

## **40.2 Effective Date, Scope, and Application of Standard Interconnection Procedures**

### **40.2.1 Effective Date of Standard Interconnection Procedures**

The Standard Interconnection Procedures set forth in this Attachment HH to the ISO OATT shall be effective on May 2, 2024. Any Interconnection Request or CRIS-Only Request for a Large Generating Facility, Class Year Transmission Project, Small Generating Facility, or Class Year Project in the Queue that was submitted prior to the effective date of the Standard Interconnection Procedures in accordance with the requirements in the Standard Large Facility Interconnection Procedures in Attachment X to the ISO OATT, the Standard Small Generator Interconnection Procedures in Attachment Z to the ISO OATT, and/or the Rules to Allocate Responsibility for the Cost of New Interconnection Facilities in Attachment S to the ISO OATT shall be subject to the transition requirements set forth in Section 40.3.1 to this Attachment HH. As of the effective date, the requirements in Attachments S, X, and Z to the ISO OATT shall no longer apply except as provided in the transition rules in Section 40.3.1 to this Attachment HH or as otherwise provided in this Attachment HH.

### **40.2.2 Scope of Standard Interconnection Procedures**

The ISO shall process Interconnection Requests and CRIS-Only Requests through a Cluster Study Process in accordance with the requirements in this Attachment HH to the ISO OATT. The ISO shall conduct a Cluster Study Process on a recurring, defined basis as established in Section 40.5.1, beginning with a Transition Cluster Study Process. Prior to the commencement of a given Cluster Study Process, an entity may obtain information concerning its proposed interconnection by reviewing the Heatmap as set forth in Section 40.4.1 and by requesting a Pre-Application Report as set forth in Section 40.4.2.

The ISO shall commence a particular Cluster Study Process by opening the Application

Window for that study cycle on the Cluster Study Process Start Date (or the Transition Cluster Study Process Start Date for the Transition Cluster Study) as set forth in Section 40.5.1. To enter a given Cluster Study Process, an Interconnection Customer must submit, as applicable, an Interconnection Request or CRIS-Only Request, including an Application Fee, Study Deposit, and all other required materials, for its Generating Facility, Cluster Study Transmission Project, or CRIS-Only Cluster Study Project during the Application Window as set forth in Section 40.5.4. If the Interconnection Customer submits a valid Interconnection Request or CRIS-Only Request, the Interconnection Request or CRIS-Only Request will be a Cluster Study Project included in the Cluster for that Cluster Study Process. An Interconnection Customer must timely cure any deficiencies identified by the ISO, Connecting Transmission Owner, or Affected Transmission Owner as set forth in Section 40.5.7.

The ISO shall then commence the Customer Engagement Window as set forth in Section 40.7.1. During the Customer Engagement Window, the ISO shall publish the list of all of the Cluster Study Projects in the Cluster for that particular Cluster Study Process as set forth in Section 40.7.2. The Connecting Transmission Owner will also conduct a Physical Infeasibility Screening of the proposed interconnections of the Cluster Study Projects as set forth in Section 40.7.3. Finally, the ISO shall conduct a group Scoping Meeting for the Cluster as set forth in Section 40.7.4. At the conclusion of the Customer Engagement Window, the ISO will commence the Phase 1 Entry Decision Period in which an Interconnection Customer will elect for its Cluster Study Project to proceed to the Phase 1 Study, including posting the Readiness Deposit 1 for its project, or to withdraw its Cluster Study Project from the Queue as set forth in Section 40.7.5. A Cluster Study Project that withdraws may be subject to a Withdrawal Penalty as set forth in Section 40.7.6.

The ISO shall then commence the Phase 1 Study. For purposes of the Phase 1 Study and Phase 2 Study, the ISO will finalize the Existing System Representation in accordance with Section 40.10.3. The Connecting Transmission Owners and Affected Transmission Owners will then perform the Phase 1 Study in accordance with Section 40.10.4 to identify the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and Local System Upgrade Facilities required to reliably interconnect the Cluster Study Project with the New York State Transmission System or Distribution System in accordance with Applicable Reliability Requirements and to provide cost estimates for and a preliminary schedule to construct the facilities. The Phase 1 Study concludes with the ISO's Operating Committee's approval of the Phase 1 Cost Estimates Summary Report.

At the conclusion of the Phase 1 Study, the ISO will commence the Phase 2 Entry Decision Period in which an Interconnection Customer will elect for its Cluster Study Project to proceed to the Phase 2 Study, including posting the Readiness Deposit 2 for its project, or to withdraw its Cluster Study Project from the Queue as set forth in Section 40.10.8. A Cluster Study Project that withdraws may be subject to a Withdrawal Penalty as set forth in Section 40.10.9.

The ISO will then perform the Phase 2 Study as set forth in Section 40.11. The ISO will perform assessments using the Cluster Baseline Assessment and Cluster Project Assessment base cases to identify the System Upgrade Facilities and Distribution Upgrades required for the reliable interconnection of Cluster Study Projects to the New York State Transmission System or to the Distribution System in compliance with the NYISO Minimum Interconnection Standard in accordance with the requirements in Section 40.12. In addition, for Cluster Study Projects requesting CRIS, the ISO will conduct a Cluster Study Deliverability Study to assess their

requested CRIS in compliance with the NYISO Deliverability Interconnection Standard and identify any required System Deliverability Upgrades in accordance with Section 40.13. The Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator will determine the cost estimates for and a preliminary schedule to construct the facilities, along with updating, as needed, the identification of and cost estimates of the facilities identified in the Phase 1 Study. The Phase 2 Study concludes with the ISO's Operating Committee's approval of the Cluster Study Report.

At the conclusion of the Phase 2 Study, the ISO will commence the Final Decision Period in which each Interconnection Customer will elect through iterative decision rounds whether to accept its Project Cost Allocation and pay cash or post Security for the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and/or System Deliverability Upgrades identified in the Cluster Study for its Cluster Study Project as set forth in Section 40.15. An Interconnection Customer that accepts its Project Cost Allocation and pays cash or posts Security in the allocated amount for its Cluster Study Project will proceed to the negotiation process for a Standard Interconnection Agreement and any required construction agreements for that project as set forth in Section 40.21. If an Interconnection Customer does not accept its Project Cost Allocation or does not pay cash or post Security in the allocated amount for its Cluster Study Project, the Cluster Study Project will be withdrawn from the Queue and may be subject to a Withdrawal Penalty as set forth in Section 40.15.5. The ISO will perform, if applicable, an Additional SDU Study as set forth in Section 40.14.

An Interconnection Customer may separately elect to enter an Expedited Deliverability Study for purposes of requesting CRIS outside the Cluster Study Process, subject to the eligibility requirements for the Expedited Deliverability Study, in accordance with Section 40.19.

### **40.2.3 Application of Standard Interconnection Procedures**

40.2.3.1 The Standard Interconnection Procedures set forth in this Attachment HH establish the rules for an Interconnection Customer to submit an Interconnection Request or CRIS-Only Request proposing to: (i) interconnect a new Generating Facility or Cluster Study Transmission Project to the New York State Transmission System or to the Distribution System, (ii) materially increase the capacity of, or make a material modification to the operating characteristics of, an existing Generating Facility, Cluster Study Transmission Project, or Class Year Transmission Project that is interconnected to the New York State Transmission System or Distribution System, or (iii) solely obtain CRIS or an increases in CRIS.

40.2.3.2 For purposes of Section 40.2.3.1, an increase in the capacity of an existing Facility is a material increase unless the increase (a) is not associated with any equipment changes or is associated with equipment changes determined by the ISO to be non-material; and (b) is an increase in: (i) the baseline ERIS level for a Facility greater than 20 MW that is equal to or less than ten (10) megawatts or five (5) percent, whichever is greater, or (ii) the baseline ERIS level for a Facility 20 MW or smaller that is equal to or less than two (2) megawatts. For purposes of this Section 40.2.3.2, the baseline ERIS level of an existing facility is (a) the greater of (i) the existing Facility's CRIS level determined as a facility pre-dating Class Year 2007 pursuant to Section 40.18.2.5, if applicable; or (ii) the final maximum summer megawatt electrical output studied for the total facility (including all Generators in a facility comprised of multiple Generators) for ERIS in the ISO's interconnection process for the existing Facility; or (b) if neither (a)(i) nor (a)(ii) are applicable, the baseline ERIS level is the value reflected in the Facility's interconnection agreement or other applicable documentation governing the Facility's interconnection; *provided, however*, if the Facility has requested a modification to its facility to decrease its size, and such modification has been deemed nonmaterial by the ISO, the decreased

MW level will be a cap on its baseline ERIS. If the existing Facility is a BTM:NG Resource, the increase in existing capacity will be measured based on the increase from the existing gross capability of the generator to the proposed gross capability of the generator, as modified. If an existing Facility comprised of multiple Generators behind a single Point of Injection modifies its Facility to become one or more standalone Generators, the total ERIS of the standalone Generator(s) behind the single Point of Injection cannot exceed the Point of Injection limit. Notwithstanding the above, if the existing Facility is a temperature sensitive unit, the maximum capacity of which varies based on ambient temperature, the increase in existing capacity will be measured based on the largest increase from the existing capacity to the proposed capacity at the same temperature, i.e., at the same temperature along the maximum megawatt electrical output versus temperature curves.

40.2.3.3 The rules in this Attachment HH apply to ERIS and CRIS obtained under this Attachment HH as well as ERIS and CRIS obtained under Attachments S, X, or Z of the ISO OATT.

40.2.3.4 A Transmission Owner that has constructed a reliability-based transmission or distribution system upgrade, or an upgrade pursuant to an order issued by a regulatory body requiring such construction, will not be deemed to be an Interconnection Customer under these rules because of the construction of that upgrade.

40.2.3.5 These Standard Interconnection Procedures do not apply to interconnections made simply to receive power from the New York State Transmission System and/or the Distribution System, nor to interconnections made solely for the purpose of generation with no wholesale sale for resale nor to net metering. These procedures do not apply to interconnections to LIPA's distribution facilities. LIPA will continue to administer the interconnection process

for generators connecting to its distribution facilities and perform all required studies on its distribution system under its own tariffs and procedures.

40.2.3.6 An Interconnection Customer seeking to return a Generating Facility to Commercial Operations after it is Retired must submit a new Interconnection Request as a new facility. An Interconnection Customer returning a Generating Facility to service prior to the expiration or termination of its Mothball Outage or ICAP Ineligible Forced Outage need not submit a new Interconnection Request unless the Generating Facility is making modifications or is increasing its capacity such as would otherwise trigger a new Interconnection Request for an existing Generating Facility.

40.2.3.7 Under the Standard Interconnection Procedures, a request to interconnect a certified Generating Facility (see Appendices 10 and 11 for description of certification criteria) to the Connecting Transmission Owner's Distribution System shall be evaluated under the Fast Track Process in Section 40.23 if the eligibility requirements of Section 40.23.1 are met. If the Generating Facility does not meet the eligibility requirements or does not pass the Fast Track Process, it shall be subject to the Cluster Study Process and may submit an Interconnection Request for the project in the next open Application Window.

40.2.3.8 A request to interconnect a certified inverter-based Generating Facility no larger than 10 kilowatts (kW) shall be evaluated under the Appendix 12 10 kW Inverter Process instead of through the Cluster Study Process. If the Generating Facility does not meet the eligibility requirements or does not pass the Fast Track Process, it shall be subject to the Cluster Study Process and may submit an Interconnection Request for the project in the next open Application Window.

#### **40.2.4 Fee and Deposit Requirements for the Standard Interconnection Procedures**

#### **40.2.4.1 Method for Payment of Cash Fees and Deposits**

An Interconnection Customer must submit any cash fee or cash deposit required under this Attachment HH to the ISO via electronic payment using the method required by the ISO.

#### **40.2.4.2 Deposit Requirement**

As security for the prompt payment of Interconnection Customer's obligation to make payments to the ISO required under this Attachment HH, Interconnection Customer shall provide deposits required by this Attachment HH in an acceptable form in accordance with the requirements in Sections 40.2.4.2.1, 40.2.4.2.2, or 40.2.4.2.3.

##### **40.2.4.2.1 Cash Deposit**

If Interconnection Customer provides cash to the ISO as a deposit, Interconnection Customer's delivery of cash to the ISO shall constitute the grant of a first-priority security interest in the cash in favor of the ISO, and the ISO shall be authorized by such delivery to hold the cash as security and to apply it to the Interconnection Customer's obligations. An Interconnection Customer who delivers cash to the ISO hereunder agrees that the ISO OATT and any other agreements incorporating the terms of the ISO OATT shall for all purposes constitute a security agreement.

##### **40.2.4.2.2 Letter of Credit**

If Interconnection Customer provides a letter of credit to the ISO as a deposit, the letter of credit shall be in a form acceptable to the ISO and issued or guaranteed by an approved U.S. or Canadian commercial bank, or an approved U.S. or Canadian branch of a foreign bank, with a minimum "A" rating from Standard & Poor's, Fitch, Moody's, or Dominion. An Interconnection Customer providing a letter of credit must provide a separate letter of credit for each Interconnection Request and each CRIS-Only Request. An Interconnection Customer's



failure to provide an acceptable deposit in an amount sufficient to meet its obligations in Attachment HH fifty (50) days prior to the termination of a letter of credit, which deposit shall be guaranteed to remain in effect for a period of not less than one (1) year, shall be considered a failure to maintain a deposit under this Attachment HH enabling the ISO to immediately draw upon the full value of the letter of credit or avail itself of all other remedies to which it is entitled under this Attachment HH.

#### **40.2.4.2.3 Surety Bond**

If Interconnection Customer provides a surety bond to the ISO as a deposit, the surety bond shall be in a form acceptable to the ISO, payable immediately upon demand without prior demonstration of the validity of the demand, and issued by a U.S. Treasury-listed surety with a minimum “A” rating from A.M. Best. An Interconnection Customer’s failure to provide an acceptable deposit in an amount sufficient to meet its obligations in Attachment HH fifty (50) days prior to the termination of a surety bond, which deposit shall be guaranteed to remain in effect for a period of not less than one (1) year, shall be considered a failure to maintain a deposit under this Attachment HH enabling the ISO to immediately demand payment of the full value of the surety bond or avail itself of all other remedies to which it is entitled under this Attachment HH.

#### **40.2.5 Comparability**

The ISO shall receive, process and analyze all Interconnection Requests and CRIS-Only Requests in a timely manner as set forth in the Standard Interconnection Procedures. As described herein, the ISO will process and analyze all Interconnection Requests and CRIS-Only Requests with independence and impartiality, in cooperation with and with input from the Interconnection Customers, Connecting Transmission Owners and other Market Participants. The ISO will perform, oversee or review the Cluster Study Process to ensure compliance with

the Standard Interconnection Procedures. The ISO shall process and analyze Interconnection Requests and CRIS-Only Requests from all Interconnection Customers, regardless of whether the Generating Facilities or Cluster Study Transmission Projects are owned by a Connecting Transmission Owner, its subsidiaries or Affiliates, or others.

#### **40.2.6 Base Case Data**

The ISO or Connecting Transmission Owner, depending upon which of those Parties possesses the data requested, shall provide base power flow, short circuit and stability databases, including all underlying assumptions and contingency lists, to the Interconnection Customer upon request. In addition, the ISO shall maintain network models and underlying assumptions within its possession on its secure portion of the ISO website, which shall be accessible through a link from the OASIS. Such network models and underlying assumptions should reasonably represent those used during the most recent Class Year Study or Cluster Study, as applicable, and be representative of current system conditions used in the interconnection studies. All Parties shall treat Confidential Information in accordance with Section 40.24.1 of these Standard Interconnection Procedures. The ISO and Connecting Transmission Owner are permitted to require that Interconnection Customers and password-protected website users sign a non-disclosure agreement before the release of Confidential Information or Critical Energy Infrastructure Information in the Base Case data. The power flow, short circuit and stability data bases and underlying assumptions provided shall be those that the ISO is using in the Cluster Baseline Assessment then in progress, or if such data bases are not available, the data bases from the last completed Cluster Project Assessment conducted prior to the request or posted to the secure portion of the ISO website. In the case of a request from an Interconnection Customer considering or requesting CRIS, the power flow data bases provided shall include the Cluster

Project Assessment case from the most recently completed Class Year Deliverability Study or Cluster Study Deliverability Study.

#### **40.2.7 No Applicability to Transmission Service or Other Services**

Nothing in these Standard Interconnection Procedures shall constitute a request for Transmission Service or confer upon an Interconnection Customer any right to receive Transmission Service. Nothing in these Standard Interconnection Procedures shall constitute a request for, nor agreement to provide, any energy, Ancillary Services or Installed Capacity under the ISO Services Tariff, except to the extent that an Interconnection Customer's election of Capacity Resource Interconnection Service and satisfaction of the NYISO Deliverability Interconnection Standard are prerequisites for the Generating Facility to become a qualified Installed Capacity Supplier and for the Cluster Study Transmission Project to receive Unforced Capacity Deliverability Rights.

#### **40.2.8 Transmission Service Customer Rights**

Nothing in these rules precludes any transmission service customer from receiving transmission service charge credits to the extent the customer is entitled to such credits under FERC policy and precedent.

#### **40.2.9 ISO Data Requirements**

Interconnection Customers and Transmission Owners shall provide the ISO with all data necessary to make the determinations contemplated by these rules.

#### **40.2.10 Limitation of Liability**

All obligations of the ISO or a Transmission Owner pursuant to these Standard Interconnection Procedures are services or associated with services under this ISO OATT and

subject to the limitation of liability contained in Section 2.11.3 to the ISO OATT.

#### **40.2.11 Rights Under the Federal Power Act**

Nothing in these Standard Interconnection Procedures restricts the rights of any person under the OATT, or the right of any person to file a complaint with the Federal Energy Regulatory Commission under the relevant provisions of the Federal Power Act or the right of a party to and under the ISO/TO Agreement or an Operating Agreement.

#### **40.2.12 Inclusion of Black Start Capability at Generating Facility Larger than 20 MW**

An Interconnection Customer proposing, pursuant to this Attachment HH, to interconnect a new Generating Facility larger than 20 MW to Zone J or to modify – i.e., materially increase (as defined in Section 40.2.3.2 of this Attachment HH) the capacity of or make a material modification to the operating characteristics of – an existing Generating Facility larger than 20 MW already interconnected to Zone J that will commence Commercial Operation after November 1, 2012, shall include black start capability at the Generating Facility; *provided, however,* the Generating Facility shall not be required to include black start capability if:

- (A) the ISO determines that: (i) the inclusion of black start capability at the Generating Facility would not provide a material benefit to system restoration in Zone J, or (ii) the Interconnection Customer has shown good cause for not including black start capability at the Generating Facility, or
- (B) as of November 1, 2012, the Generating Facility has: (i) received one or more draft or final air permits from the appropriate regulatory agency, or (ii) has completed a draft environmental impact statement and submitted it to the appropriate governmental agency for issuance for public comment.

The inclusion of black start capability at a given Generating Facility would provide a material benefit to system restoration in Zone J if, among other things, such action would improve the speed, adequacy, or flexibility of Consolidated Edison Company of New York, Inc.'s ("Consolidated Edison's") black start and system restoration plan for restoring electric service in Zone J in a safe, orderly, and prompt manner following a major system disturbance that would require Consolidated Edison to undertake system restoration efforts.

To facilitate the ISO's determination regarding material benefit, Consolidated Edison shall at its expense perform contemporaneously with the Phase 1 Study a separate study to examine whether a new or modified Generating Facility would provide a material benefit to system restoration as a black start resource. If changes to the project made subsequent to this study are deemed by the ISO to be significant, Consolidated Edison shall perform a new study at Interconnection Customer's expense. The study will indicate the black start performance measures under Consolidated Edison's black start and system restoration plan and the impact on relevant factors of the Generating Facility having black start capability. Consolidated Edison will provide its study to the ISO and to the Interconnection Customer(s) of the Generating Facility(ies) that were considered in the study, subject to appropriate confidentiality protections. Consolidated Edison may provide the study to other parties that have a direct interest in this matter as well, subject to appropriate confidentiality protections.

If an Interconnection Customer asserts that good cause exists for not including black start capability at a new or modified Generating Facility, it shall provide documentation demonstrating the technical, financial, spatial, and/or other reasons that justify its assertion. Factors that may constitute reasonable justification include, but are not limited to: (i) physical site limitations would unreasonably impair the planned use of the site or prevent the inclusion of

black start equipment in addition to the equipment required to properly operate and maintain the proposed Generating Facility; (ii) the cost of adding black start capability would increase the overall cost of the project to a level that would impair the ability of the Interconnection Customer to secure financing at commercially competitive terms; or (iii) the inclusion of black start capability would prevent Interconnection Customer from obtaining the permits and approvals needed for the project, or result in the imposition of significantly more burdensome permit conditions than would be imposed absent the installation of black start capability.

Interconnection Customer will provide a study to the ISO and Consolidated Edison that supports its claim under this section, subject to appropriate confidentiality protections. Interconnection Customer may provide the study to other parties that have a direct interest in this matter as well, subject to appropriate confidentiality protections.

Any decision by the ISO regarding a new or modified Generating Facility's installation of black start capability pursuant to these provisions shall not be considered precedential or binding on the New York State Board on Electric Generation Siting and the Environment. In the event the New York State Board on Electric Generation Siting and the Environment makes a determination regarding the installation of black start equipment in the course of its siting process under Public Service Law Article 10, the ISO will accept that determination and not make a separate determination hereunder.