the SIR (Systems above 50 kW up to 5 MW); or
- 2) Request a review by DPS Staff.

**Exception 3:** For all systems 50 kW or less, that are proposed to be installed in underground secondary network areas, the applicant should be aware that additional information and review time may be required by the utility (refer to Step 3). In some cases, interconnection may not be allowed or approved. DG systems interconnected to underground secondary network systems can cause unique design issues and overall reliability problems for the utilities. For this reason, additional review and analysis may be needed on a case by case basis. The utility has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, project is eligible for the expedited process, and whether it is approved for interconnection if eligible for expedited process. The utility shall notify the applicant in writing of its findings upon review of the application. If the utility determines that the DG system cannot be interconnected, the applicant can request a review by DPS Staff.

### **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 may discuss the scope of the interconnection with the potential applicant (either by phone or in person) and provide a copy of the SIR document and any utility specific technical specifications that may apply. A utility representative shall be designated to serve as the single point of contact for the applicant in coordinating the potential applicant's project with the utility.

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

The potential applicant submits an application package in the name of the customer<sup>1</sup> to the utility. No application fee is required of the applicant for systems 50 kW or less. A complete application package will consist of all items detailed in Appendix F. Electronic submission of all documents via the Interconnection Online Application Portal ("IOAP") is required. The utility has ten (10) Business Days upon receipt of the original application submittal to determine if the application is complete, meets the SIR technical requirements in Section II, and/or approved for interconnection if all other requirements are met. The utility shall notify the applicant by email, fax, or other form of written communication. If the application is deemed not complete by the utility, the utility shall provide a detailed explanation of the deficiencies identified and a list of the additional information required from the applicant. Once it has received the required information, the utility shall notify the applicant of the acceptance or rejection of the application within ten (10) Business days. If the applicant fails to submit the additional information to the utility within thirty (30) Business Days following the date of the utility's written notification, the application shall be removed from the queue and no

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Per the Community Distributed Generation Program Order (15-E-0082), the project sponsor shall submit the interconnection application to the electric utility for approval. The sponsor may be any single entity, including the generation facility developer, an energy service company (ESCO), a municipal entity such as a town or village, a business or not-for-profit corporation, a limited liability company, a partnership, or other form of business or civic association.

further action on the part of the utility is required.

The utility's notification of acceptance to the applicant shall include an executed New York State Standardized Interconnection Contract and the applicant may proceed with the proposed installation. The utility shall also indicate in its response to the applicant whether or not it plans to witness the testing and verification process in person.

An application will be placed in each utility's interconnection inventory once it is accepted as complete. If the final acceptance as set out in Step 6 below is not completed within twelve (12) months as a result of applicant inactivity, the utility has the right to notify the applicant by U.S. first class mail with delivery receipt confirmation that the applicant's project will be removed from the utility's interconnection inventory if the applicant does not respond within thirty (30) Business Days of the issue of such notification and provide a project status update and/or justification as to why the project should remain in the utility's interconnection inventory for an additional period of time.

With respect to an applicant proposing to install a system rated 25 kW or less, that is to be net-metered, if the utility determines that it is necessary to install a dedicated transformer(s) or other equipment 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) and other safety equipment. Appendix E sets forth the responsibility each applicant shall have with respect to the actual cost of the dedicated transformer(s) and other safety equipment.

### **STEP 4: System Installation**

The applicant will install the DG system according to the utility accepted design and the equipment manufacturer's requirements. If there are substantive design variations from the originally accepted system diagram, a revised system diagram (and other drawings for non-inverter based systems) shall be submitted by the applicant for the utility's review and acceptance. All inverter based systems will be allowed to interconnect to the utility system for a period not to exceed two hours, for the sole purpose of ensuring proper operation of the installed equipment.

For net metered systems as defined in Section II.A.6, Metering, any modifications related to existing metering configurations to allow for net energy metering for residential, farm service and non-residential wind electric generating systems shall be completed by the utility

within ten (10) Business Days of either notification to the utility that the installation has been completed or request for a verification test, whichever comes first.

# STEP 5: The Applicant's Facility is Tested in Accordance with the Standardized Interconnection Requirements

Verification testing will be performed by the applicant in accordance with the written verification test procedure provided by the equipment manufacturer. If the utility requested to witness the testing and verification process in person as required in Step 3, the applicant shall provide a written letter of notification to the utility that the system installation is completed, including any applicable inspections and authorization. After receipt of notification, the verification testing will be performed within ten (10) Business Days, at a mutually agreeable time. If the utility has opted not to witness the test, the applicant will send the utility within five (5) Business Days of completion of such tests a written notification certifying that the system has been installed and tested in compliance with the SIR, the utility-accepted design and the equipment manufacturer's instructions. The applicant's facility will be allowed to commence parallel operation upon satisfactory completion of the tests in Step 5. The applicant must have complied with, and must continue to comply with, all contractual and technical requirements.

### **STEP 6: Final Acceptance**

Within five (5) Business Days of receiving the written notification of successful test completion from Step 5, the utility will issue to the applicant a formal letter of acceptance for interconnection. Within five (5) Business Days of the completion of the on-site verification, the utility will issue to the applicant either a formal letter of acceptance for interconnection or a detailed explanation of the deficiencies in the system.

### C. Application Process Steps for Systems above 50 kW up to 5 MW

For inverter based systems above 50 kW up to 300 kW, certified and tested in accordance with the most recent revision of UL 1741 and its supplement A (SA), applicants and utilities are encouraged, but not required, to use the expedited application process (Section I.B).

**Exception 1:** For all systems 50 kW up to 5 MW that are proposed to be installed in underground secondary network areas, the applicant should be aware that a Coordinated Electric System Interconnection Review (CESIR) may be required by the utility, based on each