

## Attachment II

## **40.1 Definitions**

Whenever used in these Standard Interconnection Procedures with initial capitalization, the following terms shall have the meanings specified in this Section 40.1. Terms used in these procedures with initial capitalization that are not defined in this Section 40.1 shall have the meanings specified in Section 1 of the ISO OATT, Section 22.1 of Attachment P to the ISO OATT, Section 25.1.2 of Attachment S of the ISO OATT, Section 30.1 of Attachment Z to the ISO OATT, Appendix 1 to Attachment Z to the ISO OATT, or in Article 2 of the ISO Services Tariff.

**10 kW Inverter Process** shall mean the procedure for evaluating an Interconnection Request for a certified inverter-based Generating Facility no larger than 10 kW that uses the Section 40.23 screens. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions as set forth in Appendix 12.

**Acceptance Notice** shall mean the notice by which an Interconnection Customer communicates to the ISO its decision to accept a Project Cost Allocation or Revised Project Cost Allocation.

**Additional SDU Study** shall mean a study that an Interconnection Customer may elect to pursue if the Class Year Deliverability Study or Cluster Study Deliverability Study identifies the need for a new System Deliverability Upgrade (*i.e.*, a System Deliverability Upgrade not previously identified and cost allocated in a Class Year Study or Cluster Study and not substantially similar to a System Deliverability Upgrade previously identified and cost allocated in a prior Class Year Study or Cluster Study) that requires additional study.

**Additional SDU Study Decision Period** shall mean the period of time following the Additional SDU Study during which an Interconnection Customer must elect whether to accept the Project Cost Allocation and pay cash or post Security for the System Deliverability Upgrades identified for its Project in accordance with the requirements in Section 40.15.

**Affected System** shall mean an electric system within the New York Control Area other than the transmission system owned, controlled or operated by the Connecting Transmission Owner that may be affected by the proposed interconnection.

**Affected System Interconnection Customer** shall mean any entity that submits an interconnection request for a generating facility to a transmission system other than the New York State Transmission System that may cause the need for Affected System Network Upgrades on the New York State Transmission System.

**Affected System Network Upgrades** shall mean the additions, modifications, and upgrades to the New York State Transmission System required to accommodate Affected System Interconnection Customer's proposed interconnection to a transmission system other than the New York State Transmission System.

**Affected System Operator** shall mean the entity that operates an Affected System. Affected System Operator includes the Affected Transmission Owners.

**Affected System Queue Position** shall mean the Queue Position of an Affected System Interconnection Customer in the ISO's Queue in accordance with Section 40.8.3.3 of this Attachment HH.

**Affected System Study** shall mean the ISO's evaluation of the impacts on the New York State Transmission System of Affected System Interconnection Customers' proposed interconnection(s) to another region's transmission system and the ISO's identification of any required Affected System Network Upgrades, as described in Section 40.8.3 to this Attachment HH.

**Affected System Study Agreement** shall mean the agreement contained in Appendix 6 to this Attachment HH that is made between the ISO and Affected System Interconnection Customer to conduct an Affected System Study pursuant to Section 40.8.3 to this Attachment HH.

**Affected System Study Report** shall mean the report issued by the ISO following completion of an Affected System Study pursuant to Section 40.8.3.7 to this Attachment HH.

**Affected Transmission Owner** shall mean the New York public utility or authority (or its designated agent) other than the Connecting Transmission Owner that (i) owns facilities used for the transmission of Energy in interstate commerce and provides Transmission Service under the ISO OATT, and (ii) owns, leases or otherwise possesses an interest in a portion of the New York State Transmission System where System Deliverability Upgrades, System Upgrade Facilities, Affected Network Upgrade Facilities, or Network Upgrade Facilities are or will be installed pursuant to Attachment HH or Attachment P to the ISO OATT.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority, including but not limited to Environmental Law.

**Applicable Reliability Councils** shall mean the Electric Reliability Organization, the NPCC, and the NYSRC.

**Applicable Reliability Requirements** shall mean the NYSRC Reliability Rules, and other criteria, standards and procedures, as described in Section 40.12.1.2 of this Attachment HH; provided that no Party shall waive its right to challenge the applicability or validity of any requirement or guideline as applied to it in the context of the Standard Interconnection Procedures. The Applicable Reliability Requirements applied are those in effect when the particular assessment is commenced.

**Application Fee** shall mean the non-refundable fee an Interconnection Customer must submit with its Interconnection Request or CRIS-Only Request pursuant to Section 40.5.5.1.3 to this Attachment HH.

**Application Window** shall mean the time period set forth in Section 40.5.3 to this Attachment HH.

**Attachment Facilities** shall mean the Connecting Transmission Owner's Attachment Facilities and the Interconnection Customer's Attachment Facilities. Collectively, Attachment Facilities include all facilities and equipment between the Generating Facility or Cluster Study Transmission Project and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Facility to the New York State Transmission System or Distribution System. Attachment Facilities are sole use facilities and shall not include Stand Alone System Upgrade Facilities, Distribution Upgrades, System Upgrade Facilities, or System Deliverability Upgrades.

**Balancing Authority** shall mean an entity that integrates resource plans ahead of time, maintains demand and resource balance within a Balancing Authority Area, and supports interconnection frequency in real time.

**Balancing Authority Area** shall mean the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area.

**Base Case** shall mean the base case power flow, short circuit, and stability data bases used for the Cluster Study by the ISO, Connecting Transmission Owner, Affected Transmission Owner, Affected System Operator, or Interconnection Customer; described in Section 40.2.6 of this Attachment HH.

**Business Day** shall mean Monday through Friday, excluding federal holidays.

**Byways** shall mean all transmission facilities comprising the New York State Transmission System that are not Highways, External Other Interfaces or Internal Other Interfaces. All transmission facilities in Zone J and Zone K are Byways.

**Calendar Day** shall mean any day including Saturday, Sunday or a federal holiday. If a deadline that is established in Calendar Days in this Attachment HH does not end on a Business Day, the deadline will be extended to the next Business Day.

**Capacity Region** shall mean one of four subsets of the Installed Capacity statewide markets comprised of: (1) Rest of State (*i.e.*, Load Zones A through F); (2) Lower Hudson Valley (*i.e.*, Load Zones G, H and I); (3) New York City (*i.e.*, Load Zone J); and (4) Long Island (*i.e.*, Load Zone K).

**Capacity Resource Interconnection Service ("CRIS")** shall mean the service provided by the ISO to Interconnection Customers that satisfy the NYISO Deliverability Interconnection Standard or that are otherwise eligible to receive CRIS in accordance with the requirements in

this Attachment HH; such service being one of the eligibility requirements for participation as an ISO Installed Capacity Supplier.

**Class Year** shall mean the group of Projects included in any particular Class Year Study (Annual Transmission Reliability Assessment and/or Class Year Deliverability Study), in accordance with the criteria specified in Attachments S, X, and Z. Class Year 2023 shall be the final Class Year that is subject to a Class Year Study.

**Class Year Interconnection Facilities Study (“Class Year Study”)** shall mean the last of the successive interconnection studies conducted in the ISO’s Standard Large Facility Interconnection Procedures for proposed interconnections of Small Generating Facilities (if applicable), Large Generating Facilities, and Class Year Transmission Projects with the New York State Transmission System or with the Distribution System in accordance with the requirements in Attachments S, X, and Z to the ISO OATT. The Class Year Study for Class Year 2023 shall be the final Class Year Study conducted by the ISO.

**Cluster** shall mean a group of one or more Projects with validated Interconnection Requests and CRIS-Only Requests that are studied together for the purpose of conducting a Cluster Study.

**Cluster Baseline Assessment (“CBA”)** shall mean an assessment, conducted by the ISO in cooperation with Market Participants, to identify the System Upgrade Facilities and Distribution Upgrades that Transmission Owners are expected to need during the time period covered by the assessment to comply with Applicable Reliability Requirements and to reliably meet the load growth and changes in load pattern projected for the New York Control Area. For purposes of applying the requirements in this Attachment HH, the term Cluster Baseline Assessment include the Annual Transmission Baseline Assessment when the term refers to the assessment performed for a Class Year Study.

**Cluster Project Assessment (“CPA”)** shall mean an assessment, conducted by the ISO in cooperation with Market Participants, to determine the System Upgrade Facilities and Distribution Upgrades required for each Project included in this assessment to interconnect to the New York State Transmission System or Distribution System in compliance with Applicable Reliability Requirements and the NYISO Minimum Interconnection Standard. For purposes of applying the requirements in this Attachment HH, the term Cluster Project Assessment includes the Annual Transmission Reliability Assessment when the term refers to the assessment performed for a Class Year Study.

**Cluster Study** shall mean the study conducted, as applicable, by the ISO, Connecting Transmission Owner, Affected Transmission Owner, Affected System Operator or a third party consultant for the Interconnection Customer to determine a list of facilities (including Connecting Transmission Owner’s Attachment Facilities, Distribution Upgrades, System Upgrade Facilities and System Deliverability Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility or Cluster Study Transmission Project with the New York State Transmission System or with the Distribution System. The Cluster Study includes the Phase 1 Study and the Phase 2 Study.

**Cluster Study Agreement** shall mean the form of agreement contained in Appendix 3 to this

Attachment HH for conducting the Cluster Study.

**Cluster Study CRIS Project** shall mean a Cluster Study Project with an executed Cluster Study Agreement entering a Cluster Study for a CRIS evaluation, that thereby becomes one of the group of Cluster Study Projects included in the Cluster Study Deliverability Study. A Cluster Study CRIS Project may be a CRIS-Only Cluster Study Project that is entering a Cluster Study only for a CRIS evaluation, or it may be a Project seeking both ERIS and CRIS.

**Cluster Study Deliverability Study** shall mean an assessment, conducted by the ISO in cooperation with Market Participants, to determine whether System Deliverability Upgrades are required for Cluster Study CRIS Projects under the NYISO Deliverability Interconnection Standard.

**Cluster Study Project** shall mean a project with a validated Interconnection Request or CRIS-Only Request that thereby becomes one of the group of Projects included in the particular Cluster for that Cluster Study Process.

**Cluster Study Project List** shall mean the list of Cluster Study Projects with validated Interconnection Requests or CRIS-Only Requests that the ISO posts during the Customer Engagement Window in accordance with the requirements in Section 40.7.2.

**Cluster Study Process** shall mean the following processes, conducted in sequence: the Application Window; the Customer Engagement Window (including the Physical Infeasibility Screening and Scoping Meetings therein); the Phase 1 Study; the Phase 2 Study; and, if applicable, the Additional SDU Study.

**Cluster Study Process Start Date** shall mean the date upon which the ISO will open the Application Window for a given Cluster Study Process, which date shall be determined pursuant to Section 40.5.1 of this Attachment HH.

**Cluster Study Transmission Project** shall mean an Interconnection Customer's proposed new transmission facility that will interconnect to the New York State Transmission System or a proposed upgrade—an improvement to, addition to, or replacement of a part of an existing transmission facility—to the New York State Transmission System, for which (1) the Interconnection Customer is eligible to request and does request Capacity Resource Interconnection Service, subject to the eligibility requirements set forth in the ISO Procedures; or (2) the Interconnection Customer requests only Energy Resource Interconnection Service and the transmission facility for which it requests Energy Resource Interconnection Service is a transmission facility over which power flow can be directly controlled by power flow control devices directly connected to the Cluster Study Transmission Project without having to re-dispatch generation. Cluster Study Transmission Projects shall not include Attachment Facilities, Distribution Upgrades, Network Upgrade Facilities, System Upgrade Facilities, or System Deliverability Upgrades. The term Cluster Study Transmission Project shall include those transmission projects that were classified as a Class Year Transmission Project in the ISO's Standard Large Facility Interconnection Procedures and satisfied the requirements to complete a Class Year Study for purposes of applying the post-interconnection study requirements

applicable to a Cluster Study Transmission Project in this Attachment HH, except as otherwise indicated in this Attachment HH.

**Cluster Study Report** shall mean the report issued following completion of the Phase 2 Study pursuant to Section 40.11.7 to this Attachment HH.

**Clustering** shall mean the process whereby the impact to the New York State Transmission System of a group of Affected System Interconnection Customers which projects are interconnecting to another region are studied together, instead of serially, for the purpose of conducting the Affected System Study.

**Commercial Operation** shall mean the status of a Facility that has commenced generating or transmitting electricity for sale, excluding electricity generated or transmitted during Trial Operation.

**Commercial Operation Date** of a Facility shall mean the date on which the Facility commences Commercial Operation, notice of which must be provided by the Interconnection Customer to the ISO and Connecting Transmission Owner in the form provided in Appendix E-2 to the Standard Interconnection Agreement.

**Commercial Operation Incentive Payment Amount** shall mean the amount a Payment Eligible Project is eligible to receive from the Withdrawal Penalty Fund collected for a particular Cluster Study Process if it enters Commercial Operation pursuant to Section 40.6.5.2.5.

**Confidential Information** shall mean any information that is defined as confidential by Section 40.24.1 to this Attachment HH.

**Connecting Transmission Owner** shall mean the New York public utility or authority (or its designated agent) that (i) owns facilities used for the transmission of Energy in interstate commerce and provides Transmission Service under the ISO OATT, (ii) owns, leases or otherwise possesses an interest in the portion of the New York State Transmission System or Distribution System at the Point of Interconnection, and (iii) is a Party to the Standard Interconnection Agreement.

**Connecting Transmission Owner's Attachment Facilities** shall mean all facilities and equipment owned, controlled or operated by the Connecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Connecting Transmission Owner's Attachment Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone System Upgrade Facilities, or System Upgrade Facilities. For purposes of applying the requirements in this Attachment HH, Connecting Transmission Owner's Attachment Facilities shall include facilities that were categorized as Connecting Transmission Owner's Interconnection Facilities under the ISO's Small Generator Interconnection Procedures and facilities that were categorized as Connecting Transmission Owner's Attachment Facilities under the ISO's Standard Large Generator Interconnection Procedures.

**Contingent Facilities** shall mean those Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and/or System Deliverability Upgrades associated with Cluster Study Projects upon which the Facility's Cluster Study Project Cost Allocations are dependent, and if delayed or not built, could impact the actual costs and timing of the Facility's Project Cost Allocation for System Upgrade Facilities or System Deliverability Upgrades.

**Contingent Project** shall mean an Interconnection Request or CRIS-Only Request that an Interconnection Customer submits during the Application Window of the Cluster Study Process pursuant to Section 40.5.4.1 for a Project that is simultaneously participating in the prior, ongoing Class Year Study, Cluster Study Process, Additional SDU Study, or Small Generator facilities study.

**Contribution Percentage** shall mean the ratio of a Project's measured impact or pro rata contribution to a System Upgrade Facility, Distribution Upgrade, or System Deliverability Upgrades, as applicable, identified in the Cluster Project Assessment, to the sum of the measured impacts or pro rata contributions of all the Projects in the same Cluster Study that have at least a de minimus impact or contribution to the System Upgrade Facility or Distribution Upgrade.

**Cost Estimate Update** shall have the meaning set forth in Section 40.6.3.5.3.2.

**CRIS-Only Cluster Study Project** shall mean a project that is participating in a Cluster Study Process solely to obtain CRIS or an increase in CRIS. For purposes of applying the requirements in this Attachment HH, the term CRIS-Only Cluster Study Project when used in connection with the Class Year Interconnection Facilities Study requirements in Attachment X and S of the OATT shall mean a Class Year Project that participated in a Class Year solely to request CRIS or an increase in CRIS.

**CRIS-Only Request** shall mean Interconnection Customer's request, in the form of Appendix 2 to this Attachment HH, to solely obtain CRIS or an increase in CRIS. For purposes of applying the requirements in this Attachment HH, the term CRIS-Only Request when used in connection with the Class Year Interconnection Facilities Study requirements in Attachment X and S of the OATT shall mean a Class Year Project's request to participate in a Class Year solely to request CRIS or an increase in CRIS.

**CTOAF and SUF Project Cost Allocation** shall have the meaning set forth in Section 40.15.1 to this Attachment HH.

**Customer Engagement Window** shall mean the time period set forth in Section 40.7.1 of this Attachment HH.

**Deliverable MW** shall have the meaning set forth in Section 40.15.1 to this Attachment HH.

**Decision Period 1** shall mean the period of time following the conclusion of the Customer Engagement Window during which an Interconnection Customer must satisfy the requirements for its Cluster Study Project to enter the Phase 1 Study or be withdrawn. The Phase 1 Entry Decision Period requirements are set forth in Section 40.7.5 to this Attachment HH.

**Decision Period 2** shall mean the period of time following the conclusion of the Phase 1 Study during which an Interconnection Customer must satisfy the requirements for its Cluster Study Project to enter the Phase 2 Study or be withdrawn. The Phase 2 Entry Decision Period requirements are set forth in Section 40.10.8 to this Attachment HH.

**Dispute Resolution** shall mean the procedure described in Section 40.24.5 to this Attachment HH for resolution of a dispute between the Parties.

**Distribution System** shall mean the Transmission Owner's facilities and equipment used to distribute electricity that are subject to FERC jurisdiction, and are subject to the ISO's Standard Interconnection Procedures in this Attachment HH under FERC Order Nos. 2003 and/or 2006. The term Distribution System shall not include LIPA's distribution facilities.

**Distribution Upgrades** shall mean the modifications or additions to the existing Distribution System at or beyond the Point of Interconnection that are required for the proposed Project to connect reliably to the system in a manner that meets the NYISO Minimum Interconnection Standard. Distribution Upgrades do not include Attachment Facilities, System Upgrade Facilities, or System Deliverability Upgrades.

**Effective Date** shall mean the date on which the Standard Interconnection Agreement, Standard Upgrade Construction Agreement, or Multiparty Standard Upgrade Construction Agreement becomes effective upon execution by the Parties, subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.

**Electric Reliability Organization ("ERO")** shall mean the North American Electric Reliability Corporation or its successor organization.

**Energy Duration Limitation** shall have the meaning set forth in Section 5.12.14 of the ISO Services Tariff.

**Energy Resource Interconnection Service ("ERIS")** shall mean the service provided by the ISO to interconnect the Interconnection Customer's Generating Facility or Cluster Study Transmission Project to the New York State Transmission System or to the Distribution System, in accordance with the NYISO Minimum Interconnection Standard, to enable the New York State Transmission System to receive Energy and Ancillary Services from the Generating Facility or Cluster Study Transmission Project, pursuant to the terms of the ISO OATT.

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes Connecting Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**ERO Planning Standards** shall mean the transmission system planning standards of the Electric Reliability Organization.

**Existing System Representation** shall mean the representation of the New York State Power System developed as specified in Section 40.10.3 of this Attachment HH.

**Expedited Deliverability Study (“EDS”)** shall mean a study conducted by the ISO to determine the extent to which an existing or proposed facility satisfies the NYISO Deliverability Interconnection Standard at its requested CRIS level without the need for System Deliverability Upgrades. The schedule and scope of the study is defined in Sections 40.19.1 and 40.13.1.2 of this Attachment HH.

**Expedited Deliverability Study Agreement** shall mean the agreement contained in Appendix 8 to this Attachment HH to conduct an Expedited Deliverability Study pursuant to Section 40.19.3 of this Attachment HH.

**External Affected System** shall mean an electric system outside of the New York Control Area that may be affected by the proposed interconnection.

**External Affected System Operator** shall mean the entity that operates an External Affected System.

**External CRIS Rights** shall mean a determination of deliverability within the Rest of State Capacity Region (*i.e.*, Load Zones A-F), awarded by the ISO for a term of five (5) years or longer, to a specified number of Megawatts of External Installed Capacity that satisfy the requirements set forth in Section 40.13.11 to Attachment HH, and that can be certified in a Bilateral Transaction used for the NYCA and not a Locality, or sold into the NYCA for an Installed Capacity auction and not in an Installed Capacity auction for a Locality.

**External Other Interfaces** shall mean the following interfaces between the NYCA and adjacent Control Areas: PJM to NYISO, ISO-NE to NYISO, Hydro-Quebec to NYISO, and Norwalk Harbor (Connecticut) to Northport (Long Island) Cable.

**External-to-ROS Deliverability Rights** shall have the meaning set forth in Section 2.5 of the ISO Services Tariff.

**Facility** shall mean either a Generating Facility or a Cluster Study Transmission Project.

**Facility Modification Request** shall mean an Interconnection Customer’s request to modify its Facility in the form of Appendix 5 to this Attachment HH.

**Fast Track Process** shall mean the procedure for evaluating an Interconnection Request for a certified Generating Facility that meets the eligibility requirements of Section 40.23.1 of the Attachment HH and includes the Section 40.23 screens, customer options meeting, and optional supplemental review.

**Fast Track Request** shall mean a request in the form of Appendix 13 to this Attachment HH to enter the Fast Track Process set forth in Section 40.23 to this Attachment HH.

**Final Decision Period** shall mean the period of time following the conclusion of the Phase 2 Study during which an Interconnection Customer must elect whether to accept its Project Cost Allocation and provide the related cash or post Security for, as applicable, the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and/or System Deliverability Upgrades identified for its Project in accordance with the requirements in Section 40.15.

**Final Decision Round** shall mean the final round of ISO-communicated cost estimates and Interconnection Customer responses in, as applicable, the Final Decision Period or Additional SDU Study Decision Period, in which all remaining eligible Interconnection Customers issue an Acceptance Notice and provide cash or post Security.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device(s) for the production and/or storage for later injection of electricity identified in the Interconnection Request or CRIS-Only Request, but shall not include: the Interconnection Customer's Attachment Facilities or Distribution Upgrades. A facility comprised of multiple Generators will be treated as a single Generating Facility if the facility proposed in the Interconnection Request or CRIS-Only Request is comprised of multiple Generators behind a single Point of Interconnection, even if such Generators are different technology types.

**Generating Facility Capacity** shall mean the net seasonal capacity of the Generating Facility or the aggregate net seasonal capacity of the Generating Facility consisting of more than one device for a production and/or storage for later injection.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over any of the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; *provided, however*, that such term does not include Interconnection

Customer, the ISO, Affected System Operator, Affected Transmission Owner, Connecting Transmission Owner, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Headroom** shall mean the functional or electrical capacity of the System Upgrade Facility or the electrical capacity of the System Deliverability Upgrade that is in excess of the functional or electrical capacity actually used by the Interconnection Customer’s Project.

**Headroom Security** shall have the meaning set forth in Section 40.17.1.5 to this Attachment HH.

**Heatmap** shall mean the ISO’s publicly posted interactive visual representation of estimated incremental injection capacity available at each point of interconnection and related table of metrics in accordance with the requirements in Section 40.4.1.

**Highway** shall mean 115 kV and higher transmission facilities that comprise the following NYCA interfaces: Dysinger East, West Central, Volney East, Moses South, Central East/Total East, and UPNY-ConEd, and their immediately connected, in series, Bulk Power System facilities in New York State. Each interface shall be evaluated to determine additional “in series” facilities, defined as any transmission facility higher than 115 kV that (a) is located in an upstream or downstream zone adjacent to the interface and (b) has a power transfer distribution factor (DFAX) equal to or greater than five percent when the aggregate of generation in zones or systems adjacent to the upstream zone or zones which define the interface is shifted to the aggregate of generation in zones or systems adjacent to the downstream zone or zones which define the interface. In determining “in series” facilities for Dysinger East and West Central interfaces, the 115 kV and 230 kV tie lines between NYCA and PJM located in LBMP Zones A and B shall not participate in the transfer. Highway transmission facilities are listed in ISO Procedures.

**Initial Decision Round** shall mean the 30 calendar day period of, as applicable, the Final Decision Period or Additional SDU Study Decision Period within which an Interconnection Customer must provide an Acceptance Notice or Non-Acceptance Notice to the ISO in response to the first Project Cost Allocation issued by the ISO to the Interconnection Customer.

**Initial Backfeed Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Connecting Transmission Owner’s Attachment Facilities to obtain back feed power. Initial Backfeed Date shall include the term In-Service Date as that term is used in Attachments S, X, and Z to the ISO OATT.

**Interconnection Customer** shall mean any entity, including the Connecting Transmission Owner or any of its affiliates or subsidiaries, that submits an Interconnection Request or CRIS-

Only Request that is subject to the application of the Standard Interconnection Procedures as set forth in Section 40.2.3 of this Attachment HH or elects to enter an Expedited Deliverability Study. For purposes of applying the requirements in this Attachment HH, an Interconnection Customer shall include an entity that was categorized as a Developer under the ISO's Standard Large Facility Interconnection Procedures or as an Interconnection Customer under the ISO's Small Generator Interconnection Procedures.

**Interconnection Customer's Attachment Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Interconnection Agreement, that are located between the Generating Facility or Cluster Study Transmission Project and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility or Cluster Study Transmission Project to the New York State Transmission System or Distribution System. Interconnection Customer's Attachment Facilities are sole use facilities. For purposes of applying the requirements in this Attachment HH, Interconnection Customer's Attachment Facilities shall include facilities that were categorized as Developer's Attachment Facilities under the ISO's Standard Large Facility Interconnection Procedures or Interconnection Customer's Interconnection Facilities under the ISO's Small Generator Interconnection Procedures.

**Interconnection Request** shall mean Interconnection Customer's request, in the form of Appendix 1 to this Attachment HH, to interconnect a new Generating Facility or Cluster Study Transmission Project to the New York State Transmission System or to the Distribution System, or to 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 with the New York State Transmission System or with the Distribution System. For purposes of the Interconnection Request, a facility comprised of multiple Generators behind the same Point of Interconnection may be considered a single Generating Facility, provided the Interconnection Request identifies a single Interconnection Customer. An Interconnection Request submitted pursuant to the ISO's Standard Large Facility Interconnection Procedures in Attachment X to the ISO OATT or the ISO's Small Generator Interconnection Procedures in Attachment Z to the ISO OATT shall be subject to the transition requirements set forth in Section 40.3.1 to this Attachment HH.

**Internal Other Interfaces** shall mean the following interfaces between Capacity Regions: Lower Hudson Valley, *i.e.*, Rest of State (Load Zones A-F) to Lower Hudson Valley (Load Zones G, H and I); New York City, *i.e.*, Lower Hudson Valley (Load Zones G, H and I) to New York City (Load Zone J); and Long Island, *i.e.*, Lower Hudson Valley (Load Zones G, H and I) to Long Island (Load Zone K).

**IRS** shall mean the Internal Revenue Service.

**Local System Upgrade Facilities** shall mean the System Upgrade Facilities necessary to physically interconnect a proposed Project to the Connecting Transmission Owner's transmission system, consistent with applicable interconnection and system protection design standards. Local System Upgrade Facilities include any electrical facilities required to make the physical connection (*e.g.*, a new ring bus for a line connection or facilities required to create a new bay

for a substation connection). Local System Upgrade Facilities also include any system protection or communication facilities that may be required for protection of the Connecting Transmission Owner's and/or Affected Transmission Owner's transmission facility (line or substation) involved in the interconnection. Local System Upgrade Facilities do not include System Upgrade Facilities required to mitigate any adverse reliability impact(s) of the Project(s) identified through analysis such as power flow, short circuit, or stability (*e.g.*, replacement of a circuit breaker at a nearby substation that becomes overdutied as a result of the Project(s)).

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request with an equal or later Queue Position.

**Merchant Transmission Facility** shall mean an Interconnection Customer's proposed new transmission facility that will interconnect to the New York State Transmission System or a proposed upgrade—an improvement to, addition to, or replacement of a part of an existing transmission facility—to the New York State Transmission System, for which the costs of construction will be recovered through negotiated rates instead of cost-based rates and not subject to the competitive evaluation and selection process for purposes of cost allocation under Attachment Y to the ISO OATT. Merchant Transmission Facilities shall not include Attachment Facilities, Distribution Upgrades, Network Upgrade Facilities, System Upgrade Facilities, or System Deliverability Upgrades.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility or Cluster Study Transmission Project pursuant to the Standard Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**Minor Modification** shall mean, for purposes of the Fast Track Process requirements, modifications that will not have a material adverse impact on the cost or timing of any Interconnection Request.

**Multiparty Affected System Study Agreement** shall mean the agreement contained in Appendix 7 to this Attachment HH that is made among the ISO and multiple Affected System Interconnection Customers to conduct an Affected System Study pursuant to Section 40.8.3 of this Attachment HH.

**Non-Acceptance Event** shall have the meaning set forth in Section 40.15.2.9 of this Attachment HH.

**Non-Acceptance Notice** shall mean the notice by which an Interconnection Customer communicates to the ISO its decision not to accept a Project Cost Allocation or Revised Project Cost Allocation.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Standard Interconnection Procedures, the Standard Interconnection Agreement, the Standard Upgrade Construction Agreement, or the Multiparty Standard Upgrade Construction Agreement, or its performance.

**Notice of SDUs Requiring Additional Study** shall have the meaning set forth in Section 40.14.1 of this Attachment HH.

**NPCC** shall mean the Northeast Power Coordinating Council or its successor organization.

**NPCC Basic Design and Operating Criteria** shall mean the transmission system design and operating criteria of the Northeast Power Coordinating Council.

**NYISO Deliverability Interconnection Standard** shall mean the standard that must be met, unless otherwise provided in this Attachment HH, by (i) any generation facility larger than 2MW in order for that facility to obtain CRIS; (ii) any Cluster Study Transmission Project; (iii) any entity requesting External CRIS Rights, and (iv) any entity requesting a CRIS transfer pursuant to Section 40.18.4 to Attachment HH. To meet the NYISO Deliverability Interconnection Standard, the Interconnection Customer must, in accordance with the rules in this Attachment HH, pay cash or post Security for any System Deliverability Upgrades identified for its Project in the Cluster Study Deliverability Study.

**NYISO Load and Capacity Data Report** shall mean the annual ISO survey of power demand and supply in New York State, published pursuant to Section 6-106 of the Energy Law of New York State.

**NYISO Minimum Interconnection Standard** shall mean the reliability standard that must be met by any Generating Facility or Cluster Study Transmission Project that is subject to the Standard Interconnection Procedures that is proposing to connect to the New York State Transmission System or to the Distribution System to obtain ERIS. The standard is designed to ensure reliable access by the proposed Project to the New York State Transmission System or to the Distribution System, as applicable. The standard does not impose any deliverability test or deliverability requirement on the proposed interconnection.

**NYSRC Reliability Rules** shall mean the reliability rules of the New York State Reliability Council.

**Overage Cost** shall mean the dollar amount by which the total cost of, as applicable, System Upgrade Facilities, Distribution Upgrades, and/or System Deliverability Upgrades identified in the Cluster Project Assessment exceeds the total cost of System Upgrade Facilities considered in the Cluster Baseline Assessment for the same Cluster for a given Cluster Study.

**Overage Cost Percentage** shall mean the ratio of the Overage Cost to the total cost of System Upgrade Facilities, Distribution Upgrades, or System Deliverability Upgrades, as applicable, identified in the Cluster Project Assessment.

**Party or Parties** shall mean, as applicable, the ISO, Interconnection Customer, Affected System Interconnection Customer, Connecting Transmission Owner, Affected System Operator, Affected Transmission Owner, or any combination of the above.

**Payment Eligible Project** shall mean a Cluster Study Project eligible to recover certain study costs from the Withdrawal Penalty Funds collected by the ISO for that Cluster Study Process as defined in Section 40.6.5.2.2.

**Pending Project** shall have the meaning set forth in Section 40.5.4.1.1 to this Attachment HH.

**Permissible Technological Advancement** shall mean advancements to turbines, inverters, or plant supervisory controls or other similar advancements to the existing technology proposed in the Interconnection Request, provided that such advancements result in electrical performance that is equal or better than the electrical performance prior to the technological change and do not (i) increase the capability of the Facility by more than two (2) megawatts (ii) change the generation technology or fuel type of the Facility, (iii) have a material adverse impact on the New York State Transmission System or Distribution System, and (iv) degrade the electrical characteristics of the generating equipment proposed in the Interconnection Request (*e.g.*, the ratings, impedances, efficiencies, capabilities, and performance of the equipment under steady state and dynamic conditions).

**Phase 1 Cost Estimates Summary Report** shall mean the ISO report that summarizes the cost estimates identified in the Phase 1 Studies performed by the Connecting Transmission Owners and Affected Transmission Owners.

**Phase 1 Study** shall mean the first part of the Cluster Study as set forth in Section 40.10 in which the Connecting Transmission Owners and Affected Transmission Owners will perform design and engineering studies 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.

**Phase 1 Study Start Date** shall mean the start date for the Phase 1 Study process as set forth in Section 40.10.1.

**Phase 2 Study** shall mean the second part of the Cluster Study as set forth in Sections 40.11, 40.12, and 40.13 in which the ISO will 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 and, for Cluster Study Projects requesting CRIS, will assess their requested CRIS in compliance with the NYISO Deliverability Interconnection Standard and identify any required System Deliverability Upgrades. 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.

**Phase 2 Study Start Date** shall mean the start date for the Phase 2 Study process as set forth in Section 40.11.1.

**Physical Infeasibility and Physically Infeasible** shall have the meaning set forth in Section 40.7.3.2 to this Attachment HH.

**Physical Infeasibility Screening** shall mean the assessment performed by the applicable Transmission Owner during the Customer Engagement Window of whether the proposed

interconnection of a Cluster Study Project is Physically Infeasible. The Physical Infeasibility Screening requirements are set forth in Section 40.7.3 to this Attachment HH.

**Point of Change of Ownership** shall mean the point where the Interconnection Customer's Attachment Facilities connect to the Connecting Transmission Owner's Attachment Facilities, as set forth in Appendix A to the Standard Interconnection Agreement.

**Point of Interconnection** shall mean the point where the Attachment Facilities connect to the New York State Transmission System or to the Distribution System, as set forth in Appendix A to the Standard Interconnection Agreement.

**Pre-Application Report** shall mean the report issued following an Interconnection Customer's completion of the Pre-Application Request Form pursuant to Section 40.4.2 of this Attachment HH.

**Pre-Application Request Form** shall mean a request in the form of Appendix 4 to this Attachment HH for a Pre-Application Report.

**Project** shall mean the proposed facility as described in a single Interconnection Request or CRIS-Only Request, to the extent permitted by this Attachment HH. For facilities not subject to the ISO's Standard Interconnection Procedures in Attachment HH to the ISO OATT, the Project refers to the facility as described in a single Cluster Study Agreement or Expedited Deliverability Study Agreement, to the extent permitted by this Attachment HH.

**Project Cost Allocation** shall mean the dollar figure estimate for an Interconnection Customer's share of the cost of the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities required for the reliable interconnection of its Project to the New York State Transmission System or to the Distribution System and/or the share of the cost of the System Deliverability Upgrades required for the Interconnection Customer's Project to meet the NYISO Deliverability Interconnection Standard.

**Proportional Impact Method** shall mean the technical analysis conducted by the ISO to determine the degree to which each Facility in the Cluster Study contributes to the need for a specific System Upgrade Facility, Distribution Upgrade, or System Deliverability Upgrade as set forth in Section 40.12.2 to this Attachment HH.

**Provisional Interconnection Service** shall mean interconnection service provided by the ISO associated with interconnecting the Interconnection Customer's Facility to the New York State Transmission System (or Distribution System as applicable) and enabling the transmission system to receive electric energy from the Facility at the Point of Interconnection, pursuant to the terms of the Provisional Interconnection Agreement and, if applicable, the ISO OATT.

**Provisional Standard Interconnection Agreement** shall mean the interconnection agreement for Provisional Interconnection Service established between the ISO, Connecting Transmission Owner(s) and the Interconnection Customer. This agreement shall take the form of the Standard Interconnection Agreement, modified for provisional purposes and type of facility.

**Queue** shall mean the ISO's list of: (i) projects that possess an Interconnection Request or CRIS-Only Request participating in the ISO's Standard Interconnection Procedures set forth in this Attachment HH, (ii) projects with a valid Transmission Interconnection Application participating in the Transmission Interconnection Procedures in Attachment P to the ISO OATT, (iii) projects with a valid Study Request participating in Section 3.7 of the ISO OATT, (iv) load projects submitted in accordance with Section 3.9 of the ISO OATT, (v) projects subject to an Affected System Study, and (vi) projects that prior to the effective date of the Standard Interconnection Procedures were participating in the ISO's Standard Large Facility Interconnection Procedures in Attachment X to the ISO OATT or the Small Generator Interconnection Procedures in Attachment Z to the ISO OATT and retain their Queue Position in accordance with the transition requirements set forth in Section 40.3 to this Attachment HH.

**Queue Position** shall mean the unique number and/or letter designation in the Queue for a valid Interconnection Request, CRIS-Only Request, Study Request, Load request, or Transmission Interconnection Application that satisfies the applicable requirements for inclusion in the Queue.

**Readiness Deposits** shall mean Readiness Deposit 1 and Readiness Deposit 2.

**Readiness Deposit 1** shall mean a deposit paid by Interconnection Customer for its Cluster Study Project to enter the Phase 1 Study as set forth in Section 40.7.5 to this Attachment HH.

**Readiness Deposit 2** shall mean a deposit paid by Interconnection Customer for its Cluster Study Project to enter the Phase 2 Study as set forth in Section 40.10.8 to this Attachment HH.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Interconnection Procedures, Standard Interconnection Agreement, Standard Upgrade Construction Agreement, or Multiparty Standard Upgrade Construction Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Regulatory Limitations** shall mean a federal, state, Tribal, or local law, other than permitting and siting requirements, that makes it infeasible to obtain Site Control prior to an Interconnection Customer's submission of its Interconnection Request as set forth in ISO Procedures.

**Retired** shall mean a Generator that has permanently ceased operating on or after the effective date of Section 5.18 of the ISO Services Tariff either: i) pursuant to applicable notice; or ii) as a result of the expiration of its Mothball Outage or the expiration of its ICAP Ineligible Forced Outage.

**Revised Project Cost Allocation** shall mean the revised dollar figure cost estimate and related information provided by the ISO to an Interconnection Customer following receipt by the ISO of a Non-Acceptance Notice, or upon the occurrence of a Security Posting Default by another member of the respective Cluster.

**Scoping Meeting** shall mean the group meeting during the Customer Engagement Window among representatives of the Interconnection Customers in the Cluster for a given Cluster Study Process, the ISO, Connecting Transmission Owners, and Affected Transmission Owners

conducted for the purpose of discussing Interconnection Customers' Interconnection Requests and CRIS-Only Requests and providing available information including any transmission data and earlier study evaluations that would be reasonably expected to impact their proposed interconnections.

**SDU Project Cost Allocation** shall have the meaning set forth in Section 40.15.1 to Attachment HH.

**Security** shall mean, under the interconnection facilities cost allocation rules set out in this Attachment HH, an Interconnection Customer must signify its willingness to pay the Connecting Transmission Owner, Affected Transmission Owner(s), and/or Affected System Operator(s) for the Interconnection Customer's share of the required Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities and System Deliverability Upgrades by posting Security for the full amount of the Interconnection Customer's share within a specified time frame. The Security can be a bond, irrevocable letter of credit, parent company guarantee or other form of security from an entity with an investment grade rating, executed for the benefit of the Connecting Transmission Owner, Affected Transmission Owner(s), and/or Affected System Operator(s), meeting the requirements of the cost allocation rules in this Attachment HH, and meeting the commercially reasonable requirements of the Connecting Transmission Owner, Affected Transmission Owner(s), and/or Affected System Operator(s).

**Security Posting Default** shall mean a failure by one or more Interconnection Customers to post Security in, as applicable, the Final Decision Period or Additional SDU Study Decision Period, as required by this Attachment HH.

**Site Control** shall mean the necessary land right sufficient to develop, construct, operate, and maintain the Facility over a term of at least ten (10) years from the date of the submission of the Interconnection Request. Site Control may be demonstrated by documentation establishing: (1) ownership of, a leasehold interest in, or a right to develop a site of sufficient size to construct and operate the Facility; (2) an option to purchase or acquire a leasehold site of sufficient size to construct and operate the Facility; or (3) any other documentation that clearly demonstrates the right of Interconnection Customer to occupy a site of sufficient size to construct and operate the Facility. The term "necessary land right" restricts the use of the site for mutually exclusive projects, but does not restrict multi-use applications of the site in addition to its use for the Facility, such as agriculture, ranching, etc. The ISO will maintain acreage requirements and other applicable parameters for each facility type on its OASIS or public website.

**Site Control Deposit** shall mean the deposit provided by the Interconnection Customer to satisfy the Site Control requirement due to a Regulatory Limitation as set forth in Section 40.5.5.1.5.1 to this Attachment HH.

**Stand Alone System Upgrade Facilities** shall mean System Upgrade Facilities that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the New York State Transmission System during their construction. The ISO, the Connecting Transmission Owner, and the Interconnection Customer must agree as to what constitutes Stand Alone System Upgrade Facilities and identify them in Appendix A to the

Standard Interconnection Agreement. If the ISO, the Connecting Transmission Owner, and the Interconnection Customer disagree about whether a particular System Upgrade Facility is a Stand Alone System Upgrade Facility, the ISO and the Connecting Transmission Owner must provide the Interconnection Customer a written technical explanation outlining why the ISO and the Connecting Transmission Owner do not consider the System Upgrade Facility to be a Stand Alone System Upgrade Facility within fifteen (15) Business Days of its determination.

**Standard Interconnection Procedures (“Interconnection Procedures” or “IP”)** shall mean the interconnection procedures applicable to an Interconnection Request or a CRIS-Only Request pertaining to a Generating Facility or Cluster Study Transmission Project that are included in this Attachment HH of the ISO OATT.

**Standard Interconnection Agreement (“IA”)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Generating Facility or Cluster Study Transmission Project, that is included in Appendix 15 to this Attachment HH of the ISO OATT. For purposes of applying the requirements in this Attachment HH, the term Standard Interconnection Agreement shall include, as applicable, Standard Large Generator Interconnection Agreement and Small Generator Interconnection Agreement.

**Standard Upgrade Construction Agreement** shall mean the agreement contained in Appendix 16 to this Attachment HH that is made, as applicable, among (i) the ISO, (ii) the Affected System Operator or Affected Transmission Owner, and (iii) the Interconnection Customer or Affected System Interconnection Customer to facilitate the construction of and to set forth cost responsibility for necessary System Upgrades Facilities, System Deliverability Upgrades, or Affected System Network Upgrades on the New York State Transmission System or Distribution System.

**Standard Multiparty Upgrade Construction Agreement** shall mean the agreement contained in Appendix 17 to this Attachment HH that is made, as applicable, among (i) the ISO, (ii) the Affected System Operator, Affected Transmission Owner, or Connecting Transmission Owner, and (iii) multiple Interconnection Customers or Affected System Interconnection Customers to facilitate the construction of and to set forth cost responsibility for necessary System Upgrade Facilities, System Deliverability Upgrades, or Affected System Network Upgrades on the New York State Transmission System or Distribution System.

**Study Deposit** shall mean the study deposit the Interconnection Customer must submit with its Interconnection Request or CRIS-Only Request pursuant to Section 40.5.5.1.4 to this Attachment HH.

**Subsequent Decision Round** shall mean a seven calendar day period of, as applicable, the Final Decision Period or Additional SDU Study Decision Period, within which an Interconnection Customer must provide an Acceptance Notice or Non-Acceptance Notice to the ISO in response to the Revised Project Cost Allocation issued by the ISO to the Interconnection Customer.

**Synchronization Date** shall mean the date upon which the Generating Facility or Cluster Study Transmission Project is initially synchronized and upon which Trial Operation begins, notice of which must be provided by the Interconnection Customer to the ISO and Connecting

Transmission Owner in the form of Appendix E-1 of the Standard Interconnection Agreement. Synchronization Date shall include the term Initial Synchronization Date as that term is used in Attachments S, X, and Z to the ISO OATT.

**System Deliverability Upgrades** shall mean the least costly configuration of commercially available components of electrical equipment that can be used, consistent with Good Utility Practice and Applicable Reliability Requirements, to make the modifications or additions to Byways and Highways, External Other Interfaces and Internal Other Interfaces on the existing New York State Transmission System that are required for the proposed Project to connect reliably to the system in a manner that meets the NYISO Deliverability Interconnection Standard for Capacity Resource Interconnection Service.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to (1) protect the New York State Transmission System from faults or other electrical disturbances occurring at the Generating Facility or Cluster Study Transmission Project and (2) protect the Generating Facility or Cluster Study Transmission Project from faults or other electrical system disturbances occurring on the New York State Transmission System or on other delivery systems or other generating systems to which the New York State Transmission System is directly connected.

**System Upgrade Facilities** shall mean the least costly configuration of commercially available components of electrical equipment that can be used, consistent with Good Utility Practice and Applicable Reliability Requirements, to make the modifications to the existing transmission system that are required to maintain system reliability due to: (i) changes in the system including such changes as load growth and changes in load pattern, to be addressed in the form of generic generation or transmission projects; and (ii) proposed interconnections. In the case of proposed interconnections, System Upgrade Facilities are the modifications or additions to the existing New York State Transmission System that are required for the proposed Project to connect reliably to the system in a manner that meets the NYISO Minimum Interconnection Standard.

**Transition Cluster Study** shall mean the Cluster Study conducted during the Transition Cluster Study Process.

**Transition Cluster Study Process** shall mean the first Cluster Study Process conducted in accordance with the Standard Interconnection Procedures requirements in this Attachment HH.

**Transition Cluster Study Process Start Date** shall mean the date upon which the ISO will open the Application Window for the Transition Cluster Study Process, which date shall be determined pursuant to Section 40.5.1.1 to this Attachment HH.

**Trial Operation** shall mean the period during which an Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility or Cluster Study Transmission Project prior to Commercial Operation.

**UCAP Deration Factor (“UCDF”)** shall have the meaning set forth in Sections 40.13.8.2.1.3 and 40.13.8.2.2.2 of this Attachment HH.

**Upgrades** shall mean the required additions and modifications to the Connecting Transmission Owner's portion of the New York State Transmission System or the Distribution System at or beyond the Point of Interconnection. Upgrades may be System Upgrade Facilities or System Deliverability Upgrades or Distribution Upgrades. Upgrades do not include Attachment Facilities.

**Withdrawal Penalty** shall mean the penalties assessed by the ISO to an Interconnection Customer that chooses to withdraw or is deemed withdrawn by the ISO from the ISO's Queue or whose Generating Facility or Cluster Study Transmission Project does not otherwise reach Commercial Operation. The calculation of the Withdrawal Penalty is set forth in Section 40.6.5.1 to this Attachment HH.

**Withdrawal Penalty Funds** shall mean the amount of the Withdrawal Penalties that the ISO has collected from Cluster Study Projects for a given Cluster Study Process.

## **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 Decision Period 1 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 Decision Period 2 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.

#### **40.4 Pre-Application Interconnection Information Available to Prospective Interconnection Customers**

##### **40.4.1 Heatmap**

The ISO shall maintain and make publicly available: (1) an interactive visual representation of the estimated incremental injection capacity (in megawatts) available at each point of interconnection on the New York State Transmission System under N-1 conditions, and (2) a table of metrics concerning the estimated impact of a potential Generating Facility on the New York State Transmission System based on a user-specified addition of a particular number of megawatts at a particular voltage level at a particular point of interconnection. At a minimum, for each transmission facility impacted by the user-specified megawatt addition, the following information will be provided in the table: (1) the distribution factor; (2) the megawatt impact (based on the megawatt values of the proposed Generating Facility and the distribution factor); (3) the percentage impact on each impacted transmission facility (based on the megawatt values of the proposed Generating Facility and the facility rating); (4) the percentage of power flow on each impacted transmission facility before the injection of the proposed project; and (5) the percentage power flow on each impacted transmission facility after the injection of the proposed Generating Facility. These metrics must be calculated based on the power flow model of the New York State Transmission System with the transfer simulated from each point of interconnection to the whole New York State Transmission System (to approximate Capacity Resource Interconnection Service), and with the incremental capacity at each point of interconnection decremented by the existing and queued Generating Facilities and with the incremental capacity at each point of injection for a Class Year Transmission Project or Cluster Study Transmission Project (based on the existing or requested interconnection service limit of the generation). The information contained in the Heatmap is solely for information purposes.

An entity seeking ERIS and/or CRIS must do so pursuant to the requirements in this Attachment HH. These metrics must be updated within thirty (30) Calendar Days after the completion of the latter of the Final Decision Period or the Additional SDU Study Decision Period. This information must be publicly posted, without a password or a fee. The website will define all underlying assumptions, including the name of the most recent Cluster Study used in the Base Case. The ISO will make this information required by this Section 40.4.1 available beginning thirty (30) Calendar Days after the conclusion of the latter of the Final Decision Period or the Additional SDU Study Decision Period for the Transition Cluster Study.

#### **40.4.2 Pre-Application Report**

40.4.2.1 An entity may request a Pre-Application Report for information regarding the proposed interconnection of a Generation Facility or Cluster Study Transmission Project at a particular point on the New York State Transmission System or Distribution System. To request a Pre-Application Report, the entity must submit to the ISO: (i) a fully completed and executed Pre-Application Request Form, in the form set forth in Appendix 4 to this Attachment HH, and (ii) a non-refundable pre-application fee of \$5,000 in cash, which fee shall be provided in accordance with Section 40.2.4.1. The requesting entity may request through a single Pre-Application Request Form information concerning one point of interconnection. The requesting entity must submit an additional Pre-Application Request Form and applicable fee to request information about additional points of interconnection. An entity may submit a Pre-Application Request Form to the ISO at any time, except for within the period commencing forty-five (45) days prior to, as applicable, the Cluster Study Process Start Date or Transition Cluster Study Process Start Date and through the completion of the Application Window for that Cluster Study Process or Transition Cluster Study Process.

40.4.2.2        Upon the ISO's receipt of a fully completed and executed Pre-Application Request Form and the application fee from the requesting entity, the ISO will provide within five (5) Business Days a copy of the Pre-Application Request Form to the Connecting Transmission Owner. The application fee shall be divided between the ISO and the Connecting Transmission Owner as follows: 25% to the ISO and 75% to the Connecting Transmission Owner.

40.4.2.3        The Transmission Owner will respond to the ISO within five (5) Business Days confirming whether it is the appropriate Connecting Transmission Owner and, if so, identifying any Affected Transmission Owner(s) to the extent known at that time. Upon a Transmission Owner's confirmation that it is the appropriate Connecting Transmission Owner, it will coordinate with the requesting entity and any Affected Transmission Owner(s) to establish a date agreeable to those entities for a pre-application scoping meeting. If the identified Transmission Owner informs the ISO that it is not the appropriate Connecting Transmission Owner or Affected Transmission Owner, the ISO will provide within five (5) Business Days a copy of the Pre-Application Request Form to, as applicable, the appropriate Connecting Transmission Owner. The requesting entity shall execute a confidentiality agreement or non-disclosure agreement with the Connecting Transmission Owner and/or Affected Transmission Owner, if required by the applicable Transmission Owner, prior to the pre-application scoping meeting. The Connecting Transmission Owner shall complete, in coordination with any Affected Transmission Owner(s), and return to the requesting entity the Pre-Application Report within twenty-five (25) Business Days after the pre-application scoping meeting.

40.4.2.4        The Pre-Application Report shall be in the form set forth in Appendix 4 to this Attachment HH. The Connecting Transmission Owner shall, in good faith, complete the Pre-Application Report with the best information available at the time of the report to the extent

readily available data exists. The Pre-Application Report process does not obligate the ISO, Connecting Transmission Owner, or Affected Transmission Owner(s) to conduct a study or perform other analysis of the proposed interconnection of the Facility in the event the data is not readily available. If the Connecting Transmission Owner cannot complete all or some of the Pre-Application Report due to lack of available data, the Connecting Transmission Owner shall provide the requesting entity with a Pre-Application Report that includes the data that is available. The information included in the report is preliminary and non-binding, may be outdated by the time an Interconnection Request is submitted, and does not confer any rights on the part of the requesting entity or any obligations on the ISO, Connecting Transmission Owner, or Affected Transmission Owner(s). If the ISO, in consultation with the relevant Connecting Transmission Owner, determines that the proposed interconnection is not subject to the ISO's Standard Interconnection Procedures, the ISO will inform the requesting entity that its proposed interconnection is not subject to the Standard Interconnection Procedures, and the Connecting Transmission Owner will provide the requesting entity with the Pre-Application Report completed to the extent possible.

40.4.2.5 An entity is not required to request a Pre-Application Report to submit an Interconnection Request for its Facility to the ISO during an Application Window. Notwithstanding a Pre-Application Report, an entity must satisfy the Standard Interconnection Procedures in this Attachment HH to interconnect its Facility to the New York State Transmission System or Distribution System. If the Pre-Application Request Form seeks information about a point of interconnection that is not subject to the Standard Interconnection Procedures, the entity shall follow the applicable state tariff, rules, or procedures regarding generator interconnections.

**40.5 Cluster Study Process Start Date/Application Window/ Interconnection Requests/ Interconnection Service Options**

**40.5.1 Start Date for Transition Cluster Study Process and Subsequent Cluster Study Processes**

40.5.1.1 The Transition Cluster Study Process shall commence on the Transition Cluster Study Process Start Date, which shall be August 1, 2024.

40.5.1.2 Each subsequent Cluster Study Process shall commence on the Cluster Study Process Start Date for that Cluster Study Process.

40.5.1.3 For Cluster Study Processes after the Transition Cluster Study Process, the Cluster Study Process Start Date shall be fifteen (15) Calendar Days prior to the scheduled date for the ISO's presentation in the prior study process of the Cluster Study Report for the Operating Committee's approval. The date will be set as follows. Within thirty (30) Calendar Days of the commencement of the Phase 2 Study of the Transition Cluster Study Process or a subsequent Cluster Study Process, the ISO will provide a preliminary schedule for the next Cluster Study Process, including a preliminary Cluster Study Process Start Date, based on the then-scheduled date for the ISO's presentation of the Cluster Study Report to the Operating Committee. Sixty (60) Calendar Days prior to the latest scheduled date of the ISO's presentation of the Cluster Study Report to the Operating Committee, the ISO shall provide the final Cluster Study Process Start Date using that scheduled Operating Committee date.

If the ongoing Cluster Study, including the Final Decision Round of the Final Decision Period, takes longer than scheduled to be completed, then the ISO shall extend the Customer Engagement Window for the next Cluster Study Process by the number of additional days required to complete the prior Cluster Study, including its Final Decision Period.

40.5.1.4 The ISO shall provide notice of the Transition Cluster Study Process Start Date and subsequent Cluster Study Process Start Dates and schedule by: (i) sending notice of the start date and schedule to those registered through the ISO to be on the distribution lists for the NYISO Operating Committee and its subcommittees and (ii) posting notice on its website of the start date.

#### **40.5.2 Transition Cluster Study Process**

The Transition Cluster Study Process shall be conducted in accordance with the requirements for the Cluster Study Process set forth in this Attachment HH except as otherwise indicated in this Attachment HH.

#### **40.5.3 Application Window Duration**

40.5.3.1 The Application Window shall commence, as applicable, on the Transition Cluster Study Process Start Date or Cluster Study Process Start Date.

40.5.3.2 The Application Window shall be a forty-five (45) Calendar Day period for a Cluster Study Process; *provided, however*, that the period shall be a seventy-five (75) Calendar Day period for the Transition Cluster Study Process.

#### **40.5.4 Submission of Interconnection Request or CRIS-Only Request in Application Window**

The ISO will only process an Interconnection Request or CRIS-Only Request that is submitted by an Interconnection Customer during an Application Window, except for CRIS-Only Requests to obtain or increase CRIS that are not subject to a Cluster Study Process. An Interconnection Customer may submit an Interconnection Request or CRIS-Only Request for a project that is subject to the Standard Interconnection Procedures as set forth in Section 40.2.3 to join the Cluster evaluated for that particular Cluster Study Process. To submit an

Interconnection Request or CRIS-Only Request, an Interconnection Customer must satisfy the applicable submission requirements in Section 40.5.5.

#### **40.5.4.1 Contingent Projects**

40.5.4.1.1 If a project is participating in a Class Year Study, Cluster Study, Additional SDU Study, or Small Generator facilities study that is ongoing during the Application Window for the next Cluster Study Process (“Pending Project”), then the Interconnection Customer may submit during that Application Window for the next Cluster Study Process an Interconnection Request or CRIS-Only Request for a Cluster Study Project that is the same as its Pending Project (e.g., same technical data, modeling, Point of Interconnection, and site), which project shall be labeled as a “Contingent Project” with its own Queue Position. An Interconnection Customer’s submission of a Contingent Project will not replace, or require the withdrawal, of the Interconnection Request or CRIS-Only Request for the Pending Project.

40.5.4.1.2 The Interconnection Customer must satisfy for the Contingent Project all of the same Interconnection Request or CRIS-Only Request requirements set forth in Section 40.5.5 as are required for an entirely new project, including, but not limited to, satisfying the non-refundable Application Fee, Study Deposit, and Site Control requirements; *provided however*, that the technical data submitted with the Pending Project’s Interconnection Request need not be resubmitted with the Contingent Project’s Interconnection Request submission.

40.5.4.1.3 The Contingent Project shall be subject to all of the same requirements in the Cluster Study Process as an entirely new project except as otherwise set forth in Sections 40.5.4.1.3.1 to 40.5.4.1.3.4.

40.5.4.1.3.1 If the Pending Project is a Class Year Project or Cluster Study Project only requesting ERIS:

(i) if the Interconnection Customer accepts the SUF Project Cost Allocation or the CTOAF and SUF Project Cost Allocation required for the ERIS for the Pending Project in any decision round of the Cluster Study, then the ISO shall withdraw the Contingent Project, and the Contingent Project shall not be assessed a Withdrawal Penalty for this withdrawal; or

(ii) if the Interconnection Customer withdraws the Pending Project prior to the applicable Final Decision Round or does not accept the cost allocation described in subpart (i), then the Contingent Project shall continue as a Cluster Study Project in the new Cluster Study Process, shall be subject to all of the same requirements in the Cluster Study Process as any other project, including the option to modify its Point of Interconnection pursuant to Section 40.7.2.3, and will be subject to any applicable Withdrawal Penalties if it withdraws or is deemed withdrawn.

40.5.4.1.3.2 If the Pending Project is a Class Year Project or Cluster Study Project only requesting CRIS:

(i) if the Interconnection Customer accepts the SDU Project Cost Allocation or Deliverable MWs for the fully requested CRIS amount for the Pending Project in any decision round of the later of the applicable Cluster Study or Additional SDU Study, then the ISO shall withdraw the Contingent Project, and the Contingent Project shall not be assessed a Withdrawal Penalty for this withdrawal; or

(ii) if the Interconnection Customer withdraws the Pending Project prior to the applicable Final Decision Round, does not accept the cost allocation or

Deliverable MWs described in subpart (i), or the Additional SDU Study in which its Pending Project is participating is not completed, then the Contingent Project shall continue as a CRIS-Only Cluster Study Project in the new Cluster Study Process for purposes of obtaining the megawatts of requested CRIS that it did not obtain in the prior study and shall be subject to all of the same requirements in the Cluster Study Process as any other project, including any applicable Withdrawal Penalties if it withdraws or is deemed withdrawn by the ISO.

40.5.4.1.3.3 If the Pending Project is a Cluster Study Project requesting both ERIS and CRIS:

(i) if the Interconnection Customer (A) accepts the SUF Project Cost Allocation or the CTOAF and SUF Project Cost Allocation for the ERIS for the Pending Project in any decision round of the later of the applicable Cluster Study or Additional SDU Study, and (B) accepts the SDU Project Cost Allocation or the Deliverable MWs required for the fully requested CRIS amount for the Pending Project in the later of the applicable Cluster Study or Additional SDU Study, then the ISO shall withdraw the Contingent Project, and the Contingent Project shall not be assessed a Withdrawal Penalty for this withdrawal; or

(ii) if the Interconnection Customer withdraws the Pending Project prior to the applicable Final Decision Round for ERIS or does not accept the cost allocation described in subpart (i)(A), then the Contingent Project shall continue as a Cluster Study Project in the new Cluster Study Process, shall be subject to all of the same requirements in the Cluster Study Process as any other project, including the option to modify its Point of Interconnection pursuant to Section

40.7.2.3, and will be subject to any applicable Withdrawal Penalties if it withdraws or is deemed withdrawn by the ISO, or

(iii) if: (A) the Interconnection Customer accepts the cost allocation for ERIS as described in subpart (i), but (B) does not accept the SDU Project Cost Allocation or the Deliverable MWs required for the fully requested CRIS amount described in subpart (i) or the Additional SDU Study in which its Pending Project is participating is not completed, then the Contingent Project shall be converted into a CRIS-Only Cluster Study Project for its evaluation in the Cluster Study Process for the megawatts of requested CRIS not obtained by the Pending Project in the prior study. In such case, the ISO shall, upon Interconnection Customer's request, refund to Interconnection Customer any refundable cash portion of, or coordinate with Interconnection Customer to amend any letter of credit or surety bond for, any Study Deposit amount, Readiness Deposit(s), and Site Control Deposit that the Interconnection Customer provided for the Contingent Project that are not required for a CRIS-Only Cluster Study Project. If Interconnection Customer informs the ISO that it will not proceed as a CRIS-Only Cluster Study Project prior to electing to enter the Phase 1 Study, then the ISO shall withdraw the project, and the project shall not be assessed a Withdrawal Penalty for this withdrawal.

40.5.4.1.3.4 If the Pending Project is a Small Generating Facility subject to a Small Generator facilities study:

(i) if: (A) the facilities study is completed prior to the end of the Application Window for the Transition Cluster Study Process, and (B) the

Interconnection Customer accepts its cost allocation for the System Upgrade Facilities cost allocation following the issuance of the final report in accordance with Section 32.3.5.7 of Attachment Z, then the ISO shall withdraw the Contingent Project, and the Contingent Project shall not be assessed a Withdrawal Penalty; or

(ii) if: (A) the Interconnection Customer withdraws the Pending Project prior to the completion of the facilities study, (B) the Interconnection Customer does not accept the cost allocation for the Pending Project described in subpart (i), or (C) the facilities study for the Pending Project is not completed prior to the end of the Application Window for the Transition Cluster Study Process and is terminated by the ISO, then the Contingent Project shall continue as a Cluster Study Project in the new Cluster Study Process, shall be subject to all of the same requirements in the Cluster Study Process as any other project, including the option to modify its Point of Interconnection pursuant to Section 40.7.2.3, and will be subject to any applicable Withdrawal Penalties if it withdraws or is deemed withdrawn by the ISO.

#### **40.5.5 Submission Requirements for Interconnection Request or CRIS-Only Request**

40.5.5.1 To submit an Interconnection Request or CRIS-Only Request, an Interconnection Customer must submit to the ISO the following during, and no later than the close of, the Application Window.

40.5.5.1.1 Interconnection Customer must submit, as applicable, (i) a completed Interconnection Request in accordance with Appendix 1 to these Standard Interconnection Procedures, including the required technical data, modeling, and

conceptual one-line project layout, or (ii) a completed CRIS-Only Request in accordance with Appendix 2 to these Standard Interconnection Procedures.

40.5.5.1.2 Interconnection Customer submitting a CRIS-Only Cluster Study Project must provide documentation demonstrating that it is in service or has completed one of the following, as applicable: a Class Year Study or Cluster Study for ERIS, a completed facilities study for Small Generating Facilities processed under the Small Generator Interconnection Procedures pursuant to Section 40.3.1, or a utility interconnection study if the facility is not subject to the ISO interconnection procedures under Attachment HH.

40.5.5.1.3 Interconnection Customer must submit a non-refundable Application Fee in cash in the amount of \$10,000 in accordance with Section 40.2.4.1; *provided, however*, that the Application Fee shall be \$5,000 for a CRIS-Only Cluster Study Project. The Application Fee shall be divided between the ISO and Connecting Transmission Owner(s) as follows: 75% allocated to the ISO and 25% allocated to the Connecting Transmission Owner; *provided, however*, that for a CRIS-Only Cluster Study Project, 100% of the Application Fee will be allocated to the ISO.

40.5.5.1.4 Interconnection Customer must submit a Study Deposit in accordance with the requirements in Section 40.2.4 in the following amount based on the size of the proposed Facility in the Interconnection Request: (A) \$100,000 for a Facility smaller than 80 MW, (B) \$150,000 for a Facility greater than or equal to 80 MW and smaller than 200 MW, or (C) \$250,000 for a Facility greater than or equal to 200 MW; *provided, however*, that the Study Deposit amount shall be \$50,000 for a CRIS-Only Cluster Study Project. The MW value used to calculate the Study Deposit

amount will be based on the requested ERIIS amount at the Point of Interconnection for the Cluster Study Project. The ISO shall hold the Study Deposit for the duration of Interconnection Customer's participation in the Cluster Study Process, subject to the requirements set forth in Sections 40.6.5, 40.7.6, 40.10.9, 40.15.4, 40.15.5, and 40.24.3 to this Attachment HH.

40.5.5.1.5 Except as set forth in Section 40.5.5.1.5.1, Interconnection Customer:

- (i) must demonstrate with its Interconnection Request through its submission of materials permitted in ISO Procedures full Site Control of the Facility consistent with the acreage and other parameters for the Facility's technology type set forth in ISO Procedures and (ii) include an attestation in the form set forth in ISO Procedures from an officer of the company indicating the amount of acreage covered by these Site Control materials and that such acreage is consistent with the acreage and other parameters for the Facility's technology type set forth in ISO Procedures. If: (i) the Facility is a new technology type not addressed in the ISO Procedures or (ii) the Site Control documentation provided by the Interconnection Customer is for less acreage than required for the Facility's technology type in ISO Procedures, the Interconnection Customer must instead provide under this Section 40.5.5.1.5 an attestation in the form set forth in ISO Procedures from an officer of the company sufficiently describing and explaining the special circumstances of the project that permits a different acreage amount for Site Control than the requirements in the ISO Procedures, along with a licensed professional engineer (electrical or civil) signed and stamped site plan that depicts that the Site Control provided by the Interconnection Customer can support the proposed arrangement of its Facility.

40.5.5.1.5.1 An Interconnection Customer may submit (1) a signed affidavit from an officer of the company indicating that Site Control is unobtainable due to Regulatory Limitations as such term is defined in ISO Procedures; (2) documentation sufficiently describing and explaining the source and effects of such Regulatory Limitations, including a description of any conditions that must be met to satisfy the Regulatory Limitations and the anticipated time by which Interconnection Customer expects to satisfy the regulatory requirements; and (3) a Site Control Deposit of \$10,000 per MW, subject to a minimum of \$500,000 and a maximum of \$2,000,000 in accordance with the requirements in Section 40.2.4.2. The MW value used to calculate the Site Control Deposit amount will be based on the requested ERIS amount at the Point of Interconnection for the Cluster Study Project.

40.5.5.1.5.2 Interconnection Requests from multiple Interconnection Customers for multiple Generating Facilities that share a site must include a contract or other agreement that allows for shared land use.

40.5.5.1.6 Interconnection Customer must indicate whether the Interconnection Request or CRIS-Only Request shall be studied for Energy Resource Interconnection Service and/or for Capacity Resource Interconnection Service, as further detailed in Section 40.5.6 below.

40.5.5.1.7 Interconnection Customer must specify a single Point of Interconnection for the Interconnection Request, except: (i) for a Cluster Study Transmission Project, or (ii) for a Generating Facility proposing to interconnect at two Points of Interconnection within the same Capacity Region.

40.5.5.1.8 An Interconnection Customer that submitted an Interconnection Request for an inverter-based resource that is greater than 20 MW must submit the form set forth in ISO Procedures concerning the attestations required by NYSRC Reliability Rule B.5.

40.5.5.2 The expected Commercial Operation Date of the new Facility or proposed increase in capacity of the existing Facility provided at the time of the submission of the Interconnection Request shall be no more than ten (10) years from the date the Interconnection Request is received by the ISO. Extensions of Commercial Operation Dates are governed by Section 40.6.3.4.

40.5.5.3 Except as permitted by the Contingent Project rules in Section 40.5.4.1, an Interconnection Customer, or an Interconnection Customer and one of its Affiliates, cannot submit an Interconnection Request for a mutually exclusive Cluster Study Project with projects in the Queue or projects proceeding in the same Application Window.

40.5.5.4 An Interconnection Customer that submits to the ISO a Site Control Deposit due to demonstrated Regulatory Limitations must demonstrate that it is taking identifiable steps to satisfy the necessary regulatory requirements from the applicable federal, state, local and/or tribal entities prior to entering the Phase 2 Study. Such deposit will be held by the ISO until Interconnection Customer provides the required Site Control demonstration for its project in the Cluster Study Process. Interconnection Customers facing qualifying Regulatory Limitations must demonstrate full Site Control within one-hundred eighty (180) Calendar Days of the effective date of the Standard Interconnection Agreement.

40.5.5.5 Interconnection Customer shall promptly inform the ISO of any material change to Interconnection Customer's demonstration of Site Control under Section 40.5.5.1.5. If the

ISO determines, based on Interconnection Customer's information, that Interconnection Customer no longer satisfies the Site Control requirement, the ISO shall give Interconnection Customer fifteen (15) Business Days to demonstrate satisfaction with the applicable requirement subject to the ISO's approval. Absent such, the ISO shall deem the Interconnection Request withdrawn pursuant to Section 40.6.4.

40.5.5.6 Interconnection Customer shall submit a separate Interconnection Request for each site unless the Facility is a proposed Facility comprised of multiple Generators behind a single Point of Injection, in which case the Interconnection Customer must submit a single Interconnection Request. The Interconnection Request for a Facility comprised of multiple Generators behind a single Point of Injection must be submitted by a single Interconnection Customer. An Interconnection Customer may submit multiple Interconnection Requests for a single site to the extent permitted by the Site Control requirements in this Attachment HH. The Interconnection Customer must satisfy all Interconnection Request submission requirements for each Interconnection Request even when more than one request is submitted for a single site.

#### **40.5.6 Types of Interconnection Service**

##### **40.5.6.1 Two Types of Service**

Two types of interconnection service may be requested under the Standard Interconnection Procedures: (1) Energy Resource Interconnection Service for interconnection in compliance with the NYISO Minimum Interconnection Standard; and (2) Capacity Resource Interconnection Service for interconnection in compliance with the NYISO Deliverability Interconnection Standard.

#### **40.5.6.2 Service Elections, Generally**

All Facilities must interconnect in compliance with the NYISO Minimum Interconnection Standard. In addition, Facilities must also comply with the NYISO Deliverability Interconnection Standard before Generating Facilities can become qualified Installed Capacity Suppliers and before Cluster Study Transmission Projects can receive Unforced Capacity Deliverability Rights. An Interconnection Customer initially states its election to be evaluated in the Cluster Study for ERIS alone, or for both ERIS and CRIS, as a part of its Interconnection Request. For Projects comprised of multiple Generators, an Interconnection Customer must request a single ERIS value for the Facility and also specify the ERIS of the multiple Generators comprising the Facility as requested by Interconnection Customer in its Interconnection Request. For projects comprised of multiple Generators, the total ERIS for the Facility may be less than the sum of the ERIS for the individual Generators. The requested ERIS of the individual Generators is subject to the following limitations: (1) the requested ERIS for the Energy Storage Resource in a Co-located Storage Resource or Hybrid Storage Resource cannot exceed the lesser of the Point of Injection limit or its nameplate; and (2) the requested ERIS for each Resource in a Co-located Storage Resource or Hybrid Storage Resource other than the Energy Storage Resource cannot exceed the lesser of (a) the Point of Injection limit plus the full withdrawal capability of the Energy Storage Resource or (b) the relevant Resource's nameplate. An existing Generating Facility requesting only CRIS must request CRIS in a Cluster Study or an Expedited Deliverability Study unless it is requesting CRIS pursuant to Section 40.5.6.6.

#### **40.5.6.3 ERIS Elections**

A Facility that obtains ERIS, but not CRIS, will not be permitted to become an eligible Installed Capacity Supplier to receive Unforced Capacity Deliverability Rights. Such a Facility will be eligible to participate only in the Energy and applicable Ancillary Services markets.

When an Interconnection Customer elects ERIS, its project will be evaluated in the Cluster Study at full output (i.e., the maximum capacity the Facility is capable of injecting at the Point of Interconnection), unless the Interconnection Customer requests ERIS below the full Generating Facility Capacity of a Generating Facility or full facility capacity for a Cluster Study Transmission Project. If the Interconnection Customer requests ERIS below the full Generating Facility Capacity of the Facility, the ISO shall study the Facility at the requested ERIS for purposes of Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and associated costs. However, if the maximum capacity that the Facility is capable of injecting at the Point of Interconnection is limited (i.e., through the use of control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the ISO's and Connecting Transmission Owner's agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and reliability of the New York State Transmission System (or Distribution System as applicable). If the ISO and Connecting Transmission Owner do not agree with the proposed manner to limit output, then the Interconnection Customer can either withdraw its Interconnection Request or modify its Interconnection Request to specify the maximum capacity that the Facility is capable of injecting into the New York State Transmission System (or Distribution System as applicable) without such limitations. The ISO and Connecting Transmission Owner, based on Good Utility Practice and related engineering considerations and after accounting for any control technology proposed

by the Interconnection Customer, may require further studies of the Facility at its full output to ensure the safety and reliability of the New York State Transmission System (or Distribution System as applicable), with the additional study costs borne by the Interconnection Customer. The ISO and Connecting Transmission Owner shall provide the Interconnection Customer with an explanation of its determination to perform studies at the Facility's full capacity before beginning such studies. If the ISO and Connecting Transmission Owner determine that additional System Upgrade Facilities are necessary after the additional studies are complete, the ISO and Connecting Transmission Owner must: (1) specify which additional System Upgrade Facilities costs are based on which studies; and (2) provide a detailed explanation of why the additional System Upgrade Facilities are necessary. The Interconnection Customer may be responsible for additional System Upgrade Facilities and/or additional control technologies, as well as testing and validation of those technologies consistent with Article 6 of its Standard Interconnection Agreement. The necessary control technologies and protection systems, as well as any potential penalties for exceeding the level of ERIS established in the executed, or requested to be filed unexecuted, Standard Interconnection Agreement, shall be set forth in Appendix C of the executed, or requested to be filed unexecuted, Standard Interconnection Agreement.

When an Interconnection Customer interconnects under ERIS only, the Interconnection Customer may at a later date request CRIS in accordance with the Standard Interconnection Procedures.

#### **40.5.6.4 CRIS Elections**

When an Interconnection Customer requests CRIS, the amount of CRIS requested shall be stated in MW of Installed Capacity ("ICAP"), and cannot exceed the permissible levels set

forth in Section 40.5.6.5. When an Interconnection Customer elects CRIS, the ISO will evaluate the deliverability of the Facility by applying the test methodology described in Section 40.13; *provided, however*, that requests for CRIS for a Facility 2 MW or smaller or for an increase in CRIS permitted by Section 40.5.6.6 will not be evaluated for deliverability under the NYISO Deliverability Interconnection Standard. The ISO will apply this test methodology to identify the System Deliverability Upgrades, if any, needed to make the Facility deliverable at its requested CRIS MW level and will also identify the MW of Installed Capacity, if any, that are deliverable from the Facility with no System Deliverability Upgrades. A Facility electing CRIS will be able to become a qualified Installed Capacity Supplier or receive Unforced Capacity Deliverability Rights to the extent of its deliverable capacity, once it has paid cash or provided Security for any required System Deliverability Upgrades in accordance with the relevant provisions of Attachment HH to the ISO OATT. An Interconnection Customer qualifying for CRIS will have two CRIS values: one for the summer capability period and one for the winter capability period. The CRIS value, in MW of Installed Capacity, for the summer capability period will be set using the deliverability test methodology and procedures described in Section 40.13 of this Attachment HH. The CRIS value for the winter capability period, also in MW of Installed Capacity, will be set in accordance with Section 40.13.6 of this Attachment HH.

#### **40.5.6.5 Maximum Requested CRIS**

The maximum permissible MW of CRIS an Interconnection Customer may request are subject to the following limitations:

- (i) if the Facility is a proposed BTM:NG Resource, the requested MW level of CRIS cannot exceed its Net ICAP;

- (ii) if the Facility is a proposed Resource with Energy Duration Limitations, the requested MW level of CRIS cannot exceed the minimum of the following: (a) its expected maximum injection capability in MW for the Interconnection Customer-selected duration; (b) the nameplate capacity of the Project (i.e., injection capability of the Project expressed in MW); or (c) the sum of the Project's requested and existing ERIS, as applicable;
- (iii) if the Facility is a Cluster Study Transmission Project requesting External-to-ROS Deliverability Rights, the requested MW level of CRIS cannot exceed the anticipated increase in transfer capability created by its associated Cluster Study Transmission Project;
- (iv) if the Facility is comprised of multiple Generators of the same or different technology type (*e.g.*, Co-located Storage Resource, Hybrid Storage Resource or single technology facility with multiple units), the requested MW level of CRIS must be requested at the Facility level (i.e., corresponding to the Facility as described in the Interconnection Request or CRIS-Only Request, as applicable), and shall be allocated among the multiple Generators, as requested by Interconnection Customer; *provided, however*, that the requested MW level of CRIS cannot exceed the minimum of the following: (a) the expected maximum injection capability in MW for the Facility as described in the Interconnection Request or CRIS-Only Request, as applicable, including all co-located Generators sharing the same injection limit (*e.g.*, the entire Co-located Storage Resource, entire Hybrid Storage Resource, entire Distributed Energy Resource, or entire multi-unit single technology resource); *provided, however*, that if the Project

- includes a Resource with Energy Duration Limitation, its expected maximum injection capability in MW is limited by the Interconnection Customer-selected duration; (b) the nameplate capacity of the Facility (i.e., collective injection capability of all units within the proposed Facility expressed in MW); or (c) the sum of the Facility's requested and existing ERIS, as applicable; and
- (v) if the above subsections do not apply to the Facility, the requested MW level of CRIS cannot exceed the nameplate capacity of the Facility.

For existing facilities proposing a modification to add a Generator of the same or different technology co-located at the same Point of Interconnection for which the Interconnection Customer requests CRIS, the collective CRIS of the resources within what will be the modified facility (*e.g.*, the resulting Co-located Storage Resource, Hybrid Storage Resource or Distributed Energy Resource) cannot exceed the injection limit of the co-located Facility.

#### **40.5.6.6 Increases In Established CRIS Values**

Any facility with an established CRIS value may at a later date request an increase in CRIS not to exceed the levels permitted by Section 40.5.6.5 of Attachment HH. An increase in CRIS may be requested by submitting (1) a CRIS-Only Request; (2) an Expedited Deliverability Study Request; or (3) a request for up to 2 MW of CRIS during the operating life of a facility in accordance with ISO Procedures, such request not being subject to a deliverability evaluation in a Cluster Study or Expedited Deliverability Study; *provided, however*, that such request is subject to the limitations on permissible CRIS MW levels set forth in Section 40.5.6.5 of this Attachment HH, and, for facilities comprised of multiple Generators, this CRIS request is permitted only at the facility level, not at the individual Generator level. A Project that receives a

CRIS increase pursuant to this Section 40.5.6.6, to the extent it later combines with another Generator(s) to become a co-located resource (*e.g.*, Co-located Storage Resource; Hybrid Storage Resource or a Distributed Energy Resource), is not eligible for any additional CRIS increase above a single increase up to 2 MW, without proceeding through a deliverability evaluation in a Cluster Study or Expedited Deliverability Study.

For purposes of this Section 40.5.6.6, an “established CRIS value” for facilities subject to a CRIS set and reset period pursuant to Section 40.18.2.5.4, Section 40.18.2.6.1.1, Section 40.18.2.6.1.2, Section 40.18.2.7.2, or Section 40.18.2.7.3 of Attachment HH to the ISO OATT is the final CRIS value established after the termination of the CRIS set and reset period.

#### **40.5.7 Validation of Interconnection Request or CRIS-Only Request**

##### **40.5.7.1 Acknowledgment and Assessment of Interconnection Request or CRIS-Only Request**

40.5.7.1.1 Within ten (10) Business Days of the ISO’s receipt of an Interconnection Request or CRIS-Only Request submission within an Application Window that includes all of the items required for such request set forth in Section 40.5.5 above (or within fifteen (15) Business Days for the Transition Cluster Study Process), the ISO shall:

- (i) acknowledge receipt of the received Interconnection Request or CRIS-Only Request;
- (ii) confirm whether all of the elements of the Interconnection Request or CRIS-Only Request comply with the requirements in Section 40.5.5; except that for purposes of the validation, the ISO will not review for deficiencies: (i) the Facility model, for which any deficiencies will be addressed pursuant to Section 40.5.7.4, and (ii) any Transmission Owner-specific information submitted by the Interconnection Customer pursuant to Section 40.5.7.3,

which information will be reviewed by the applicable Transmission Owner pursuant to Section 40.5.7.3;

- (iii) confirm receipt of the Interconnection Customer's payment of the Application Fee and Study Deposit;
- (iv) identify the Connecting Transmission Owner(s) with which the Facility is proposing to connect and any Affected Transmission Owner(s) that the ISO is aware of;
- (v) make available the information submitted with the Interconnection Request or the CRIS-Only Request and its acknowledgement to the Connecting Transmission Owner(s) and any identified Affected Transmission Owner(s) for their confirmation within the ISO's review period that they are the appropriate Connecting Transmission Owner or Affected Transmission Owner for the Interconnection Request or CRIS-Only Request;
- (vi) if the Interconnection Request is to interconnect to a distribution facility, consult with the Connecting Transmission Owner to determine whether the Standard Interconnection Procedures apply; and
- (vii) notify Interconnection Customer whether the Interconnection Request or CRIS-Only Request is valid or includes any deficiencies.

#### 40.5.7.1.2 Cluster Study Agreement

40.5.7.1.2.1 As soon as practicable after the ISO determines in the Application Window that an Interconnection Request or CRIS-Only Request is valid or within ten (10) Business Days of the ISO making this determination in the Customer Engagement Window, the ISO will tender an executable version of the Cluster Study Agreement for

that Interconnection Request or CRIS-Only Request in the form set forth in Appendix 3 to this Attachment HH to the Interconnection Customer, the Connecting Transmission Owner(s), and any identified Affected Transmission Owner(s) or Affected System Owners.

40.5.7.1.2.2 The Interconnection Customer, Connecting Transmission Owner(s), and any Affected Transmission Owner(s) or Affected System Operator(s) must execute the Cluster Study Agreement within ten (10) Calendar Days of the NYISO's tender of the agreement.

40.5.7.1.2.3 If the ISO subsequently identifies additional or other Connecting Transmission Owner(s), Affected Transmission Owner(s), or Affected System Operator(s) for the Interconnection Request or CRIS-Only Request, the ISO will tender as soon as practicable an amended version of the Cluster Study Agreement, which the parties must execute within ten (10) Calendar Days of the NYISO's tender of the agreement.

#### **40.5.7.2 Addressing Deficiencies in Interconnection Request or CRIS-Only Request**

40.5.7.2.1 An Interconnection Request or CRIS-Only Request will not be considered to be a valid request until all items in Section 40.5.5 have been received during the Application Window and confirmed by the ISO. If an Interconnection Request or CRIS-Only Request fails to meet the requirements set forth in Section 40.5.5, the ISO shall notify the Interconnection Customer and Connecting Transmission Owner within the time period set forth in Section 40.5.7.1 of the reasons for such failure and that the Interconnection Request or CRIS-Only Request does not constitute a valid request.

40.5.7.2.2 The Interconnection Customer shall provide to the ISO the information required to address a deficiency identified by the ISO in accordance with Section 40.5.7.2.1 or this Section 40.5.7.2.3 within ten (10) Business Days after receipt of such notice (or within fifteen (15) Business Days for the Transition Cluster Study Process), but no later than the close of the Application Window. The Interconnection Customer's submission shall be limited to addressing the identified deficiency(ies). Within ten (10) Business Days of an Interconnection Customer's submission of the additional information concerning the identified deficiency (or within fifteen (15) Business Days for the Transition Cluster Study), the ISO will review the Interconnection Customer's submitted information and, if it determines the identified deficiency has not been addressed, will notify the Interconnection Customer of the remaining deficiency, which the Interconnection Customer must address in accordance with this Section 40.5.7.2.2. The ISO shall promptly forward such additional information provided by the Interconnection Customer to the Connecting Transmission Owner and Affected Transmission Owner.

40.5.7.2.3 If the ISO determines that Interconnection Customer's Interconnection Request or CRIS-Only Request is valid or that the Interconnection Customer has addressed any deficiencies identified by the ISO within the timeframe set forth in Section 40.5.7.2.2, the ISO shall notify the Interconnection Customer that the Interconnection Request or CRIS-Only Request is valid, and such Interconnection Request or CRIS-Only Request shall proceed as part of the ISO's Queue for further processing pursuant to the procedures in this Attachment HH. If Interconnection Customer fails to submit additional information required by the ISO within the timeframe set forth in Section 40.5.7.2.2 or fails to fully address any deficiencies in its Interconnection Request or CRIS-Only Request prior to the completion of the Application Window, the ISO shall deem the Interconnection Request or CRIS-Only Request withdrawn

pursuant to Section 40.6.4 (without a withdrawal cure period). Notwithstanding the ISO's validation of an Interconnection Request, an Interconnection Customer for that Interconnection Request must also satisfy the requirements for any Transmission Owner-specific technical information in accordance with the requirements in Section 40.5.7.3 and any subsequent information requests in accordance with the requirements in Section 40.5.7.4.

#### **40.5.7.3 Transmission Owner Review of Interconnection Customer's Submission of Transmission Owner-Specific Technical Information**

40.5.7.3.1 Within ten (10) Business Days of the ISO's notification to the Connecting Transmission Owner, Affected Transmission Owner(s) and Interconnection Customer that the Interconnection Request for its Cluster Study Project is validated pursuant to Section 40.5.7.2.3, the Connecting Transmission Owner and any Affected Transmission Owner(s) may request technical information from the Interconnection Customer for purposes of Connecting Transmission Owner's and/or Affected Transmission Owner's performance of the Phase 1 Study that the Interconnection Customer has not already provided as part of its Interconnection Request. The Interconnection Customer must submit the requested technical information within ten (10) Business Days of receipt of the Connecting Transmission Owner's or Affected Transmission Owner(s') request(s).

40.5.7.3.2 The Transmission Owner shall review Interconnection Customer's submission of the information submitted pursuant to Section 40.5.7.3.1 and shall identify any deficiencies within ten (10) Business Days of the Interconnection Customer's provision of such information in accordance with Section 40.5.7.3.1 and within ten (10) Business Days of any additional information submission by the Interconnection Customer pursuant to Section 40.5.7.3.3. The Transmission Owner's review of this information request is separate from the ISO's review of the validity of the Interconnection Request.

40.5.7.3.3 If the Transmission Owner identifies any deficiency, Interconnection Customer shall provide additional information to the Transmission Owner to cure such deficiency within ten (10) Business Days.

40.5.7.3.4 If the ISO, in consultation with the Connecting Transmission Owner or Affected Transmission Owner, determines that Interconnection Customer has not timely responded to a Transmission Owner-specific information request in accordance with Section 40.5.7.3.1 or cured a deficiency in the Transmission Owner-specific information prior to five (5) Business Days of the scheduled conclusion of the Customer Engagement Window, the Interconnection Request shall be withdrawn pursuant to Section 40.6.4 (without a withdrawal cure period).

#### **40.5.7.4 Subsequent Information Request**

At any time following the ISO's validation of an Interconnection Request or CRIS-Only Request, if the ISO, Connecting Transmission Owner, or Affected Transmission Owner finds: (i) that the technical data provided by Interconnection Customer, including the Facility model, is incomplete or contains errors or (ii) that it requires additional information from Interconnection Customer to perform its responsibilities required under this Attachment HH, then such entity shall request that Interconnection Customer provide such information. Interconnection Customer shall submit such information within ten (10) Business Days of the information request. If Interconnection Customer: (i) fails to timely submit the requested information or (ii) does not address any deficiencies with its Facility model prior to the Scoping Meeting in the Customer Engagement Window, the Interconnection Customer's Interconnection Request or CRIS-Only Request shall be withdrawn from the Queue.

#### **40.5.8 OASIS Posting**

40.5.8.1 The ISO will maintain on its OASIS or a publicly accessible portion of its website a list of all valid Interconnection Requests and CRIS-Only Requests. The list will identify, for each Interconnection Request or CRIS-Only Request, as applicable: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected Initial Backfeed Date, Synchronization Date and Commercial Operation Date; (v) the status of the Interconnection Request or CRIS-Only Request, including Queue Position; (vi) the identity of the Interconnection Customer; (vii) the availability of any studies related to the Interconnection Request or CRIS-Only Request; (viii) the date of the Interconnection Request; (ix) the type of Facility to be constructed; and (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. The ISO shall also post any known deviations in date proposed by the Facility in this Section 40.5.8.1(iv), above. Phase 1 Study reports, the Phase 1 Cost Estimate Summary Report, and the Cluster Study Report shall be posted to the ISO password-protected website as soon as practicable following the conclusion, as applicable, of the Phase 1 Study or Phase 2 Study.

## **40.6 Queue Position/ Modification/ Withdrawal/ Withdrawal Penalties**

### **40.6.1 Queue Position**

#### **40.6.1.1 Assignment of Queue Position**

The ISO shall assign a Queue Position for an Interconnection Customer's Interconnection Request or CRIS-Only Request based upon the date and time of the ISO's receipt during the Application Window of the Interconnection Customer's complete submission of an Interconnection Request or CRIS-Only Request pursuant to Sections 40.5.4 and 40.5.5. If the ISO validates the Interconnection Request or CRIS-Only Request pursuant to Section 40.5.7, then the Interconnection Request or CRIS-Only Request shall retain its assigned Queue Position based on the date and time the submission was originally filed.

#### **40.6.1.2 Higher Queue Position**

A higher "Queue Position" assigned to an Interconnection Request or CRIS-Only Request is one that has been placed "earlier" in the Queue in relation to another Interconnection Request or CRIS-Only Request that is assigned a lower Queue Position. All Interconnection Requests and CRIS-Only Requests submitted and validated in a single Application Window that are a part of a single Cluster for the Cluster Study Process shall be considered equally queued as between the Interconnection Requests and CRIS-Only Requests within the same Cluster; *provided, however*, that an Interconnection Request's individual Queue Position will be used to determine priority as between Interconnection Requests in the same Cluster in the event of a Physical Infeasibility determination as set forth in Section 40.7.3. Interconnection Requests and CRIS-Only Requests that are part of a particular Class Year Study or Cluster Study shall be considered to have a higher Queue Position than Interconnection Requests and CRIS-Only Requests that are part of a subsequent Cluster Study.

#### **40.6.2 Transferability of Queue Position**

An Interconnection Customer may transfer its Queue Position for its Interconnection Request or CRIS-Only Request to another entity only if: (i) such entity acquires the specific Facility identified in the Interconnection Request or CRIS-Only Request, (ii) the Point of Interconnection does not change, (iii) for an Interconnection Request, the acquiring entity demonstrates Site Control for its Project, (iv) the transferring Interconnection Customer is up-to-date on payments to the ISO, and (v) the acquiring entity submits any deposits required for its Interconnection Request or CRIS-Only Request under this Attachment HH. As a result of such a transfer, the acquiring entity shall become the Interconnection Customer of the specific Facility identified in the Interconnection Request or CRIS-Only Request. After such transfer, the ISO will refund to the transferring Interconnection Customer any refundable cash portion of the Study Deposit, Readiness Deposit(s), or Site Control Deposit or provide written authorization for Interconnection Customer to request that the bank cancel any remaining letter of credit or surety bond provided as a deposit.

#### **40.6.3 Modifications**

An Interconnection Customer may request an ISO determination as to whether an Interconnection Customer's proposed modification to any information provided in the Interconnection Request or CRIS-Only Request for its project is permitted or is a Material Modification by submitting to the ISO: (i) a Facility Modification Request in the form of Appendix 5 to these Standard Interconnection Procedures, (ii) a study deposit in cash in the amount of \$10,000, and (iii) any supporting information or documentation required under this Section 40.6.3; *provided, however*, that an Interconnection Customer is not required to provide a study deposit to submit a permitted extension of its Commercial Operation Date pursuant to

Section 40.6.3.4, a change to its Point of Interconnection pursuant to Section 40.6.3.1, a name change for the Cluster Study Project, or a name change for the Interconnection Customer. Any proposed modification to any information provided in the Interconnection Request or CRIS-Only Request must be accompanied by any resulting updates to the models included in such requests to the extent required in the Facility Modification Request. Except as otherwise provided in Sections 40.6.3.1 and 40.6.3.7, an Interconnection Customer cannot request a modification to the information provided in its validated Interconnection Request or CRIS-Only Request for its Cluster Study Project until the completion of the later of the Final Decision Period or Additional SDU Study Decision Period in which its Cluster Study Project is participating. Except as otherwise indicated in Section 40.6.3.1, the Interconnection Customer shall retain its Queue Position if its requested modification is permitted in accordance with Sections 40.6.3.4 or is determined not to be Material Modifications pursuant to this Section 40.6.3.

40.6.3.1        Within five (5) Business Days after the ISO posts the Cluster Study Project List during the Customer Engagement Window pursuant to Section 40.7.2, the Interconnection Customer may propose a modification to the Point of Interconnection in its Interconnection Request in accordance with the requirements in Section 40.7.2.3 to this Attachment HH.

40.6.3.2        Upon the ISO's receipt of an Interconnection Customer's Facility Modification Request, the ISO shall commence and perform any necessary additional studies as soon as practicable, but in no event shall the ISO commence such studies later than thirty (30) Calendar Days after receiving Interconnection Customer's complete Facility Modification Request; *provided, however*, that: (i) the ISO will not perform a study for a proposed modification to a Point of

Interconnection pursuant to Section 40.6.3.1; (ii) for a modification subject to the Commercial Operation Date extension requirements in Section 40.6.3.5, the ISO and Connecting Transmission Owner shall assess the proposed modification in accordance with the requirements in 40.6.3.5; and (iii) for a proposed technological change pursuant to Section 40.6.3.7, the ISO shall assess the proposed modification in accordance with the requirements in Section 40.6.3.7. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost in accordance with the requirements in Section 40.24.3.

40.6.3.3 Prior to making any modification other than those specifically permitted by Section 40.6.3.4, Interconnection Customer shall first request that the ISO evaluate whether such modification is a Material Modification in accordance with the requirements in this Section 40.6.3. In response to Interconnection Customer's request, the ISO shall evaluate the proposed modifications, including performing any studies required by this Section 40.6.3, prior to making them and inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection except the change deemed acceptable under Section 40.6.3.1 or so allowed elsewhere shall constitute a Material Modification. Any change in requested CRIS from the requested CRIS set forth in the Interconnection Request or CRIS-Only Request or any request for CRIS not included in the Interconnection Request (*i.e.*, if the Interconnection Request included only a request for ERIS) or CRIS-Only Request shall constitute a Material Modification.

Except as otherwise set forth in Section 40.6.3.1 above, any modification to a Cluster Study Project during a Cluster Study Process for which it is a member of the Cluster shall constitute a Material Modification. For proposed modifications deemed to be Material Modifications, the Interconnection Customer may withdraw the proposed modification request or proceed with a new Interconnection Request or CRIS-Only Request in a subsequent Cluster Study Process for such modification.

40.6.3.4 Extensions of the proposed Commercial Operation Date will not be Material Modifications if either the requirements in Section 40.6.3.4(A) or 40.6.3.4(B) are satisfied:

(A) (i) the proposed Commercial Operation Date is within five (5) years from the date set forth, as applicable, in Sections 40.6.3.4.1, 40.6.3.4.2, or 40.6.3.4.3, and (ii) if the Interconnection Customer is requesting an extension of the Commercial Operation Date for a Facility, Large Generating Facility, or Small Generating Facility that participated in the Transition Cluster Study, a prior Class Year Study, or a prior facilities study performed pursuant to the Small Generator Interconnection Procedures beyond four years from the date set forth, as applicable, in Sections 40.6.3.4.1, 40.6.3.4.2, or 40.6.3.4.3 below, the Interconnection Customer satisfies the requirements for a Cost Estimate Update to update the cost estimates for the five-year duration and to accept such costs and to provide cash or post Security for any increased cost estimates in accordance with the requirements in Section 40.6.3.5.3; or

(B) (i) the ISO, Connecting Transmission Owner, and Interconnection Customer mutually agree to include a Commercial Operation Date beyond this five-year period for the initial Standard Interconnection Agreement due to either: (a) the attributes of the technology type of the Facility or (b) the expected sequencing of work on the transmission or distribution system that is beyond Interconnection Customer's control (e.g., expected unavailability of required system outages, expected delays in the completion of facilities included in the base case of applicable study for the Facility), and (ii) the Interconnection Customer satisfies the requirements for a Cost Estimate Update to update the cost estimates for the agreed-upon extended duration and to accept such costs and to provide cash or post Security for any increased cost estimates in accordance with the requirements in Section 40.6.3.5.3.

40.6.3.4.1 For all Facilities that participated in a Cluster Study Process, the date the Interconnection Customer and all other Interconnection Customers remaining in the Final Decision Period for the Cluster Study provided the required cash or Security in the Final Decision Round of the Final Decision Period (i.e., the completion of the Cluster Study).

40.6.3.4.2 For all Large Facilities and for Small Generating Facilities that participated in a Class Year Interconnection Facilities Study subject to Attachment S to the ISO OATT, the date the Interconnection Customer and all other Interconnection Customers remaining in the Class Year provided the required cash or Security as part of a Class Year Interconnection Facilities Study (i.e., completion of the Class Year).

40.6.3.4.3 For Small Generating Facilities that were subject to the Small Generator Interconnection Procedures in Attachment Z to the ISO OATT and did not participate in a Class Year Interconnection Facilities Study or Cluster Study, the date the ISO tendered the SGIA to the Interconnection Customer.

40.6.3.5 An Interconnection Customer may request an extension of its Commercial Operation Date beyond the limit specified in Section 40.6.3.4 or beyond the limit of a previous extension that the ISO determined was not a Material Modification. Such request for an extension will not be a Material Modification only if the ISO determines that all three components of the extension requirements set forth in Sections 40.6.3.5.1, 40.6.3.5.2, and 40.6.3.5.3 have been met. If an Interconnection Customer is requesting an extension of the Commercial Operation Date for a Small Generating Facility: (i) which requested interconnection was studied in a facilities study pursuant to the Small Generator Interconnection Procedures in Attachment Z of the ISO OATT and (ii) for which the Interconnection Customer agreed prior to March 20, 2024 (*i.e.*, the effective date of the requirements in Section 32.3.5.7) to pay for the System Upgrade Facilities identified in its facilities study report to proceed to a Small Generator Interconnection Agreement in accordance with the then-applicable requirements in Attachment Z, then Interconnection Customer must also satisfy Section 40.6.3.5.5 to obtain an extension of its Commercial Operation Date.

40.6.3.5.1 An Interconnection Customer must satisfy the first component of the extension requirements by meeting the requirements set forth in Section

40.6.3.5.1.1 or 40.6.3.5.1.2, for an extension of its Commercial Operation Date.

40.6.3.5.1.1 Interconnection Customer's requested extension of its Commercial Operation Date for its Facility is on or before May 2, 2028; or

40.6.3.5.1.2 An Interconnection Customer has an executed Interconnection Agreement or unexecuted Interconnection Agreement accepted by the Commission and demonstrates (via an officer certification) that it has made reasonable progress in the development of its project against milestones set forth in the interconnection agreement , including progress within the six months prior to the request (*e.g.*, (i) completion of engineering design, (ii) major equipment orders, (iii) commencement and continuation of construction of the Facility and associated Attachment Facilities, Distribution Upgrades, or System Upgrade Facilities, as applicable, (iv) completion of applicable permitting process, (v) application of the applicable primary siting permitting process deemed complete with demonstration that project is on course to obtain final permit in time to meet requested Commercial Operation Date).

40.6.3.5.1.3 Upon the ISO's request, an Interconnection Customer shall promptly provide the ISO with information concerning its demonstration that its project has made reasonable progress pursuant to Section 40.6.3.5.1.2.

40.6.3.5.1.4 An Interconnection Customer that relied on its satisfaction of certain milestones to extend its Commercial Operation Date in accordance with the requirements in this Section 40.6.3.5.1 must demonstrate satisfaction of additional milestones for any subsequent requested extensions.

40.6.3.5.2 As the second component of the extension requirements, Interconnection Customer must also provide the ISO with a milestone schedule for the interconnection of the Project that it has agreed upon with the Connecting Transmission Owner and any Affected Transmission Owner(s), as applicable, that meets the requested extended Commercial Operation Date. The Connecting Transmission Owner's and Affected Transmission Owner's agreement to the revised milestone schedule shall not be unreasonably withheld; *provided however*, that a Connecting Transmission Owner or Affected Transmission Owner reviewing a milestone schedule proposed by an Interconnection Customer pursuant to this Section 40.6.3.5.2 may request and Interconnection Customer must furnish supporting information and documentation demonstrating the status of the Project in relation to the proposed milestones.

40.6.3.5.3 As the third component of the extension requirements, the ISO, in consultation with the Connecting Transmission Owner or Affected Transmission Owner, must either determine that: (i) a Cost Estimate Update is not required to update the cost estimates of the Connecting Transmission Owner's or Affected Transmission Owner's Attachment Facilities, Distribution Upgrades, or System Upgrade Facilities identified in the Small Generator facilities study, Class Year Study, or Cluster Study for the Facility, or (ii) if the ISO, in consultation with the Connecting Transmission Owner or Affected Transmission Owner, determines that a Cost Estimate Update is required, the Interconnection Customer must agree in writing that the Cost

Estimate Update be performed, that it will be responsible for the costs of such evaluation, and that its extended Commercial Operation Date shall be subject to its acceptance of, and its posting of any additional Security, of any increase in the cost estimate as described in Section 40.6.3.5.3.3.

40.6.3.5.3.1 To determine whether a Cost Estimate Update is required and when such study will be performed, the ISO, in consultation with the Connecting Transmission Owner and/or any Affected Transmission Owner(s), will consider the requested length of the extension, the duration in time since the cost estimates were determined in a Small Generator facilities study, Class Year Study, or Cluster Study, the updated milestone schedule for the Project agreed upon by the Interconnection Customer and Connecting Transmission Owner, and whether the interconnection facilities are shared with other projects. If the ISO determines, in consultation with the Connecting Transmission Owner and/or any Affected Transmission Owner(s), that a Cost Estimate Update is required, the ISO will provide the Interconnection Customer its basis for requiring such update. The need and timeframe for the update will be included in the interconnection agreement or an amended version of the interconnection agreement for the project, as applicable, unless the Cost Estimate Update will be performed prior to the execution, or the unexecuted filing, of the interconnection agreement.

40.6.3.5.3.2 The Connecting Transmission Owner or Affected Transmission Owner will perform, at Interconnection Customer's expense, any Cost Estimate Update agreed upon with the Interconnection Customer to

update the cost estimates of the Connecting Transmission Owner's or Affected Transmission Owner's Attachment Facilities, Distribution Upgrades, or System Upgrade Facilities identified in the Small Generator facilities study, Class Year Study, or Cluster Study for the Facility. If the Connecting Transmission Owner or Affected Transmission Owner determines that equipment identified in the applicable interconnection study for the Connecting Transmission Owner's or Affected Transmission Owner's Attachment Facilities, Distribution Upgrades, or System Upgrade Facilities for Interconnection Customer's project is no longer available, the Connecting Transmission Owner or Affected Transmission Owner may, as part of its Cost Estimate Update, identify and provide the cost estimate for any replacement equipment.

40.6.3.5.3.3 If the Cost Estimate Update identifies revised cost estimates, including for any replacement equipment, the Interconnection Customer will only be permitted to proceed with its requested Commercial Operation Date extension if, within thirty (30) Calendar Days of the conclusion of the Cost Estimate Update or such other time period mutually agreed upon with the Connecting Transmission Owner or Affected Transmission Owner, Interconnection Customer: (i) accepts its cost allocation for the revised cost estimates and (ii) provides cash or posts Security to the Connecting Transmission Owner or Affected Transmission Owner for the revised cost estimates to the extent agreed to by the Connecting Transmission Owner or Affected Transmission Owner. In such case, the updated cost estimates and

the cash or Security amounts will be included in the interconnection agreement for the project. Any updated cost estimate and Security provided in accordance with this section shall be subject to the Security forfeiture requirements in Section 40.16.1 and the requirements for future cost responsibility set forth in Section 40.16.3.

40.6.3.5.4 If an Interconnection Customer is requesting an extension of the Commercial Operation Date for a Small Generating Facility: (i) which requested interconnection was studied in a facilities study pursuant to the Small Generator Interconnection Procedures in Attachment Z of the ISO OATT and (ii) for which the Interconnection Customer agreed prior to March 20, 2024 (*i.e.*, the effective date of the requirements in Section 32.3.5.7) to pay for the System Upgrade Facilities identified in its facilities study report to proceed to a Small Generator Interconnection Agreement in accordance with the then-applicable requirements in Attachment Z, then Interconnection Customer must agree - to obtain its requested extension of the Commercial Operation Date - that the cash or Security that it has provided to Connecting Transmission Owner and/or Affected Transmission Owner(s) for the System Upgrade Facilities for its Small Generating Facility, including any additional Security that it has provided or is required to provide in connection with a Cost Estimate Update, shall be subject to the Security forfeiture rules in Section 40.16.1.

40.6.3.6 As soon as it becomes apparent that the most recent proposed Initial Backfeed Date posted on the Queue is infeasible, and also prior to the expiration of the proposed Initial Backfeed Date posted on the ISO Queue, Interconnection

Customer is obligated to provide the ISO with notice of any proposed extensions of the proposed Initial Backfeed Date, proposed Synchronization Date, or proposed Commercial Operation Date.

40.6.3.7      Technological Change Procedure. A technological change that satisfies the definition of a Permissible Technology Advancement or that the ISO determines is not a Material Modification under this technological change procedure is a permissible modification that will not result in an Interconnection Customer losing its Queue Position if it elects to proceed with the requested modification; provided however, if an Interconnection Customer in an ongoing Cluster Study requests a technological change, such request (1) must be submitted to the ISO no later than ten (10) Business Days prior to the close the Customer Engagement Window pursuant to Section 40.7.2 of this Attachment HH and (2) must fully satisfy the requirements in Section 40.6.3.7.1 of this Attachment HH no later than the cutoff of this ten (10) Business Day period prior to the close of the Customer Engagement Window. Technological changes proposed less than ten (10) Business Days prior to the close of the Customer Engagement Window, or any time following the close of the Customer Engagement Window during the ongoing Cluster Study, will be deemed material during the remainder of the Cluster Study.

40.6.3.7.1      An Interconnection Customer seeking to modify its proposed Facility based upon a change to the turbines, inverters, or plant supervisory controls or other similar advancements to the existing technology proposed in the Interconnection Customer's Interconnection Request shall submit, in accordance

with Section 40.6.3, a Facility Modification Request, study deposit, and any support relied on by the Interconnection Customer to show that the change is a Permissible Technological Advancement or not a Material Modification. Upon receipt of a Facility Modification Request that identifies a request for a technological change, the ISO, in consultation with the Connecting Transmission Owner(s) to the extent practicable, shall first conduct a review of the technological change and supporting information to determine whether such change constitutes a Permissible Technological Advancement. The ISO shall commence such review within thirty (30) Calendar Days after receiving notice of Interconnection Customer's complete Facility Modification Request. If the Facility Modification Request demonstrates that the proposed technological change satisfies the definition of Permissible Technological Advancement and does not result in a change to the electrical characteristics that is (i) greater than two (2) percent voltage drop at the Point of Interconnection or (ii) greater than 100 amperes short circuit contribution, then no additional study is required and the technological change shall constitute a Permissible Technological Advancement.

40.6.3.7.2 If the ISO identifies that additional studies are required to determine whether the technological change constitutes a Permissible Technological Advancement, the ISO shall commence and perform any necessary studies to determine whether the electrical performance is equal or better than the electrical performance prior to the technological change and it does not result in adverse reliability concerns. Such additional studies shall be identified and performed

based on the ISO's engineering judgment and at the Interconnection Customer's expense. If the Interconnection Customer fails to provide information or data that is required by the ISO to conduct the additional studies, the ISO shall reject the requested technological change; however, the Interconnection Customer may resubmit a Facility Modification Request for the same technological change with the required information.

40.6.3.7.3 If the ISO concludes that the requested technological change does not constitute a Permissible Technological Advancement after completing the additional studies, the ISO shall review whether the technological change would constitute a Material Modification consistent with Section 40.6.3 of this Attachment HH.

40.6.3.7.4 The ISO will complete its review and any additional studies required under this technological change procedure in accordance with the requirements in Section 40.6.3.2. Following completion of the ISO's review and any additional studies, the ISO shall describe the studies that were conducted, if any.

#### **40.6.4 Withdrawal**

40.6.4.1 The Interconnection Customer may withdraw its Interconnection Request or CRIS-Only Request at any time by written notice of such withdrawal to the ISO. In addition, if the Interconnection Customer fails to adhere to all requirements of these Standard Interconnection Procedures, except as provided in Section 40.24.5 (Disputes), the ISO shall deem the Interconnection Request or CRIS-Only Request to be withdrawn and shall provide written notice to the Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the

Interconnection Customer shall have a cure period of fifteen (15) Business Days in which to either respond with information or actions that cures the deficiency or to notify the ISO of its intent to pursue Dispute Resolution; except that the cure period set forth in this Section 40.6.4.1 does not extend the following specific deadlines set forth in Section 40.5.7.2 for an Interconnection Customer to cure a deficiency in its Interconnection Request or CRIS-Only Request identified by the ISO;

- (i) in Section 40.5.7.3 for an Interconnection Customer to cure a deficiency in its submission of information requested under Section 40.5.7.3 or 40.5.7.4;
- (ii) deadline for Decision Period 1 set forth in Section 40.7.5;
- (iii) deadline for Decision Period 2 set forth in Section 40.10.8.3; and
- (iv) deadlines for the Final Decision Period and Additional SDU Decision Periods set forth in Section 40.15.2.

40.6.4.2 Withdrawal shall result in the loss of the Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, the Interconnection Customer's Interconnection Request or CRIS-Only Request is eliminated from the Queue until such time that the outcome of Dispute Resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request or CRIS-Only Request shall pay to the ISO and Connecting Transmission Owner all costs that the ISO and Connecting Transmission Owner prudently incurred with respect to that Interconnection Request or CRIS-Only Request prior to the receipt of notice described above. The Interconnection Customer must pay all monies due to the ISO and Connecting Transmission Owner before it is allowed to obtain any Cluster Study data or results.

40.6.4.3 If Interconnection Customer withdraws its Interconnection Request or CRIS-Only Request, or is deemed withdrawn by the ISO, pursuant to this Section 40.6.4, the ISO shall (i) update the OASIS Queue posting to remove the Queue Position for the Interconnection Request or CRIS-Only Request, and (ii) conduct a final reconciliation of Interconnection Customer's costs and any applicable Withdrawal Penalties and follow the process set forth in 40.24.3 for returning or cancelling deposits. The ISO shall also refund to the Interconnection Customer the refundable cash portion of the Interconnection Customer's Site Control Deposit, if applicable, or provide written authorization for Interconnection Customer to request that the bank cancel any remaining letter of credit or surety bond provided as a deposit.

40.6.4.4 In the event of such withdrawal, the ISO and Connecting Transmission Owner, subject to non-disclosure arrangements consistent with Section 40.24.1, shall provide, at Interconnection Customer's request, supporting documentation, workpapers, and databases or data that the ISO and Connecting Transmission Owner developed in the preparation of the applicable study conducted up to the date of withdrawal of the Interconnection Request or CRIS-Only Request.

#### **40.6.5 Withdrawal Penalties**

##### **40.6.5.1 Interconnection Requests and CRIS-Only Requests Subject to Withdrawal Penalties**

40.6.5.1.1 If an Interconnection Customer withdraws its Interconnection Request or CRIS-Only Request, or such Interconnection Request or CRIS-Only Request is deemed withdrawn by the ISO, either during the Application Window or during the Customer Engagement Window up to five (5) Business Days after the ISO posts the Cluster Study Project List in the Customer Engagement Window pursuant to Section 40.7.2.2, the Interconnection Request or CRIS-Only Request shall not be subject to a Withdrawal Penalty.

40.6.5.1.2 If an Interconnection Customer withdraws its Interconnection Request or CRIS-Only Request, or such Interconnection Request or CRIS-Only Request is deemed withdrawn by the ISO, after the periods sets forth in Sections 40.6.5.1.1, the Interconnection Request or CRIS-Only Request may be subject to a Withdrawal Penalty as determined based on when in the Cluster Study Process the Interconnection Request or CRIS-Only Request withdraws or is deemed withdrawn by the ISO as detailed in Sections 40.7.6, 40.10.9, and 40.15.5 to this Attachment HH. If the Interconnection Customer has accepted its Project Cost Allocation and paid cash or posted Security in the Final Round of the Final Decision Period or Additional SDU Study Decision Period for any required Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrades Facilities, and/or System Deliverability Upgrades, the Interconnection Customer's Security will be subject to the forfeiture requirements in Section 40.16.1.

#### **40.6.5.2 Distribution of Withdrawal Penalties**

40.6.5.2.1 For each Cluster Study Process, the ISO shall hold all Withdrawal Penalty Funds that it has collected from any Cluster Study Project(s) participating in the Cluster for that study that withdraw or are deemed withdrawn by the ISO at or before the completion of the later of: (i) the Final Decision Period or (ii) the Additional SDU Study Decision Period for that Cluster Study Process. The ISO shall post the balance of Withdrawal Penalty Funds held by the ISO but not yet dispersed on its OASIS or a publicly accessible portion of its website and update this posting on a quarterly basis.

40.6.5.2.2 The ISO shall first use any collected Withdrawal Penalty Funds to offset the study costs of the Cluster Study Process, as applicable, that were incurred by those Interconnection Customers: (i) for the Cluster Study Project(s) in that Cluster that accepted their

Project Cost Allocation and paid cash or posted Security (if any required) for any Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and/or System Upgrade Facilities identified in the study process and (ii) for the CRIS-Only Cluster Study Project(s) in that Cluster: (A) that accepted their Deliverable MW or Project Cost Allocation and paid cash or posted Security (if any required) for any System Deliverability Upgrades or (B) that participated in an Additional SDU Study that was not completed for that Cluster Study Process ("Payment Eligible Projects").

40.6.5.2.3 Within one hundred fifty (150) Calendar Days of the completion of the later of, as applicable, the Final Decision Period or Additional SDU Study Decision Period for the Cluster Study Process, the ISO shall refund to the Interconnection Customers of each Payment Eligible Project a share of the Withdrawal Penalty Funds to offset the study costs it incurred in that Cluster Study Process. The ISO shall calculate the refund payment for each individual Payment Eligible Project by dividing the total Withdrawal Penalty Funds amount by the number of Payment Eligible Projects. The ISO shall then provide this refund payment to the Interconnection Customer for each Payment Eligible Project; *provided, however*, that an Interconnection Customer shall not receive from the ISO a higher study refund payment for its Payment Eligible Project than the total payments it made to the ISO for the actual study costs of the Payment Eligible Project in that particular Cluster Study Process.

40.6.5.2.4 If, after the ISO makes the payments required by Section 40.6.5.2.3, there remains Withdrawal Penalty Funds for that Cluster, the ISO shall then calculate and apply the Commercial Operation Incentive Payment Amount for that Cluster.

40.6.5.2.5 The ISO shall calculate the Commercial Operation Incentive Payment Amount for a Cluster by dividing the remaining Withdrawal Penalty Funds by the total number of Payment Eligible Projects except for CRIS-Only Cluster Study Projects.

40.6.5.2.6 The ISO shall hold the remaining Withdrawal Penalty Funds for the Cluster until the Commercial Operation Incentive Payment Amount has been applied for each Payment Eligible Project, except CRIS-Only Cluster Study Projects, as follows. If a Payment Eligible Project enters Commercial Operation, the ISO shall pay the Interconnection Customer for that Payment Eligible Project the Commercial Operation Incentive Payment Amount. If a Payment Eligible Project withdraws or is deemed withdrawn by the ISO prior to entering Commercial Operation, it shall forfeit at that time its Commercial Operation Incentive Payment Amount, which amount the ISO shall use to offset the ISO's administration costs.

40.6.5.2.7 The following is an example of the distribution of the Withdrawal Penalty Fund pursuant to this Section 40.6.5.2.

40.6.5.2.7.1 Assume at the conclusion of a Cluster Study Process that there are ten Payment Eligible Projects and \$2,000,000 in Withdrawal Penalty Funds. The ISO will first determine the share of study costs that will be refunded to the Payment Eligible Projects by dividing the \$2,000,000 by 10, which results in a refund payment share for each project of \$200,000. The ISO would make this refund payment to each Payment Eligible Project up to the amount in actual study cost such project paid in that Cluster Study Process. Accordingly, if a Payment Eligible Project only paid \$100,000 in actual study costs during the Cluster Study Process, its refund payment would be limited to \$100,000, and the remaining \$100,000 would be subject to the second stage of the Withdrawal Penalty Fund distribution.

40.6.5.2.7.2 Assume for this second stage, that \$500,000 remained following the study cost refund payments. The ISO would then calculate the Commercial Operation Incentive Payment Amount. This would be calculated as the remaining \$500,000 divided by 10 or a \$50,000 amount for which each Payment Eligible Project would be eligible. Assume 7 of the 10 Payment Eligible Projects entered into Commercial Operation. In such case, those 7 projects would each receive the \$50,000 Commercial Operation Incentive Payment Amount. The remaining \$150,000 associated with the 3 projects that did not enter Commercial Operation would be forfeited and used by the ISO to offset its administration costs.

## **40.7 Customer Engagement Window/ Decision Period 1**

### **40.7.1 Customer Engagement Window Start Date, Duration, and Scope**

40.7.1.1 The Customer Engagement Window for the Cluster Study Process shall commence on the first Business Day after the end date of the Application Window.

40.7.1.2 The Customer Engagement Window period shall be a seventy (70) Calendar Day period for a Cluster Study Process; except as follows:

(i) for the Transition Cluster Study Process, this period shall complete at the later of: (A) a ninety (90) Calendar Day period and (B) the completion of the Final Decision Period for the Class Year Study for Class Year 2023; and

(ii) for subsequent Cluster Study Processes, this period shall be extended to the extent required by Section 40.5.1.3.

40.7.1.3 During the Customer Engagement Window: (i) the ISO shall complete its review and validation of Interconnection Requests submitted, but not validated, during the Application Window, (ii) the ISO shall post the Cluster Study Project List in accordance with the requirements in Section 40.7.2, (iii) the Connecting Transmission Owner shall perform the Physical Infeasibility Screening of the proposed interconnections of the Cluster Study Projects in accordance with the requirements in Section 40.7.3, and (iv) the ISO shall conduct the Scoping Meeting in accordance with the requirements in Section 40.7.4.

### **40.7.2 Posting of Cluster Study Project List**

40.7.2.1 Within ten (10) Business Days of the commencement of the Customer Engagement Window, the ISO shall post on its OASIS, or a publicly accessible portion of its website, the Cluster Study Project List, which is a list of the validated Interconnection Requests and CRIS-Only Requests for that Cluster. The list shall identify for each Interconnection

Request and each CRIS-Only Request: (1) the requested amount of Energy Resource Interconnection Service and/ Capacity Resource Interconnection Service; (2) the location by county and state; (3) the substation or transmission line or lines of the requested Point of Interconnection; (4) the proposed Initial Backfeed Date; (5) the type of Interconnection Service requested; (6) the type of Facility to be constructed, including fuel types, such as coal, natural gas, solar, wind, storage, or combined resource; (7) the number of proposed generator leads; (8) Queue Position; (9) whether the Interconnection Request or CRIS-Only Request is for a Contingent Project; and (10) the applicable Connecting Transmission Owner and any identified Affected Transmission Owners.

40.7.2.2 If an Interconnection Customer withdraws its Interconnection Request or CRIS-Only Request, or such Interconnection Request or CRIS-Only Request is deemed withdrawn by the ISO, during the Customer Engagement Window up to five (5) Business Days after the ISO posts the Cluster Study Project List, the Interconnection Request shall not be subject to a Withdrawal Penalty as set forth in Section 40.7.6.2.

40.7.2.3 Within five (5) Business Days after the ISO posts the Cluster Study Project List, the Interconnection Customer may propose a modification to the Point of Interconnection in its Interconnection Request for its Cluster Study Project other than for a Contingent Project; *provided, however,* that such modification cannot modify the electrical characteristics of its Cluster Study Project. The Interconnection Customer shall submit to the ISO any requested change to the Point of Interconnection through the Facility Modification Request set forth in Appendix 5. If the Interconnection Customer submits a Facility Modification Request requesting to change the Point of Interconnection, then the ISO shall modify the priority designation of the Queue Position assigned to its Interconnection Request pursuant to Section 40.6.1.1 based on the

date and time of the ISO's receipt of the Interconnection Customer's submission of the completed Facility Modification Request form requesting the change and will notify the Connecting Transmission Owner and Affected Transmission Owner of this change when notifying the Interconnection Customer of its modified Queue Position

### **40.7.3 Physical Infeasibility Screening**

40.7.3.1 During the Customer Engagement Window, the Connecting Transmission Owner and any Affected Transmission Owner(s) identified pursuant to Section 40.5.7.1.1 in connection with the proposed interconnection of a Cluster Study Project (except for CRIS-Only Cluster Study Projects) shall review the proposed interconnection of the Cluster Study Project to assess whether the proposed Point of Interconnection is Physically Infeasible as defined in Section 40.7.3.2 and shall provide the ISO their written assessment.

40.7.3.2 An Interconnection Request shall be deemed Physically Infeasible if:

- (1) (i) the substation for the selected Point of Interconnection does not have any available bus positions and (ii) (a) is not expandable electrically or within the existing substation footprint, and (b) the Transmission Owner has determined that adjacent usable vacant land is not available, or
- (2) proposals by Interconnection Customer are inconsistent with Good Utility Practice or Applicable Reliability Requirements; or
- (3) a viable tie line cable route(s) cannot be established from either the Point of Change of Ownership to the Point of Interconnection or, where these points are the same, a viable route cannot be established within or from the fence line; or
- (4) the project capacity exceeds the ratings of equipment at the substation selected for the Point of Interconnection, replacement equipment that would be adequately rated for the

project capacity is not commercially available from an approved supplier and within applicable specifications set by the Transmission Owner, and an alternative upgrade is not physically feasible (e.g., higher voltage Point of Interconnection substation); or (5) an Attachment Facility, System Upgrade Facility or Distribution Upgrade required for the Cluster Study Project to reliably interconnect is Physically Infeasible.

For purposes of this Section 40.7.3.2, “commercially available” equipment shall mean equipment manufactured by an approved supplier of a particular Connecting Transmission Owner and/or Affected Transmission Owner(s) and conforming with engineering specifications and procedures of the Connecting Transmission Owner and/or Affected Transmission Owner(s).

This section: (i) does not establish on behalf of the Cluster Study Project any rights or title to the Transmission Owner’s real property and (ii) does not create an obligation on a Transmission Owner to transfer, convey or use its real property rights on behalf of the Cluster Study Project or to acquire on behalf of the Cluster Study Project through eminent domain or otherwise any real property, subject to the Land of Other Property Owners requirements in, as applicable, the Standard Interconnection Agreement, Standard Upgrade Construction Agreement, or Standard Multiparty Upgrade Construction Agreement.

40.7.3.3 The ISO shall issue a report with the results of the Physical Infeasibility Screening for that Cluster. If, as a result of the Physical Infeasibility Screening or at any time in the Cluster Study Process, the ISO determines, in consultation with the Connecting Transmission Owner or Affected Transmission Owner, that the proposed interconnection of a Cluster Study Project is Physically Infeasible as defined in Section 40.7.3.2, then the ISO shall notify the

Interconnection Customer that the proposed interconnection of its Cluster Study Project is Physically Infeasible and shall withdraw the Interconnection Request for the project pursuant to Section 40.6.4; *provided, however*, that if a Cluster Study Project is deemed Physically Infeasible in the Customer Engagement Window the Interconnection Customer may conditionally request entry in the Phase 1 Study as set forth in Section 40.7.5 of this Attachment HH if (i) the Interconnection Request was deemed Physically Infeasible in the Customer Engagement Window because the Point of Interconnection could only accommodate one project with a Queue Position with a higher designated priority; and (ii) the Cluster Project is the next queue position in priority for the POI; and (iii) there is only one Interconnection Request with a Queue Position with a higher designated priority that passed the Physical Infeasibility Screening.

40.7.3.4 If: (i) more than one Interconnection Request in a Cluster proposes to interconnect at the same Point of Interconnection on the New York State Transmission System or Distribution System and (ii) all of the Interconnection Requests proposing to interconnect at that location are not able in the aggregate to interconnect due to a Physical Infeasibility, then an Interconnection Request with a Queue Position with a higher designated priority shall have priority over an Interconnection Request with a Queue Position with a lower designated priority (including as between Interconnection Requests within the same Cluster) for access to that Point of Interconnection for purposes of Physical Infeasibility determinations.

40.7.3.5 For purposes of applying Section 40.7.3.4 if one or more of the Cluster Study Projects proposing to interconnect at the same Point of Interconnection are Contingent Projects, the Transmission Owner shall perform two Physical Infeasibility assessments.

40.7.3.5.1 For the first Physical Infeasibility assessment, the Transmission Owner (i) will assume all Pending Projects, including those associated with Contingent Projects, that their

associated Pending Projects have accepted their Project Cost Allocation and provided the required cash or Security in, as applicable, the ongoing Class Year Study, Cluster Study, Additional SDU Study, or Small Generator Interconnection Procedures facilities study and (ii) will assess whether, with these Pending Projects assumed in the baseline of the system used in the assessment, there are Physical Infeasibility issues for any remaining Cluster Study Projects that are not Contingent Projects. This first assessment will be used for determining which Interconnection Requests for the Cluster Study Projects that are not Contingent Projects are Physically Infeasible if the Pending Project(s) proceed to accept their Project Cost Allocation and provide the required cash or Security in, as applicable, the ongoing Class Year Study, Cluster Study, Additional SDU Study, or Small Generator Interconnection Procedures facilities study.

40.7.3.5.2 For the second Physical Infeasibility assessment, the Transmission Owner: (i) will assume for all Pending Projects, including those associated with Contingent Projects, that the Pending Projects do not accept their Project Cost Allocation and/or do not provide the required cash or Security in, as applicable, the ongoing Class Year Study, Cluster Study, or Additional SDU Study, or Small Generator Interconnection Procedures facilities study and (ii) assuming all of the Pending Projects are not used in the baseline of the system used in the assessment, will assess all Cluster Study Projects, including Contingent Projects, equally for their access to the Point of Interconnection and will apply the priority rules in Section 40.7.3.4.

#### **40.7.4 Scoping Meeting**

During the Customer Engagement Window, and after the ISO posts the Physical Infeasibility screening report, the ISO shall hold a group Scoping Meeting with all Interconnection Customers with validated Interconnection Requests and CRIS-Only Requests

included in the Cluster for that Cluster Study Process, along with the Connecting Transmission Owners and any Affected Transmission Owner(s) identified in connection with the Interconnection Requests. The ISO will provide notice of the Scoping Meeting by sending notice to the contact list of the Cluster Study Projects included in the Cluster Study Project List and the applicable Connecting Transmission Owners, Affected Transmission Owners, and Affected System Operators. In setting the date for the Scoping Meeting, the ISO will consult with the Transmission Owners concerning the timeframe for completion of the Physical Infeasibility Screening, with the Scoping Meeting to take place no later than the last Business Day before the close of the Customer Engagement Window.

The purpose of the Scoping Meeting shall be to reinforce the roles and responsibilities of all parties in the interconnection process, including to discuss the study scope for the Cluster Study, the schedule, and the work plan, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to discuss the results of the Physical Infeasibility Screening, including summarizing potential Physical Infeasibility issues, and to analyze such information. The ISO, Connecting Transmission Owner, Affected Transmission Owner(s), and Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. The duration of the meeting shall be sufficient to accomplish its purpose. If the Scoping Meeting consists of more than one Interconnection Customer, the ISO shall issue, no later than fifteen (15) Business Days after the commencement of the Customer Engagement Window, and Interconnection Customer shall execute, a non-disclosure agreement prior to a group Scoping Meeting, which will provide for confidentiality of commercially sensitive information identified in the Scoping Meeting pertaining to any other

Interconnection Customers. Before holding a Scoping Meeting with an Affiliate of a Connecting Transmission Owner and that Connecting Transmission Owner, the ISO shall post on its OASIS an advance notice of its intent to do so.

#### **40.7.5 Decision Period 1**

40.7.5.1 Decision Period 1 for the Cluster Study Process shall commence on the first Business Day after the end date of the Customer Engagement Window.

40.7.5.2 Decision Period 1 shall be a five (5) Business Day period.

40.7.5.3 A Cluster Study Project will be included in the Phase 1 Study if, during Decision Period 1, the Interconnection Customer for the Cluster Study Project:

(i) notifies the ISO of its election for its Cluster Study Project to proceed to the Phase 1 Study;

(ii) submits to the ISO an updated proposed Initial Backfeed Date, an updated proposed Synchronization Date, and an updated proposed Commercial Operation Date; and

(iii) provides the ISO with the Readiness Deposit 1 for its Cluster Study Project in accordance with the requirements in Section 40.2.4.2. The Readiness Deposit 1 shall be \$4,000 per MW based on the requested ERIS amount at the Point of Interconnection for the Cluster Study Project; *provided, however*, that a CRIS-Only Cluster Study Project is not required to provide Readiness Deposit 1 to proceed to the Phase 1 Study.

An Interconnection Customer may request conditional entry into the Phase 1 Study pursuant to Section 40.7.3.3 or if the Interconnection Customer has a pending dispute pursuant to Section 40.24.5; *provided however*, that the Interconnection Customer must satisfy the above requirements in this Section 40.7.5. If the Interconnection Request for an Interconnection

Customer that requests conditional entry is ultimately withdrawn from the Queue, its Readiness Deposit 1 will be refunded pursuant to Section 40.24.3.4.3.

#### **40.7.6 Withdrawal and Withdrawal Penalties**

40.7.6.1 If an Interconnection Customer does not satisfy the requirements in Section 40.7.5.3 for the Cluster Study Project to proceed to the Phase 1 Study, then the ISO shall withdraw the Interconnection Request or CRIS-Only Request for the Cluster Study Project from the ISO's Queue pursuant to the Withdrawal requirements in Section 40.6.4.

40.7.6.2 If an Interconnection Customer withdraws the Interconnection Request or CRIS-Only Request for a Cluster Study Project, or the Interconnection Request or CRIS-Only Request is deemed withdrawn by the ISO, from the ISO's Queue during the Customer Engagement Window or at Decision Period 1, the Interconnection Customer for the Cluster Study Project, including a CRIS-Only Cluster Study Project, shall pay a Withdrawal Penalty in an amount equal to twenty-five percent (25%) of its initial Study Deposit amount for the project; except for the following:

(i) if the Interconnection Request or CRIS-Only Request was withdrawn or was deemed withdrawn by the ISO during the Customer Engagement Window up to five (5) Business Days after the ISO posted the Cluster Study Project List pursuant to Section 40.7.2.2, then the Cluster Study Project shall not be assessed a Withdrawal Penalty;

(ii) if the ISO determined that the Cluster Study Project cannot move forward due to Physical Infeasibility pursuant to Section 40.7.3, then the Cluster Study Project shall not be assessed a Withdrawal Penalty; and

(iii) if the Interconnection Request or CRIS-Only Request was for: (A) a Contingent Project that was withdrawn by the ISO pursuant to Section 40.5.4.1.3 or (B)

for a Contingent Project that was converted to a CRIS-Only Cluster Study Project and informs the ISO of its election to withdraw prior to the Phase 1 Study pursuant to Section 40.5.4.1.3, then the Interconnection Request or CRIS-Only Request shall not be assessed a Withdrawal Penalty.

40.7.6.2.1 The ISO shall invoice, and Interconnection Customer shall pay, any Withdrawal Penalty as set forth in Section 40.24.3.

40.7.6.3 The ISO shall apply the collected Withdrawal Penalty Funds pursuant to Section 40.6.5.

## **40.9 Cluster Study Overview/ NYISO Minimum Interconnection Standard/ NYISO Deliverability Interconnection Standard/ Cluster Study Cost Allocation Rules Overview**

### **40.9.1 Cluster Study Overview**

The Cluster Study shall consist of:

(i) the ISO's development of the Existing System Representation used for the Cluster Study as set forth in Sections 40.10.3;

(ii) the Connecting Transmission Owners' and Affected Transmission Owners' performance of the Phase 1 Study for the Cluster Study Projects as set forth in Section 40.10.4;

(iii) Decision Period 2 in which Interconnection Customers elect whether to satisfy the requirements for their Cluster Study Projects to proceed to the Phase 2 Study as set forth in Section 40.10.8;

(iv) the ISO's performance of the Phase 2 Study, in conjunction with the Connecting Transmission Owner and Affected Transmission Owner, for the Cluster Study Projects as set forth in Sections 40.11 through 40.14, including: (A) the ISO's development of the Cluster Baseline Assessment and Cluster Project Assessment used for the Cluster Study as set forth in Section 40.12, (B) the ISO's assessment of the reliable interconnection of the Cluster Study Projects requesting ERIS in accordance with the NYISO Minimum Interconnection Standard as set forth in Section 40.12, (C) the ISO's assessment of the deliverability of Cluster Study Projects, including CRIS-Only Cluster Study Projects, requesting CRIS in accordance with the NYISO Deliverability Interconnection Standard in the Cluster Study Deliverability Study in accordance with Section 40.13, and (D) if applicable, the ISO's performance of an Additional SDU Study in accordance with Section 40.14; and

(v) the Final Decision Period at the conclusion of the Phase 2 Study and, if applicable, the Additional SDU Study Decision Period, at the conclusion of any Additional SDU Study as set forth in Section 40.15.

#### **40.9.2 Timeframes**

40.9.2.1 The timeframe for the ISO's, Connecting Transmission Owners', and Affected Transmission Owners' performance of their responsibilities for the Phase 1 Study and Phase 2 Study will be scheduled for each Cluster Study Process as follows:

(i) The scheduled duration of the Phase 1 Study process will be a one hundred ninety (190) Calendar Day period between the Phase 1 Study Start Date and the ISO's presentation to its Operating Committee for its approval of the Phase 1 Cost Estimates Summary Report ("Scheduled Phase 1 Study Timeframe"). Within this period, the scheduled duration for the key individual components of the Phase 1 Study process are set forth in Section 40.10.

(ii) The scheduled duration of the Phase 2 Study process will be a two hundred seventy (270) Calendar Day period between the Phase 2 Study Start Date and the ISO's presentation of the draft Cluster Study Report to the Operating Committee for its approval ("Scheduled Phase 2 Study Timeframe"). Within this period, the scheduled duration for the key individual components of the Phase 2 Study process are set forth in Section 40.11.

40.9.2.2 If the ISO, Connecting Transmission Owner, or Affected Transmission Owner is unable to complete an individual component of the Cluster Study Process in accordance with that component's timeframe established in this Attachment HH, the entity responsible for performing that component shall complete it as soon as practicable, and the ISO shall notify Interconnection Customers of any anticipated resulting delay in the overall timeframe of, as applicable, the Phase 1 Study or Phase 2 Study. The ISO shall address any failure of the

responsible entity to achieve a study component within a tariff-prescribed time period through the requirements set forth in Section 40.9.3.

### **40.9.3 Study Metrics and Penalties for Study Delays**

#### **40.9.3.1 Metrics and Reporting Obligation**

##### **40.9.3.1.1 Publicly Posted Study Metrics for Cluster Study Process**

40.9.3.1.1.1 Within thirty (30) Calendar Days of the completion of Decision Period 2 for a given Cluster Study Process, the ISO will post on a publicly accessible portion of its website the following statistics related to processing of Cluster Studies performed in accordance with this Attachment HH:

(A) Number of individual Phase 1 Study reports completed during the Phase 1 Study process for a given Cluster Study Process;

(B) Number of individual Phase 1 Study reports during the Phase 1 Study process for a given Cluster Study Process that were finalized beyond the timeframe set forth in Section 40.10.5 of this Attachment HH;

(C) For each individual Phase 1 Study report completed during the Phase 1 Study for a given Cluster Study Process: (i) the details of the Interconnection Request posting on the ISO's Queue; (ii) the identity of Connecting Transmission Owner(s) and Affected Transmission Owner(s), as applicable; (iii) the total time (in Calendar Days) from the Phase 1 Study Start Date to the date the ISO provided the applicable Transmission Owner with an updated Cluster Study Project List and the finalized CPA short-circuit base case pursuant to Section 40.10.4.1; (iv) if the total time calculated for Section 40.9.3.1.1.1(C)(iii) is greater than the time period for the ISO to provide the required materials to the applicable Transmission Owner as set forth in Section 40.10.4.1, the

reasons for the delay; (v) the total time (in Calendar Days) from the date the ISO provided to the applicable Transmission Owner with an updated Cluster Study Project List and the finalized CPA short-circuit base case to the date when the applicable Transmission Owner provides the individual final version of the Phase 1 Study report to the ISO and the Interconnection Customer; and (vi) if the total time calculated for Section 40.9.3.1.1.1(C)(v) is greater than the time period set forth in Section 40.10.5 for the Transmission Owner to provide the final report, the reasons for the delay reported to the ISO by the applicable Transmission Owner;

(D) Total time (in Calendar Days) from the Phase 1 Study Start Date to the date when the ISO presents the Phase 1 Cost Estimates Summary Report to the ISO Operating Committee; and

(E) Number of Interconnection Requests or CRIS-Only Requests withdrawn from the ISO's Queue during the period between the commencement of the Customer Engagement Window and the completion of Decision Period 2 for the given Cluster Study.

For purposes of this section, the Phase 1 Study process includes (i) individual Phase 1 Study reports for each Cluster Study Project, including reports from the Connecting Transmission Owner(s) and any applicable Affected Transmission Owners; and (ii) a Phase 1 Cost Estimates Summary Report compiled by the ISO from cost estimates identified for all Cluster Study Projects in the Phase 1 Study. An individual Phase 1 Study report for a Cluster Study Project is deemed complete on the date upon which the applicable Transmission Owner provides the final version of the study report to the ISO and the Interconnection Customer in accordance with Section 40.10.5. A Phase

1 Cost Estimates Summary Report is deemed complete on the date upon which the Phase 1 Cost Estimates Summary Report is presented to the ISO's Operating Committee in accordance with Section 40.10.6.

Connecting Transmission Owners and Affected Transmission Owners shall timely provide any information reasonably requested by the ISO to complete the study metrics specified in this Section 40.9.3.1.1.

40.9.3.1.1.2 Within thirty (30) Calendar Days of the completion of the Phase 2 Study Final Decision Period for a given Cluster Study Process, the ISO will post on a publicly accessible portion of its website the following statistics related to processing of Cluster Studies performed in accordance with this Attachment HH:

(A) For each updated individual Phase 1 Study report completed during the Phase 2 Study for a given Cluster Study Process: (i) the details of the Interconnection Request posting on the ISO's Queue; (ii) the identity of Connecting Transmission Owner(s) and Affected Transmission Owner(s), as applicable; (iii) the total time (in Calendar Days) from the Phase 2 Study Start Date to the date the ISO provided the applicable Transmission Owner with an updated Cluster Study Project List and an updated CPA short-circuit base case pursuant to Section 40.11.2.2; (iv) if the total time calculated for Section 40.9.3.1.1.2(A)(iii) is greater than the time period for the ISO to provide the required materials to the applicable Transmission Owner as set forth in Section 40.11.2.2, the reasons for the delay; (v) the total time (in Calendar Days) from the date the ISO provided to the applicable Transmission Owner with an updated Cluster Study Project List and the updated CPA short-circuit base case to the date when the applicable Transmission Owner provides the individual final, updated version of the Phase 1 Study

report to the ISO and the Interconnection Customer; and (vi) if the total time calculated for Section 40.9.3.1.1.2(A)(v) is greater than the time period set forth in Section 40.11.2.2 for the Transmission Owner to provide the final updated report, the reasons for the delay reported to the ISO by the applicable Transmission Owner;

(B) For each individual Phase 2 Study report completed during the Phase 2 Study for a given Cluster Study Process: (i) the details of the Interconnection Request or CRIS-Only Request posting on the ISO's Queue; (ii) the identity of Connecting Transmission Owner(s) and Affected Transmission Owner(s), as applicable; (iii) the total time (in Calendar Days) from the Phase 2 Study Start Date to the date the ISO provided the applicable Transmission Owner with any System Upgrade Facilities, Distribution Upgrades, and System Deliverability Upgrades identified by the ISO for a Cluster Study Project and their major electrical characteristics pursuant to Section 40.11.4.1; (iv) if the total time calculated for Section 40.9.3.1.1.2(B)(iii) is greater than the time period for the ISO to provide the applicable Transmission Owner with the identified upgrades and their major electrical characteristics as set forth in Section 40.11.4.1, the reasons for the delay; (v) the total time (in Calendar Days) from the date the ISO provided to the applicable Transmission Owner the identified upgrades and their major electrical characteristics for a Cluster Study Project to the date when the applicable Transmission Owner provides the individual final version of the Phase 2 Study report to the ISO and the Interconnection Customer; and (vi) if the total time calculated for Section 40.9.3.1.1.2(B)(v) is greater than the time period set forth in Section 40.11.4.3 for the Transmission Owner to provide the final report, the reasons for the delay reported to the ISO by the applicable Transmission Owner;

(C) Total time (in Calendar Days) from the Phase 2 Study Start Date to the date when the ISO presents the summary Cluster Study Report to the ISO's Operating Committee;

(D) Total time (in Calendar Days) for the Phase 1 Study process and Phase 2 Study process of the given Cluster Study Process (excluding Decision Period 2); and

(E) Number of Interconnection Requests or CRIS-Only Requests withdrawn from the ISO's Queue during the period between the commencement of the Phase 2 Study and the completion of the Final Decision Period.

For purposes of this section, the Phase 2 Study process is deemed complete on the date upon which the Cluster Study Report is presented to the ISO's Operating Committee.

Connecting Transmission Owners and Affected Transmission Owners shall timely provide any information reasonably requested by the ISO to complete the study metrics specified in this Section 40.9.3.1.2.

#### **40.9.3.1.2 Publicly Posted Study Metrics for Interconnection Requests and CRIS-Only Requests Withdrawn from the Queue**

40.9.3.1.2.1 On an annual basis, the ISO will post on a publicly accessible portion of its website the following statistics, or an update to previously posted statistics, related to the Interconnection Requests and CRIS-Only Requests that withdraw or are deemed withdrawn by the ISO from the Queue for each Cluster Study Process during that prior year in accordance with this Attachment HH:

(A) Number of validated Interconnection Requests and CRIS-Only Requests for a given Cluster Study Process;

(B) Number of Interconnection Requests and CRIS-Only Requests in the Cluster Study Process withdrawn from the Queue after the commencement of the Phase 1 Study, but before commencement of the Phase 2 Study;

(C) Number of Interconnection Requests and CRIS-Only Requests in the Cluster Study Process withdrawn from the Queue after the commencement of the Phase 2 Study, but prior to the completion of the Final Decision Period for the Cluster Study;

(D) Number of Interconnection Requests and, if applicable, CRIS-Only Requests withdrawn from the Queue after the completion of the Final Decision Period for the Cluster Study, but before execution of a Standard Interconnection Agreement or an Interconnection Customer requesting the filing of an unexecuted, new Standard Interconnection Agreement; and

(E) Number of Interconnection Requests and, if applicable, CRIS-Only Requests withdrawn from the Queue after execution of a Standard Interconnection Agreement or an Interconnection Customer requesting the filing of an unexecuted, new Standard Interconnection Agreement.

#### **40.9.3.1.3 Informational Reports of Study Processing Times**

40.9.3.1.3.1 If: (A) the duration of the Phase 1 Study process between the Phase 1 Study Start Date and the ISO's presentation to its Operating Committee of the Phase 1 Cost Estimates Summary Report (the "Actual Phase 1 Study Timeframe") exceeds the Scheduled Phase 1 Study Timeframe or (B) the duration of the Phase 2 Study process between the Phase 2 Study Start Date and the ISO's presentation of the draft Cluster Study Report to the Operating Committee for its approval (the "Actual Phase 2 Study Timeframe") exceeds the Scheduled Phase 2 Study Timeframe for a given Cluster Study

Process , the ISO will file a report with the Commission: describing (i) the reason(s), as applicable, that the Actual Phase 1 Study Timeframe exceeded the Scheduled Phase 1 Study Timeframe and/or the Actual Phase 2 Study Timeframe exceeded the Scheduled Phase 2 Study Timeframe for that process ; and (ii) steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. A report must be filed at the Commission within sixty-five (65) Business Days following, as applicable, (i) the completion of Decision Period 2 for a late Phase 1 Study process, and (ii) the completion of the Final Decision Period for a late Phase 2 Study process. The ISO will also aggregate the total number of its and Transmission Owners' employee hours and third party consultant hours expended towards a late Phase 1 Study process or a late Phase 2 Study process. The ISO will post this information within sixty-five (65) Business Days following, as applicable: (i) the completion of Decision Period 2 for a late Phase 1 Study process, and (ii) the completion of the Final Decision Period for a late Phase 2 Study process. Connecting Transmission Owners and Affected Transmission Owners shall timely provide any information reasonably requested by the ISO to complete the report and the aggregation of employee and consultant hours.

#### **40.9.3.2 Penalties for Failure to Meet Study Deadlines**

40.9.3.2.1 Commencing with the first Cluster Study Process for which penalties may be applied as set forth in Section 40.9.3.2.10, the ISO and/or Transmission Owners shall be subject to a penalty to the extent required in this Section 40.9.3.2 if the Phase 1 Study process, the Phase 2 Study process, or an Affected System Study is not completed within the applicable deadline set forth in this Section 40.9.3.2.

40.9.3.2.2 If: (A) the Actual Phase 1 Study Timeframe exceeds the Scheduled Phase 1 Study Timeframe, (B) the Actual Phase 2 Study Timeframe exceeds the Scheduled Phase 2 Study Timeframe, or (C) the duration of the Affected System Study (excluding the final decision period) (the “Actual Affected System Study Timeframe”) exceeds the three hundred (300) Calendar Days scheduled duration for this study as established in Section 40.8.3.7 (“Scheduled Affected System Study Timeframe”), the ISO will take the following action, unless the study process is completed within the ten (10) Business Day grace period set forth in Section 40.9.3.2.8 or within an agreed upon extended period as set forth in Section 40.9.3.2.9:

40.9.3.2.2.1 The ISO will prepare a Draft Penalty Summary within twenty (20)

Business Days of, as applicable: (i) the completion of Decision Period 2 for a delayed Phase 1 Study process, (ii) the completion of the Final Decision Period for a delayed Phase 2 Study process, and (iii) the completion of the Final Decision Period for a delayed Affected System Study. Each Draft Penalty Summary will compute the total penalty amount and the allocation of such penalty amount among the ISO and the Transmission Owners.

40.9.3.2.2.2 The ISO will calculate the penalty amount by multiplying: (i) the daily penalty amount set forth in Section 40.9.3.2.6 by (ii) the number of Business Days that, as applicable,: (A) the Actual Phase 1 Study Timeframe exceeded the Scheduled Phase 1 Study Timeframe with any agreed upon extension(s) as set forth in Section 40.9.3.2.9, (B) the Actual Phase 2 Study Timeframe exceeded the Scheduled Phase 2 Study Timeframe with any agreed upon extension(s) as set forth in Section 40.9.3.2.9, or (C) the Actual Affected System Study Timeframe

exceeded the Scheduled Affected System Study Timeframe with any agreed upon extension(s) as set forth in Section 40.9.3.2.9.

40.9.3.2.2.3 The ISO will allocate the computed penalty amount among itself and each individual Transmission Owner based on the delays of each party in completing the portions of, as applicable, the Phase 1 Study process or Phase 2 Study process for which each party is explicitly responsible for under this Attachment HH and/or under any contract to implement these responsibilities between the ISO and the applicable Transmission Owner.

40.9.3.2.2.4 The Transmission Owners will have twenty (20) Business Days to review the Draft Penalty Summary and to provide any comments to the ISO. The ISO will then have ten (10) Business Days to finalize the Penalty Summary.

40.9.3.2.3 The ISO and/or Transmission Owner must pay the penalty set forth in the Penalty Summary, as applicable, for each late Phase 1 Study process or Phase 2 Study process as follows:

40.9.3.2.3.1 For a penalty resulting from a late Phase 1 Study process, the ISO and/or Transmission Owner shall pay the penalty set forth in the Penalty Summary on a pro rata basis per Interconnection Request or CRIS-Only Request for all Interconnection Customer(s) included in the Cluster during the Phase 1 Study that satisfied Decision Period 2 requirements in Section 40.10.8.3 to enter into the Phase 2 Study in proportion to the final study costs for the Phase 1 Study process for each Interconnection Request or CRIS-Only Request.

40.9.3.2.3.2 For a penalty resulting from a late Phase 2 Study process, the ISO and/or Transmission Owner shall pay the penalty set forth in the Penalty Summary on a pro rata

basis per Interconnection Request or CRIS-Only Request to all Interconnection Customer(s) included in the Cluster during the Phase 2 Study that accepted any required cost allocation identified in the study and paid cash or posted security, if any, for their allocated amount, in proportion to the final study cost for the Phase 2 Study process for each Interconnection Request or CRIS-Only Request.

40.9.3.2.4 The ISO must pay the penalty set forth in the Penalty Summary for a late Affected Systems Study on a pro rata basis to all Affected System Interconnection Customer(s) included in the relevant Affected System Study that accepted any required cost allocation identified in the study and paid cash or posted security, if any, for their allocated amount, in proportion to each Affected System Interconnection Customer's final study cost.

40.9.3.2.5 Unless otherwise indicated in this Section 40.9.3.2, the study delay penalty for each late study set forth in Sections 40.9.3.2.3 and 40.9.3.2.4 shall be distributed no later than ninety (90) Business Days after, as applicable: (i) the completion of Decision Period 2 for a penalty resulting from a late Phase 1 Study process; (ii) the completion of the Final Decision Period for a penalty resulting from a late Phase 2 Study process, or (iii) the completion of the Final Decision Period for a penalty resulting from a late Affected System Study. If a Transmission Owner is responsible for paying a penalty amount and has not appealed the penalty amount, it shall make such payment to the ISO within sixty-five (65) Business Days after, as applicable: (i) the completion of Decision Period 2 for a penalty resulting from a late Phase 1 Study process; (ii) the completion of the Final Decision Period for a penalty resulting from a late Phase 2 Study process, or (iii) the completion of the Final Decision Period for a penalty resulting from a late

Affected System Study. The ISO will be responsible for distributing the penalty amount to the applicable Interconnection Customers.

40.9.3.2.6 For penalties assessed in accordance with this Section 40.9.3.2, the penalty amount will be equal to: (i) \$2,000 per Business Day for delays of, as applicable, the Phase 1 Study process or the Phase 2 Study process beyond the applicable deadline set forth in this Section 40.9.3.2 and (ii) \$2,000 per Business Day for delays of Affected System Studies beyond the applicable deadline set forth in this Section 40.9.3.2. The total amount of penalties assessed under this Section 40.9.3.2 for a given Cluster Study (i.e., the combined total amounts of any penalties for a late Phase 1 Study process and any penalties for a late Phase 2 Study process) shall not exceed one hundred percent (100%) of the initial study deposit(s) received for all of the Interconnection Requests and CRIS-Only Requests in the Cluster for that Cluster Study. The total amount of a penalty assessed under this Section 40.9.3.2 for an Affected System Study shall not exceed one hundred percent (100%) of the study deposit(s) that the ISO collects for conducting the Affected System Study.

40.9.3.2.7 The ISO and/or each Transmission Owner may appeal to the Commission any penalties set forth in the Penalty Summary that will be imposed under this Section 40.9.3.2. The Transmission Owner's right to appeal includes the right to challenge the ISO's allocation of penalty amounts in the Penalty Summary. Any such appeal must be filed no later than sixty-five (65) Business Days after, as applicable, (i) the completion of Decision Period 2 for a penalty resulting from a late Phase 1 Study process; (ii) the completion of the Final Decision Period for a penalty resulting from a late Phase 2 Study process, or (iii) the completion of the Final Decision Period for a penalty resulting from a

late Affected System Study. While an appeal to the Commission is pending, the ISO and/or Transmission Owner shall remain liable for the penalty, but need not distribute the penalty until sixty (60) Calendar Days after the later of: (1) the deadline for filing a rehearing request has ended, if no requests for rehearing of the Commission's order on the appeal have been filed, or (2) the date that the Commission issues a substantive order on any requests for rehearing. The Transmission Owner shall make any penalty payment to the ISO within fifteen (15) Calendar Days of this date. The Commission may excuse the ISO and/or Transmission Owner from penalties under this Section 40.9.3.2 for good cause.

40.9.3.2.8 No penalty will be assessed under this Section 40.9.3.2 where a study is delayed by ten (10) Business Days or less. If the study is delayed by more than ten (10) Business Days, the penalty amount will be calculated from the first Business Day the applicable study misses its deadline.

40.9.3.2.9 If (a) a Phase 1 Study process, a Phase 2 Study process, or an Affected System Study will not be completed within the applicable deadline set forth in this Section 40.9.3.2 or an extended deadline for the study established pursuant to this Section 40.9.3.2.9 and (b) unless ten percent (10%) or more of the total number of Interconnection Requests and CRIS-Only Requests included in the relevant Phase 1 Study process or Phase 2 Study process or of the total number of projects in the Affected System Study vote affirmatively against an extension, the deadline for that study process shall be extended thirty (30) Business Days from the original deadline. In such a scenario, no penalty will be assessed for missing the original deadline.

40.9.3.2.10 No penalties shall be assessed until the third Cluster Study Process cycle after the Commission-approved effective date of the Standard Interconnection Procedures (i.e., the second Cluster Study Process following the completion of the Transition Cluster Study Process).

40.9.3.2.11 The ISO must maintain on its OASIS or its public website summary statistics related to penalties assessed under this Section 40.9.3.2, updated quarterly. For each calendar quarter, the ISO must calculate and post (1) the total amount of penalties assessed under this Section 40.9.3.2 during the previous reporting quarter and (2) the highest penalty assessed under this Section 40.9.3.2 paid to a single Interconnection Customer or Affected System Interconnection Customer during the previous reporting quarter. The ISO must post on its OASIS or its website these penalty amounts for each calendar quarter within thirty (30) Calendar Days of the end of the calendar quarter. The ISO must maintain the quarterly measures posted on its OASIS or its website for three (3) calendar years with the first required posting to be the third Cluster Study Process cycle after the Commission-approved effective date of the Standard Interconnection Procedures (i.e., the second Cluster Study Process following the completion of the Transition Cluster Study Process).

#### 40.9.3.3 Cluster Study Upgrade Summary

As soon as practicable after the completion of the Phase 2 Study Final Decision Period for a given Cluster Study Process, the ISO will post a summary of Physical Infeasibility determinations and CTOAF, Distribution Upgrades, System Upgrade Facilities and System Deliverability Upgrades identified for Cluster Study Projects in

such Cluster Study, together with the cost estimate and construction timeline estimates for each such upgrade.

#### **40.9.4 No Prioritization of Cluster Study Projects**

There will be no prioritization of the Projects grouped and studied together in a Cluster Study, except as otherwise indicated in Section 40.6.1.2 or as set forth in Section 40.7.3.4 in the event of a Physical Infeasibility determination. Each Project in a Cluster Study will, with other Projects in the same Cluster Study, share in the then currently available functional or electrical capability of the transmission system, and share in the cost of the System Upgrade Facilities required to interconnect its respective Project and, for Interconnection Customers seeking CRIS, System Deliverability Upgrades required under the NYISO Deliverability Interconnection Standard, in accordance with the rules set forth herein. For purposes of this Section 40.9.4, the “then currently available functional or electrical capability of the transmission system” is the functional or electrical capability of the transmission system currently available in the applicable base case.

#### **40.9.5 Interconnection Facilities Covered by the Cluster Study**

##### **40.9.5.1 Interconnection Standards**

The interconnection facilities covered by the Cluster Study and its cost allocation rules are (i) those required for the proposed project to reliably interconnect to the New York State Transmission System or to the Distribution System in a manner that meets the NYISO Minimum Interconnection Standard for ERIS, and (ii) those required for the project to meet the NYISO Deliverability Interconnection Standard for CRIS.

##### **40.9.5.2 Interconnection Facilities**

The interconnection facilities covered by the Cluster Study and its cost allocation rules include the following types of facilities: Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades.

#### **40.9.6 NYISO Minimum Interconnection Standard**

##### **40.9.6.1 Scope and Purpose of Standard**

Each Facility must be evaluated under the NYISO Minimum Interconnection Standard in a Cluster Study.

40.9.6.1.1 The NYISO Minimum Interconnection Standard is designed to ensure reliable access by the proposed project to the New York State Transmission System and to the Distribution System. The NYISO Minimum Interconnection Standard does not impose any deliverability test or deliverability requirement on the proposed project. Application of these rules, including the Cluster Baseline Assessment and the Cluster Project Assessment, to allocate responsibility for the cost of new transmission facilities to permit interconnection is not intended to affect the NYISO Minimum Interconnection Standard.

40.9.6.1.2 Consequently, the NYISO Minimum Interconnection Standard is not intended to address in any way the allocation of responsibility for the cost of upgrades and other new facilities associated with transmission service and the delivery of power across the Transmission System, the reduction of Congestion, economic transmission system upgrades, or the mitigation of Transmission System overloads associated with the delivery of power.

40.9.6.1.3 It is not anticipated that the installation of any interconnection facilities covered by the NYISO Minimum Interconnection Standard will improve the

deliverability of power, reduce Congestion, or mitigate overloads associated with the delivery of power. If the installation of any facilities by an Interconnection Customer does improve deliverability, reduce Congestion and create Incremental Transmission Congestion Contracts, or mitigate overloads, then that situation will be handled in accordance with the relevant provisions of the ISO OATT, including Sections 3.7 and 4.5, and applicable FERC precedent.

#### **40.9.7 NYISO Deliverability Interconnection Standard**

##### **40.9.7.1 Scope and Purpose of Standard**

Each proposed or existing facility larger than 2 MW, and each facility with CRIS that requests an increase to its CRIS, must meet the NYISO Deliverability Interconnection Standard before it can receive CRIS or Unforced Capacity Deliverability Rights, unless otherwise provided for in this Attachment HH. For purposes of this Section 40.9.7.1, a facility comprised of multiple Generators is a single “facility.”

40.9.7.1.1 The NYISO Deliverability Interconnection Standard is designed to ensure that the Project is deliverable throughout the New York Capacity Region(s) where the Project will interconnect or is interconnected. The NYISO Deliverability Interconnection Standard is also designed to ensure that the Interconnection Customer of the Project restores the transfer capability of any External Other Interface or Internal Other Interface degraded by its interconnection.

40.9.7.1.2 Each Project electing CRIS will be allowed to become an Installed Capacity Supplier, or will be allowed to receive Unforced Capacity Deliverability Rights or External-to-ROS Deliverability Rights, in accordance with the rules of the ISO’s Installed Capacity market, up to the amount of its deliverable capacity,

as that amount is determined in accordance with the rules in this Attachment HH, once the Interconnection Customer of the Project has paid cash or posted Security for any required System Deliverability Upgrades in accordance with the rules in this Attachment HH.

#### **40.9.8 Overview of Cost Allocation Rules for Cluster Study**

##### **40.9.8.1 Purpose of the Rules**

As set forth in this Attachment HH, the Cluster Study will (1) allocate responsibility among Interconnection Customers, Transmission Owners, and Load Serving Entities (“LSEs”), as described herein, for the cost of the new interconnection facilities that are required for the reliable interconnection of Projects to the New York State Transmission System and to the Distribution System in compliance with the requirements of the type of interconnection service elected by the Interconnection Customer; and (2) allocate responsibility for the cost of interconnection facilities required for Capacity Resource Interconnection Service and interconnection in compliance with the NYISO Deliverability Interconnection Standard. Section 40.12 of this Attachment HH describes the rules to estimate and allocate responsibility for the cost of the interconnection facilities required for Energy Resource Interconnection Service and interconnection in compliance with the NYISO Minimum Interconnection Standard. Section 40.13 of this Attachment HH describes the rules to estimate and allocate responsibility for the cost of interconnection facilities required for CRIS and interconnection in compliance with the NYISO Deliverability Interconnection Standard. Every Interconnection Customer is responsible for the cost of the new interconnection facilities required for the reliable interconnection of its Project in compliance with the NYISO Minimum Interconnection Standard, as that responsibility is determined by these rules. In addition, every Interconnection Customer electing CRIS is also

responsible for the cost of the interconnection facilities required pursuant to the NYISO Deliverability Interconnection Standard, as that responsibility is determined by these rules.

As described herein, the intent of the cost allocation rules for the Cluster Study in this Attachment HH is that each Interconnection Customer be held responsible for the net impact of the interconnection of its Project on the reliability of the New York State Transmission System. An Interconnection Customer is held responsible for the cost of the interconnection facilities that are required by its Project, facilities that would not be required but for its Project. However, an Interconnection Customer is not responsible for the cost of facilities that are, without considering the impact of its Project, required to maintain the reliability of the New York State Transmission System. Transmission Owners are, in accordance with the ISO OATT and FERC precedent, responsible for the cost of the facilities that are, without considering the impact of Interconnection Customer's Project, required to maintain the reliability of the New York State Transmission System.

#### **40.9.8.2 Attachment Facilities**

Each Interconnection Customer is responsible for 100% of the cost of the Attachment Facilities required for the reliable interconnection of its Project in compliance with the NYISO Minimum Interconnection Standard, as that responsibility is determined by these rules.

#### **40.9.8.3 Distribution Upgrades**

Each Interconnection Customer is responsible for 100% of the cost of the Distribution Upgrades required for the reliable interconnection of its Project in compliance with the NYISO Minimum Interconnection Standard, as that responsibility is determined by these rules.

#### **40.9.8.4 Side Agreements**

These cost allocation rules will not preclude or supersede any binding cost allocation agreements that are executed between or among Interconnection Customers, Connecting Transmission Owners, and/or Affected Transmission Owners; *provided, however*, that no such agreements will increase the cost responsibility or cause a material adverse change in the circumstances as determined by these rules of any Interconnection Customer or Transmission Owner who is not a party to such agreement.

#### **40.9.8.5 Costs Covered By Attachment HH**

The interconnection facility cost allocated by these rules is comprised of all costs and overheads associated with the design, procurement, and installation of the new interconnection facilities. These rules do not address in any way the allocation of responsibility for the cost of operating and maintaining the new interconnection facilities once they are installed. Nor do these rules address in any way the ownership of the new interconnection facilities.

#### **40.9.8.6 Dispatch Costs**

Interconnection Customers, Connecting Transmission Owners, and Affected Transmission Owners will not be charged directly for any redispatch cost that may be caused by the temporary removal of transmission facilities from service to install new interconnection facilities, as such cost is reflected in Locational Based Marginal Prices. Nor will existing generators be paid for any lost opportunity cost that may be incurred when their units are dispatched down or off in connection with the installation of new interconnection facilities.

#### **40.9.8.7 Transmission Owners' Cost Recovery**

Any Connecting Transmission Owner or Affected Transmission Owner implementation and construction of (i) System Upgrade Facilities as identified in the Cluster Baseline Assessment or Cluster Project Assessment, or (ii) System Deliverability Upgrades as identified in the Cluster Study Deliverability Study, shall be in accordance with the ISO OATT, Commission-approved ISO Related Agreements, the Federal Power Act and Commission precedent, and therefore shall be subject to the Connecting Transmission Owner's or Affected Transmission Owner's right to recover, pursuant to appropriate financial arrangements contained in agreements or Commission-approved tariffs, all reasonably incurred costs, plus a reasonable return on investment.

#### **40.9.9 LIPA's Prospective Assumption of Cluster Study Responsibilities**

##### **40.9.9.1 LIPA Assumption of Cluster Study and Supporting Analyses**

Commencing with the first Cluster Study Process following the Transitional Cluster Study, if LIPA is identified as the Connecting Transmission Owner or an Affected Transmission Owner for an Interconnection Request or CRIS-Only Request participating in the Cluster Study, LIPA will perform the responsibilities established in this Attachment HH, for, as applicable, a Connecting Transmission Owner or Affected Transmission Owner in the performance of the Phase 1 Study, Phase 2 Study, and Additional SDU Study concerning the Interconnection Request or CRIS-Only Request, in accordance with Section 40.9.9.2. LIPA's distribution system is not included within the defined scope of the Distribution System. In the event that it is determined that LIPA's distribution system may be materially affected by a Cluster Study Project, analysis of the need for any distribution upgrades to address such material impacts shall be undertaken by LIPA as part of the Phase 1 Study and Phase 2 Study established in this Attachment HH, the procedures for which will be adopted pursuant to Section 40.9.9.2.

#### **40.9.9.2          Applicable Procedures**

Unless LIPA's Board of Trustees exercises its authority, under applicable state law, to adopt comparable standards and procedures for LIPA's responsibilities in the performance of the Cluster Study for the Long Island Transmission District, LIPA shall voluntarily follow the Cluster Study procedures set forth in this Attachment HH. For purposes of any comparability procedures for LIPA's responsibilities in the performance of the Cluster Study adopted by LIPA's Board of Trustees, such procedures shall be consistent with the applicable Connecting Transmission Owners and Affected Transmission Owners procedures for the performance of the Phase 1 Study, Phase 2 Study, and Additional SDU Study established in this Attachment HH. Upon adoption by the LIPA Board of Trustees, such procedures for the Cluster Study within the Long Island Transmission District shall be provided to the NYISO for filing with FERC on an informational basis and subject to confirmation that the adopted procedures meet the comparability standard under the Commission's reciprocity policy for the provision of interconnection service by non-jurisdictional utilities.

#### **40.9.9.3          Disputes**

With respect to any dispute arising out of, or relating to, LIPA's performance of its responsibilities under this Attachment HH that is not resolved through the dispute resolution requirements in Section 40.24.5, any succeeding action at law or equity seeking resolution of such dispute that: (i) is within the primary or exclusive jurisdiction of FERC, shall be brought in the first instance at FERC, or (ii) is raised solely within the jurisdiction of LIPA's Board of Trustees, shall be raised in the courts of the State of New York pursuant to Article 78 of the New York Civil Practice Law and Rules or the United States District Court of the Eastern District of New York, as applicable.

## **40.10 Phase 1 Study Process, Development of System Models, and Decision Period 2**

### **40.10.1 Phase 1 Study Process Start Date and Duration**

40.10.1.1 The Phase 1 Study process for the Cluster Study Process shall commence on the first Business Day after the end date of Decision Period 1.

40.10.1.2 The scheduled duration of the Phase 1 Study process shall be set forth in Section 40.9.2.

40.10.1.3 The Phase 1 Study process period shall conclude with the ISO's Operating Committee's approval of the Phase 1 Cost Estimates Summary Report.

### **40.10.2 ISO Development Work for Cluster Study Existing System Representation and Base Cases**

40.10.2.1.1 The ISO will develop the Existing System Representation in accordance with the requirements in Section 40.10.3. The Existing System Representation is the foundation of the CBA and CPA base cases. The ISO shall develop the Existing System Representation and auxiliary files for a given Cluster Study during the Application Window and Customer Engagement Window for that Cluster Study Process. The Existing System Representation will be completed for a given Cluster Study after the conclusion of the Final Decision Period for the prior Class Year Study or Cluster Study and prior to the commencement of the Phase 1 Study for the ongoing Cluster Study Process.

40.10.2.1.2 Using the Existing System Representation, the ISO will develop the CBA in accordance with the requirements in Section 40.12.1. The CBA evaluates the pre-existing baseline system before the Cluster Study Projects are included and identifies any System Upgrade Facilities and associated cost estimates for the baseline system. The CBA is used to determine the cost allocation of required facilities between Transmission Owners and Cluster Study Projects. The ISO will commence the development of the CBA base cases (*e.g.*, short-

circuit, steady state) for a given Cluster Study during the Application Window and/or the Customer Engagement Window for that Cluster Study Process. The ISO will be responsible for developing and completing each CBA base case. The ISO shall provide Transmission Owners at least five (5) Business Days to review and provide comments on the draft of each CBA base case and at least five (5) Business Days to review and provide comments on any updates the ISO makes to the draft base case to address the Transmission Owner's comments.

40.10.2.1.3 The ISO will develop the CPA in accordance with the requirements in Section 40.12.2. The CPA evaluates the condition of the system with the Cluster Study Projects added to the baseline system, identifies the System Upgrade Facilities required for the Cluster Study Projects collectively, and then performs a design, preliminary engineering, and estimation of costs and time to construct for each System Upgrade Facility. The CPA determines the cost allocation of required facilities among the Cluster Study Projects. The ISO will commence the development of the CPA base cases for a given Cluster Study during the Customer Engagement Window. The ISO will be responsible for developing and completing each CPA base case. The ISO shall provide Transmission Owners at least 5 Business Days to review and provide comments on the draft of each CPA base case and at least 5 Business Days to review and provide comments on any updates the ISO makes to the draft base case to address the Transmission Owner's comments.

### **40.10.3 Existing System Representation**

40.10.3.1 The ISO shall include in the Existing System Representation for purposes of the CBA and CPA for a given Cluster Study or Expedited Deliverability Study:

(i) the following facilities included in the ISO's most recent NYISO Load and Capacity Data Report: all generation identified as existing and all transmission facilities identified as

existing and/or firm, excluding those facilities that are subject, as applicable, to Class Year Study or Cluster Study cost allocation but for which Class Year Study or Cluster Study cost allocations have not been accepted or for which cash or Security for the allocated amount has not been provided;

(ii) all proposed Projects, together with their associated System Upgrade Facilities and System Deliverability Upgrades, as applicable, that have accepted their cost allocation and paid cash or posted Security for their allocated amount in a prior Class Year Study or Cluster Study cost allocation process or for their facilities study in accordance with the Small Generator Interconnection Procedures in Attachment Z; *provided, however*, that System Deliverability Upgrades where construction has been deferred pursuant to Section 40.13.12.3.1 will only be included if construction of the System Deliverability Upgrades has been triggered under Section 40.13.12.3.1;

(iii) all Affected System Network Upgrades for which the Affected System Interconnection Customer has accepted its cost allocation and paid cash or posted Security in accordance with Section 40.8.3.10;

(iv) all proposed generators that interconnect to the distribution system through studies conducted outside of the NYISO's interconnection procedures (*e.g.*, the New York State Standardized Interconnection Requirements ("NYSSIR") process or a utility's individual interconnection procedures) and have been identified as firm in accordance with ISO Procedures;

(v) all generation and transmission retirements and derates identified in the NYISO Load and Capacity Data Report as scheduled to occur during the five-year cost allocation study planning period;

(vi) Transmission Projects that are proposed under Attachments Y or FF of the ISO OATT and have met the following milestones prior to the start date of the Customer Engagement Window for that Cluster Study Process: (1) have been triggered under the Reliability Planning Process, selected under the Short-Term Reliability Process, selected under the Public Policy Transmission Planning Process, or approved by beneficiaries under the Economic Planning Process, (2) have, if applicable, a completed System Impact Study in accordance with Attachment P to the ISO OATT, and (3) are making reasonable progress under the applicable OATT Attachments Y or FF planning process;

(vii) Transmission Projects that are not proposed under Attachments Y or FF to the ISO OATT that have completed a Facilities Study and posted Security for Network Upgrade Facilities as required in Section 22.11.1 of Attachment P to the ISO OATT (if applicable);

(viii) transmission projects that are not subject to the Transmission Interconnection Procedures, the Standard Large Facility Interconnection Procedures, or the Standard Interconnection Procedures (*i.e.*, new transmission facilities or upgrades proposed by a Transmission Owner in its Local Transmission Owner Plan or NYPA transmission plan) identified as “firm” by the Connecting Transmission Owner before the start date of the Customer Engagement Window for the Cluster Study Process and either (1) have commenced a Facilities Study in accordance with Section 3.7 of the OATT (if applicable) and have an Article VII application deemed complete (if applicable); or (2) are under construction and scheduled to be in-service within 12 months after the Cluster Study Process Start Date; and

(ix) all other changes to existing facilities – other than changes that are subject to, as applicable, Class Year Study or Cluster Study cost allocation but that have not accepted their Class Year or Cluster Study cost allocation or have not paid cash or posted Security for their

accepted cost allocation – that are identified in the NYISO Load and Capacity Data Report or reported before the start date of the Customer Engagement Window for the Cluster Study Process by Market Participants to the ISO as scheduled to occur during the five year cost allocation study planning period.

40.10.3.2 Facilities in a Mothball Outage, an ICAP Ineligible Forced Outage, or Inactive Reserves will be modeled as in, and not removed from, the Existing System Representation.

40.10.3.3 If the ISO has triggered multiple Transmission Projects under its Reliability Planning Process, the ISO will include in the base case the selected Transmission Project until or unless that project is halted or its Development Agreement is terminated, in which case the ISO will include in the base case the regulated backstop solution.

40.10.3.4 The point of interconnection of a Retired generator with a terminated interconnection agreement is available to proposed facilities on a non-discriminatory basis pursuant to the ISO's applicable interconnection and transmission expansion processes and procedures. A Retired generator with an interconnection agreement that remains in effect after it is Retired will retain its right to the specific point of interconnection as provided for in the interconnection agreement and access to this point will not be available for new facilities.

#### **40.10.4 Phase 1 Study Scope and Procedures**

40.10.4.1 Within five (5) Business Days of the Phase 1 Study Start Date, the ISO will provide to the Connecting Transmission Owners and Affected Transmission Owners identified pursuant to Section 40.5.7.1.1 an updated Cluster Study Project List and the finalized CPA short-circuit base case. Upon the ISO's submission of these materials, (i) the Connecting Transmission Owner identified by the ISO pursuant to Section 40.5.7.1.1 on which system a Cluster Study Project proposes to interconnect shall commence and perform a Phase 1 Study for

that project, and (ii) any Affected Transmission Owner identified by the ISO pursuant to Section 40.5.7.1.1 which system is impacted by the proposed interconnection of a Cluster Study Project shall commence and perform a separate Phase 1 Study for that project, unless the Affected Transmission Owner indicates that no study is required or agrees with the Connecting Transmission Owner to include its input with the Connecting Transmission Owner's Phase 1 Study report. For the Transition Cluster Study, if, within ten (10) Business Days of the start of the Customer Engagement Window, a Connecting Transmission Owner or Affected Transmission Owner demonstrates to the ISO good cause that it is unable to perform or use a contractor to perform (i) a Phase 1 Study in accordance with the requirements in Sections 40.10.4 and 40.10.5, and/or (ii) the Transmission Owner's responsibilities for the Phase 2 Study in accordance with the requirements in Section 40.11.2.2 and 40.11.4, or (iii) the Transmission Owner's responsibilities for the Additional SDU Study in accordance with the requirements in Section 40.14.2.2, then the ISO will use a third party contractor pursuant to Section 40.24.4 to perform the studies in accordance with the requirements in, as applicable, Sections 40.10.4, 40.10.5, 40.11.2.2, 40.11.4, and 40.14.2.2 provided that the Connecting Transmission Owner or Affected Transmission Owner will use commercially reasonable efforts, and coordinate directly with the ISO or its contractor (as applicable), to support the development of and performance of the studies and the completion of the draft and final studies within the timeframes in, as applicable, Sections 40.10.4, 40.10.5, 40.11.2.2, 40.11.4, and 40.14.2.2. The Phase 1 Studies for all of the Cluster Study Projects participating in a given Cluster shall be performed to the extent practicable on a concurrent basis during the Phase 1 Study period; *provided, however*, that a Phase 1 Study will not be performed for a CRIS-Only Cluster Study Project.

40.10.4.2 For purposes of the Phase 1 Study, the Connecting Transmission Owner or Affected Transmission Owner shall perform a design and engineering study to identify the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and Local System Upgrade Facilities, along with the related metering, protection, and telecommunication 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 to the extent such upgrades are not Physically Infeasible. The Phase 1 Study will evaluate any potential control equipment proposed by the Interconnection Customer for requests for ERIS that are lower than the full output of the Facility and will identify any required interconnection facilities for system protection and coordination purposes. The Phase 1 Study will also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment, and shall evaluate the use of static synchronous compensators, static VAR compensators, advanced power flow control devices, transmission switching, synchronous condensers, voltage source converters, advanced conductors, and tower lifting. The Connecting Transmission Owner or Affected Transmission Owner, as applicable, shall evaluate each identified alternative transmission technology and determine whether the above technologies should be used, consistent with Good Utility Practice, Applicable Reliability Requirements, and Applicable Laws and Regulations. The Connecting Transmission Owner or Affected Transmission Owner, as applicable, shall include an explanation of the results of the evaluation for each technology in the Phase 1 Study report, as applicable.

40.10.4.3 The Phase 1 Study shall determine a +30%/-15% estimate of the costs of the equipment, engineering and design work, procurement and construction work and commissioning of the required Local System Upgrade Facilities, Distribution Upgrades, and Connecting Transmission Owner's Interconnection Facilities that are identified in the study in accordance with Good Utility Practice and, for each of these cost categories, shall specify and estimate the cost of the work to be done at each substation and/or transmission or, if applicable, distribution line to physically and electrically connect each facility in the Cluster to the New York State Transmission System and Distribution System. The Transmission Owner will calculate cost estimates based on the assumption that the activities for which the cost estimates are calculated are the responsibility of the Transmission Owner and shall be subject to reasonable exclusions (*e.g.*, environmental, subsurface conditions, permitting, site acquisition costs). The categories of costs excluded from the estimates shall be identified in the Phase 1 Study report and the Standard Interconnection Agreement. The Phase 1 Study shall also include a preliminary schedule showing the estimated time required to complete the engineering and design, procurement, construction, installation and commissioning phases for the required Local System Upgrade Facilities, Distribution Upgrades, and Connecting Transmission Owner's Interconnection Facilities identified in the study.

40.10.4.4 Upon request, the Connecting Transmission Owner or Affected Transmission Owner shall provide each Cluster Study Project for which it has performed a Phase 1 Study supporting documentation, workpapers, and databases or data developed in the preparation of the Phase 1 Study, subject to non-disclosure arrangements consistent with Section 40.24.1.

40.10.4.5 The ISO, Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator, as applicable, may use subgroups in the Phase 1 Study or Phase 2 Study. The criteria used to define and determine subgroups will be set forth in ISO Procedures.

40.10.4.6 Prior to the end of the Application Window of a given Cluster Study Process, the ISO and Transmission Owners shall enter into appropriate agreements concerning the performance of that Cluster Study, which terms shall not be inconsistent with the requirements in this Attachment HH.

#### **40.10.5 Phase 1 Study Reports**

The Connecting Transmission Owner and any Affected Transmission Owner identified pursuant to Section 40.5.7.1.1 shall provide its draft Phase 1 Study report for a Cluster Study Project to the Interconnection Customer and the ISO no later than one hundred fifty (150) Calendar Days after the date the ISO provided it with the updated Cluster Study Project List and the CPA short-circuit base case pursuant to Section 40.10.4.1. The ISO shall establish a period of at least ten (10) Business Days for the Interconnection Customer, Affected Transmission Owner(s), and the ISO to review and provide comments on the draft report. The Connecting Transmission Owners and Affected Transmission Owners shall review comments and provide responses and issue a finalized Phase 1 Study report to the Interconnection Customer and the ISO no later than one hundred eighty (180) Calendar Days after the date the ISO provided it with the updated Cluster Study Project List and the CPA short-circuit base case pursuant to Section 40.10.4.1.

#### **40.10.6 Stakeholder Review of the Phase 1 Cost Estimates Summary Report**

Following the ISO's receipt of the draft Phase 1 Study reports, the ISO will present a draft Phase 1 Cost Estimates Summary Report that summarizes the cost estimates identified for

Cluster Study Projects in the draft Phase 1 Studies to the ISO's Operating Committee's Transmission Planning Advisory Subcommittee. Following its receipt of the finalized Phase 1 Study reports, the ISO will update the draft Phase 1 Cost Estimates Summary Report and present the final Phase 1 Cost Estimates Summary Report to stakeholders for approval at the ISO's Operating Committee.

#### **40.10.7 Preparatory Work for Phase 2 Study**

##### **40.10.7.1 Bus Flow Analysis and Individual Breaker Analysis**

40.10.7.1.1 Within sixty (60) Calendar Days of the Phase 1 Study Start Date, the ISO will provide to the Connecting Transmission Owners the finalized CBA and CPA steady state base cases. Except as otherwise indicated in Section 40.10.7.1.3, upon the ISO's submission of these base cases, the Connecting Transmission Owner shall be responsible for performing the bus flow analysis, as applicable, for its system for purposes of the ISO's thermal analysis for the Phase 2 Study and coordinating with the ISO for the development of any required solutions within the timeframe set forth in Section 40.10.7.1.4.

40.10.7.1.2 During the Phase 1 Study process, the ISO, in consultation with the Connecting Transmission Owner, will determine whether an assessment of individual breakers on the Connecting Transmission Owner's system is required. Except as otherwise indicated in Section 40.10.7.1.3, upon this determination, the Connecting Transmission Owner shall be responsible for performing the individual breaker analysis for its system for purposes of the ISO's short-circuit analysis for the Phase 2 Study and coordinating with the ISO for the development of any required solutions within the timeframe set forth in Section 40.10.7.1.4.

40.10.7.1.3 A Connecting Transmission Owner may elect for the ISO to perform the bus flow analysis and/or the individual breaker analysis for that Connecting Transmission Owner's

system by notifying the ISO of this election within fifteen (15) Business Days of the start date of the Customer Engagement Window. If a Connecting Transmission Owner makes this election, it must provide the ISO with the ratings of its equipment and the one-line diagrams for the Cluster Study Projects proposing to connect to its system within sixty (60) Calendar Days of the Phase 1 Study Start Date to enable the ISO to perform the analysis, provided that the ISO and Connecting Transmission Owner may agree that this information is only required for certain projects. The ISO shall then be responsible for performing the bus flow analysis and/or individual breaker analysis for the Connecting Transmission Owner's system within the timeframe set forth in Section 40.10.7.1.4.

40.10.7.1.4 The Connecting Transmission Owner or ISO, as applicable, may commence the bus flow analysis during the Phase 1 Study and must complete the analysis and the Connecting Transmission Owner must identify any required solutions no later than sixty (60) Calendar Days after the Phase 2 Study Start Date. The Connecting Transmission Owner or ISO, as applicable, may commence the individual breaker analysis during the Phase 1 Study and must complete the analysis and the ISO must identify any required solutions no later than sixty (60) Calendar Days after the Phase 2 Study Start Date. Within this time period, the Connecting Transmission Owner or ISO performing the analysis must provide the other entity (*i.e.*, the ISO or Connecting Transmission Owner) a period of at least ten (10) Business Days to review and provide comments on the draft results of the analysis.

#### 40.10.7.2 Cost Recovery

To the extent the ISO, Connecting Transmission Owner(s), and Affected Transmission Owners commence study work for the Phase 2 Study during the Phase 1 Study period, Interconnection Customers shall be responsible for such study costs.

#### **40.10.8 Decision Period 2**

40.10.8.1 Decision Period 2 for the Cluster Study Process shall commence on the first Business Day after the ISO's Operating Committee's approval of the Phase 1 Cost Estimates Summary Report in accordance with Section 40.10.6.

40.10.8.2 Decision Period 2 shall be a ten (10) Business Day period.

40.10.8.3 A Cluster Study Project shall be included in the Phase 2 Study if, during Decision Period 2, the Interconnection Customer for the Cluster Study Project notifies the ISO of its election to proceed to the Phase 2 Study, and, as applicable:

- (i) satisfies the Readiness Deposit 2 requirements for its Cluster Study Project as determined in accordance with Section 40.10.8.4; *provided, however*, that a CRIS-Only Cluster Study Project is not required to provide Readiness Deposit 2 to proceed to the Phase 2 Study; and
- (ii) if Interconnection Customer submitted a Site Control Deposit with its Interconnection Request in lieu of demonstrating Site Control in accordance with Section 40.5.5.1.5.1, Interconnection Customer must satisfy the requirements in Section 40.5.5.4.

An Interconnection Customer may request conditional entry into the Phase 2 Study if the Interconnection Customer has a pending dispute pursuant to Section 40.24.5; *provided however*, that the Interconnection Customer must satisfy the above requirements in this Section 40.10.8.3. If the Interconnection Request for an Interconnection Customer that requests conditional entry is ultimately withdrawn from the Queue, its Readiness Deposit 2 will be refunded pursuant to Section 40.24.3.4.3.

40.10.8.4 The Readiness Deposit 2 for a Cluster Study Project is the greater of: (i) the Readiness Deposit 1 amount for the Cluster Study Project, and (ii) 20% of the cost estimate determined in the Phase 1 Study for any Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and Local System Upgrade Facilities for the Cluster Study Project.

40.10.8.4.1 To satisfy the Readiness Deposit 2 requirement for the Cluster Study Project, the Interconnection Customer must submit to the ISO during Decision Period 2 in accordance with the requirements in Section 40.2.4.2 the incremental difference, if any, between the Readiness Deposit 1 amount that it previously submitted for the project and the Readiness Deposit 2 amount for the project calculated pursuant to this Section

40.10.8.4. If the Readiness Deposit 1 amount for the project is the same as the Readiness Deposit 2 amount calculated pursuant to this Section 40.10.8.4, Interconnection Customer is not required to take any action during Decision Period 2 to satisfy the Readiness Deposit 2 requirement.

40.10.8.4.2 The Readiness Deposit 1 amount for the Cluster Study Project and the incremental difference for the project, if any, submitted by the Interconnection Customer pursuant to this Section 40.10.8.4 shall, in total, constitute the Readiness Deposit 2 for the Cluster Study Project and replace the Readiness Deposit 1 for the project.

#### **40.10.9 Withdrawal and Withdrawal Penalties**

40.10.9.1 If an Interconnection Customer does not satisfy the requirements in Section 40.10.8.3 for the Cluster Study Project to proceed to the Phase 2 Study, then the ISO shall

withdraw the Interconnection Request or CRIS-Only Request for the Cluster Study Project from the ISO's Queue pursuant to the Withdrawal requirements in Section 40.6.4.

40.10.9.2 If an Interconnection Customer withdraws the Interconnection Request or CRIS-Only Request for a Cluster Study Project, or the Interconnection Request or CRIS-Only Request for the Cluster Study Project is deemed withdrawn by the ISO, from the ISO's Queue during the Phase 1 Study or at Decision Period 2, the Interconnection Customer for the Cluster Study Project shall pay a Withdrawal Penalty in an amount equal to fifty percent (50%) of its initial Study Deposit and ten percent (10%) of its Readiness Deposit 1 for the project; except for the following:

- (i) a CRIS-Only Cluster Study Project shall only pay a Withdrawal Penalty in the amount of fifty percent (50%) of its initial Study Deposit amount;

- (ii) if the ISO determined that the Cluster Study Project cannot move forward due to Physical Infeasibility pursuant to Section 40.7.3, then the Cluster Study Project shall not be assessed a Withdrawal Penalty; and

- (iii) if the Interconnection Request or CRIS-Only Request was for a Contingent Project that was withdrawn by the ISO pursuant to Section 40.5.4.1.3, then the Interconnection Request or CRIS-Only Request shall not be assessed a Withdrawal Penalty.

40.10.9.3 The ISO shall invoice, and Interconnection Customer shall pay, for any Withdrawal Penalty as set forth in Section 40.24.3.

40.10.9.4 The ISO shall apply the collected Withdrawal Penalty Funds pursuant to Section 40.6.5.

## **40.11 Phase 2 Study**

### **40.11.1 Phase 2 Study Process Start Date and Duration**

40.11.1.1 The Phase 2 Study process for the Cluster Study Process shall commence on the first Business Day after the end date of Decision Period 2.

40.11.1.2 The duration of the Phase 2 Study process shall be set forth in Section 40.9.2.

40.11.1.3 The Phase 2 Study process period shall conclude with the ISO's Operating Committee's approval of the Cluster Study Report.

### **40.11.2 Phase 2 Study - Scope and Procedures of Energy Resource Interconnection**

#### **Services Analysis**

40.11.2.1 For the Phase 2 Study, for purposes of assessing the requested ERIS for the Cluster Study Projects on a concurrent basis, the ISO shall perform short-circuit/fault duty, steady state (thermal and voltage) and stability analyses using the CBA and CPA base cases to identify the System Upgrade Facilities and Distribution Upgrades required for the reliable interconnection of Facilities 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, to the extent such System Upgrade Facilities and Distribution Upgrades are not Physically Infeasible. The Connecting Transmission Owner and/or ISO, as applicable and in consultation with each other, shall complete within sixty (60) Calendar Days of the Phase 2 Study Start Date in accordance with the requirements in Section 40.10.7.1: (i) the bus flow analysis for the ISO's thermal analysis and the Connecting Transmission Owner's identification of any required solutions and (ii) the individual breaker analysis for the ISO's short-circuit analysis and the ISO's identification of any required solutions.

40.11.2.2 Within five (5) Business Days of the Phase 2 Study Start Date, the ISO will submit to the Connecting Transmission Owner and Affected Transmission Owner an updated Cluster Study Project List and an updated CPA short-circuit model. Upon the ISO's submission of these materials, the Connecting Transmission Owners and Affected Transmission Owners shall within one hundred seventy-five (175) Calendar Days: (i) provide draft updates to the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities identified in the Phase 1 Study for individual Cluster Study Projects and the related cost estimates if there are changes to this equipment and related costs resulting from another Cluster Study Project's withdrawal after the Phase 1 Study, and (ii) perform sensitivity analysis to account for the impacts of Cluster Study Projects withdrawing during the Phase 2 Study. The ISO shall establish a period of at least ten (10) Business Days for the Interconnection Customer, Affected Transmission Owner(s), and the ISO to review and provide comments on any updates to the Phase 1 Study results and for the ISO to review and provide comments on the sensitivity analysis. The Connecting Transmission Owners and Affected Transmission Owners shall review comments and issue finalized updates and sensitivities to the ISO no later than two hundred five (205) Calendar Days after the date the ISO provided it with the updated Cluster Study Project List and the updated CPA short-circuit base case pursuant to this Section

40.11.2.2.

40.11.2.3 The ISO shall also determine as set forth in Section 40.17 any electrical or functional headroom reimbursements from the current Cluster Study to prior Class Year Projects or Cluster Study Projects.

### **40.11.3 Phase 2 Study – Scope of Capacity Resource Interconnection Service Analysis**

40.11.3.1 For the Phase 2 Study, the ISO shall perform a Cluster Study Deliverability Study in accordance with Section 40.13 for the Cluster Study Projects requesting CRIS, including CRIS-Only Cluster Study Projects, on a concurrent basis to assess their reliable interconnection with the requested CRIS in compliance with the NYISO Deliverability Interconnection Standard. The ISO will: (i) assess the amount of requested CRIS that would be deliverable without System Deliverability Upgrades, if any; (ii) identify the System Deliverability Upgrades required to make the requested CRIS fully deliverable, to the extent not Physically Infeasible; and (iii) determine whether an Additional SDU Study for a new System Deliverability Upgrade is required. If a new Additional SDU Study is required as set forth in Section 40.14.1, the ISO shall perform such study in accordance with the requirements in Section 40.14.

### **40.11.4 Determination of Cost Estimates and Schedule for System Upgrade Facilities, Distribution Upgrades, and System Deliverability Upgrades Identified in Phase 2 Study**

40.11.4.1 Within sixty (60) Calendar Days of the Phase 2 Study Start Date, the ISO will submit to the Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator any System Upgrade Facilities, Distribution Upgrades, and System Deliverability Upgrades identified by the ISO in accordance with Sections 40.11.2 and 40.11.3 and their major electrical characteristics. Upon the ISO's submission of the identified upgrades, (i) the Connecting Transmission Owner identified by the ISO pursuant to Section 40.5.7.1.1 on which system a Cluster Study Project proposes to interconnect shall commence and perform a Phase 2 Study for that project as described in this Section 40.11.4, and (ii) any Affected

Transmission Owner or Affected System Operator identified by the ISO pursuant to Section 40.5.7.1.1 which system is impacted by the proposed interconnection of a Cluster Study Project shall commence and perform a separate Phase 2 Study for that project, unless the Affected Transmission Owner or Affected System Operator indicates that no study is required or agrees with the Connecting Transmission Owner to include its input with the Connecting Transmission Owner's Phase 2 Study report.

40.11.4.2 The applicable Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator shall determine a +30%/-15% estimate of the costs of the equipment, engineering and design work, procurement and construction work and commissioning of the required System Upgrade Facilities, Distribution Upgrades, and System Deliverability Upgrades described in Sections 40.11.2.1 and 4.11.3 that are identified by the ISO and, for each of these cost categories, shall specify and estimate the cost of the required work. The Transmission Owner will calculate cost estimates based on the assumption that the activities for which the cost estimates are calculated are performed by the Transmission Owner and shall be subject to reasonable exclusions (e.g., environmental, subsurface conditions, permitting, site acquisition costs). The categories of costs excluded from the estimate shall be identified in the Phase 2 Study report and the Standard Interconnection Agreement. The Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator shall also determine a preliminary schedule showing the estimated time required to complete the engineering and design, procurement, construction, installation and commissioning phases for the required System Upgrade Facilities, Distribution Upgrades, and System Deliverability Upgrades.

40.11.4.3 The Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator shall provide the ISO with a draft Phase 2 Study of the cost estimates and preliminary schedule for the upgrades identified by the ISO within one hundred fifty (150) Calendar Days after the date the ISO provided it with the identified upgrades in accordance with Section 40.11.4.1. The ISO shall establish a period of at least (10) Business Days for the Interconnection Customer, Affected Transmission Owner(s)/Affected System Owners, and the ISO to review and provide comments on the draft Phase 2 Study. The Connecting Transmission Owners and Affected Transmission Owners shall review comments and issue finalized Phase 2 Study to the ISO no later than one hundred eighty (180) Calendar Days after the date the ISO provided it with the identified upgrades in accordance with Section 40.11.4.1.

#### **40.11.5 Phase 2 Study – Additional Requirements**

40.11.5.1 The Phase 2 Study shall evaluate the use of static synchronous compensators, static VAR compensators, advanced power flow control devices, transmission switching, synchronous condensers, voltage source converters, advanced conductors, and tower lifting. The ISO shall evaluate each identified alternative transmission technology and determine whether the above technologies should be used, consistent with Good Utility Practice, Applicable Reliability Requirements, and Applicable Laws and Regulations. The ISO shall include an explanation of the results of the ISO's evaluation for each technology in the Cluster Study Report.

40.11.5.2 The Cluster Study Report will provide a list of the non-Local System Upgrade Facilities and System Deliverability Upgrades required as a result of the Interconnection Requests and CRIS-Only Requests within the Cluster and a non-binding good faith estimate of cost responsibility and a non-binding good faith estimated time to construct.

40.11.5.3 The ISO shall coordinate the Phase 2 Study with the Connecting Transmission Owner and Affected Transmission Owners, and with any other Affected System pursuant to Section 40.8. The ISO shall utilize existing studies to the extent practicable in performing the Phase 2 Study, including in performing the CBA, CPA, and Cluster Study Deliverability Study.

40.11.5.4 Upon request, the ISO, Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator shall provide each Cluster Study Project supporting documentation, workpapers, and databases or data developed in the preparation of the Phase 2 Study, subject to non-disclosure arrangements consistent with Section 40.24.1.

#### **40.11.6 Status of Class Year Projects, Small Generating Facility and Cluster Study Projects**

40.11.6.1 At the completion of the first calendar quarter following the ISO's tender of a Standard Interconnection Agreement, and at the conclusion of each subsequent calendar quarter, a Class Year Project, Cluster Study Project, or Small Generating Facility evaluated under Attachment Z, and their respective Connecting Transmission Owner and any Affected Transmission Owner(s), shall report on the progress of the milestones in the Project's Interconnection Agreement in a format consistent with, and include the content required by, applicable ISO Procedures.

#### **40.11.7 Stakeholder Review of the Cluster Study Report**

Following the ISO's receipt of the finalized Phase 2 Study reports from the Connecting Transmission Owners, Affected Transmission Owners, and Affected System Operators pursuant to Section 40.11.4, the ISO shall complete the draft Cluster Study Report, which shall include the results of the Cluster Baseline Assessment, Cluster Project Assessment and Cluster Study Deliverability Study components of the Phase 2 Study. For a Facility comprised of multiple

Generators, the Cluster Study Report will identify the allocation of the Cluster Study Project's requested CRIS among its multiple Generators, as applicable. The ISO will present the draft Cluster Study Report to the ISO Operating Committee's Transmission Planning Advisory Subcommittee and Interconnection Project Facilities Study Working Group, and the ISO will then present the draft Cluster Study Report to the ISO's Operating Committee for its approval. Upon the Operating Committee's approval, the Cluster Study Report will be final, subject to any revisions during the Final Decision Period.

#### **40.11.8 Re-Study**

If re-study of the Cluster Study and cost allocation report is required pursuant to Section 40.15.2 and Section 40.15.3, the ISO shall so notify Cluster Study Projects and conduct such re-study in accordance with the requirements of this Attachment HH. Any cost of re-study shall be borne by the Cluster Study Projects being re-studied.

## **40.12 Cluster Baseline Assessment and Cluster Project Assessment**

### **40.12.1 Cluster Baseline Assessment (CBA) for Cost Allocation Between Interconnection Customers and Connecting Transmission Owners**

The cost of System Upgrade Facilities is first allocated between Interconnection Customers and Connecting Transmission Owners in accordance with the rules that are discussed below in this Section 40.12.1. For purposes of this 40.12.1, the requirements applicable to Connecting Transmission Owner also apply to Affected Transmission Owner or Affected System Operator.

40.12.1.1 The cost of System Upgrade Facilities is allocated between Interconnection Customers and Connecting Transmission Owners based upon the results of a Cluster Baseline Assessment of the five-year need for System Upgrade Facilities. The Cluster Baseline Assessment, as described in these rules, will be conducted by the ISO in cooperation with Market Participants. No Market Participant will have decisional control over any determinative aspect of the Cluster Baseline Assessment. The ISO will have decisional control over the entire Cluster Baseline Assessment. If, at any time, the ISO decides that it needs specific expert services from entities such as Market Participants, consultants or engineering firms for it to conduct the Cluster Baseline Assessment, then the ISO will enter into appropriate contracts with such entities for such input. As it conducts each Cluster Baseline Assessment, the ISO will provide regularly scheduled status reports and working drafts, with supporting data, to the ISO Operating Committee to ensure that all affected Market Participants have an opportunity to contribute whatever information and input they believe might be helpful to the process. Each completed Cluster Baseline Assessment will be

reviewed and approved by the ISO Operating Committee as part of the Cluster Study Report in accordance with 40.11.7. Each Cluster Baseline Assessment is reviewable by the ISO Board of Directors in accordance with provisions of the Commission-approved ISO Agreement.

40.12.1.1.1 The purpose of the Cluster Baseline Assessment is to identify the System Upgrade Facilities that Transmission Owners are expected to need during the five-year period covered by the assessment to reliably meet the load growth and changes in the load pattern projected for the New York Control Area, with cost estimates for the System Upgrade Facilities.

#### **40.12.1.2 Procedure for Cluster Baseline Assessment**

The Cluster Baseline Assessment procedure used to identify the System Upgrade Facilities that will ensure that New York State Transmission System facilities are sufficient to reliably serve existing load and meet load growth and changes in load patterns in compliance with NYSRC Reliability Rules, NPCC Basic Design and Operating Criteria, NERC Planning Standards, ISO rules, practices and procedures, and the applicable Transmission Owner criteria included in FERC Form No. 715 (collectively “Applicable Reliability Requirements”). In order for the ISO to recognize any revisions to Transmission Owner criteria as Applicable Reliability Requirements under this Attachment HH, the Transmission Owner shall present proposed revisions to such criteria to the ISO Operating Committee or one of its subcommittees. To the extent such revised criteria are not inconsistent with Order No. 2003 or the ISO’s interconnection procedures set forth in this Attachment HH to the OATT, the ISO will accept such revised criteria. The procedure will use the Applicable Reliability Requirements in effect when the Cluster Baseline Assessment is commenced. The procedure will be:

40.12.1.2.1 The ISO will first develop the Existing System Representation.

40.12.1.2.2 The ISO will then utilize the Existing System Representation to develop existing system improvement plans with each Transmission Owner. These improvement plans will use ISO data from the annual NYISO Load and Capacity Data Report to project system load growth and changes in load patterns, including those that reflect demand side management, and will identify the System Upgrade Facilities needed year-by-year for the existing system to reliably serve projected load in the Transmission Owner's Transmission District for a five-year period. The ISO will integrate these existing system improvement plans into the Cluster Baseline Assessment to ensure that the System Upgrade Facilities needed for a five-year period are identified on a New York State Transmission System-wide basis. The Cluster Baseline Assessment will identify each anticipated System Upgrade Facility project, its estimated cost, its anticipated in-service date, and the status of the project (in construction, budget approval received, budget approval pending).

40.12.1.2.3 The ISO will identify in the Cluster Baseline Assessment the System Upgrade Facilities needed to reliably meet projected load growth and changes in load pattern without the interconnection of any proposed Cluster Study Projects, except for those proposed Projects included in the Existing System Representation pursuant to Section 40.10.3.

40.12.1.2.4 The ISO will perform thermal, voltage, and stability analyses, as appropriate, to determine the normal and emergency transfer capabilities of the statewide existing system.

40.12.1.2.5 The ISO will rely on the most recent resource reliability analysis of the existing system. If no Reliability Needs are required under the study assumptions used in the most recent resource reliability analysis, the existing system will be deemed to meet Applicable Reliability Requirements for purposes of the Cluster Study.

40.12.1.2.6 If the transmission and generation facilities included in the Existing System Representation, combined with previously approved and accepted System Upgrade Facilities, are insufficient to meet Applicable Reliability Requirements on a year by year basis, then the ISO will develop feasible generic solutions that satisfy the Applicable Reliability Requirements, in accordance with Section 40.12.1.3, below.

40.12.1.2.7 If the existing system meets Applicable Reliability Requirements, the ISO will perform short-circuit analysis to determine whether there is sufficient interrupting capability in the existing system. If there are any breaker overloads, the ISO will determine the System Upgrade Facilities needed to mitigate the short circuit overloads.

40.12.1.2.8 A reassessment of Sections 40.12.1.2.4 through 40.12.1.2.6 shall be reassessed and, to the extent required by Good Utility Practice, repeated if the improvement plan impacts the transmission transfer capability of the system. The results of the short-circuit analysis will be treated in the same manner as the results of thermal, voltage and stability analyses for all purposes under these cost allocation rules.

40.12.1.2.9 Each Cluster Baseline Assessment conducted by the ISO will be reviewed and approved by the ISO Operating Committee, and its effectiveness will be subject to the approval of the ISO Operating Committee. In its report to the ISO Operating Committee, the ISO shall explain its reasons for all of its recommendations.

40.12.1.2.10 Each most recently completed Cluster Baseline Assessment will be reviewed during the next Cluster Study Process by the ISO and updated, as necessary, following the criteria and procedures described herein.

40.12.1.3 In developing solutions as required by Section 40.12.1.3.6, the ISO will, as it develops its own generic solutions, also utilize the following procedures:

40.12.1.3.1 The ISO will first select as generic solutions proposed Cluster Study Projects sufficient to meet Applicable Reliability Requirements on a year by year basis. If a proposed Cluster Study Project is larger than necessary, the ISO shall select that portion or segment of the project that is sufficient to meet but not exceed Applicable Reliability Requirements. If the proposed Cluster Study Project is not capable of being segmented or if the Cluster Study Project cannot meet Applicable Reliability Requirements on a year by year basis, the ISO shall not select it.

40.12.1.3.2 If the generation and transmission facilities included in the Existing System Representation, together with any proposed Cluster Study Projects that qualify as solutions pursuant to Section 40.12.1.3.1, above, are not sufficient to meet Applicable Reliability Requirements, the ISO shall complete the development of its own generic solutions, taking into account any generic

solutions proposed pursuant to Section 40.12.1.3.3, below, for inclusion in the CBA.

40.12.1.3.3 Market Participants may also propose generic solutions for inclusion in the CBA. The Market Participant proposing such solutions shall provide the ISO with all data necessary for the ISO to determine the feasibility of such proposed generic solutions.

40.12.1.3.4 The ISO shall develop and consider alternative sets of proposed generic solutions that fairly represent the range of feasible solutions to Applicable Reliability Requirements.

40.12.1.3.5 The ISO shall determine the feasibility of additional generic solutions developed pursuant to Sections 40.12.1.3.2, 40.12.1.3.3, and 40.12.1.3.4, according to the following criteria:

40.12.1.3.5.1 The ISO shall select only solutions that are based on proven technologies that have actually been licensed and financed, are under construction or have already been built in similar locations.

40.12.1.3.5.2 The ISO shall select as additional generic solutions only facilities that can reasonably be placed in service in time to meet Applicable Reliability Requirements on a year by year basis. In making this determination, the ISO shall consider the size and type of facility, access to fuel, access to transmission facilities, transmission upgrade requirements, construction time, and Good Utility Practice.

40.12.1.3.6 The ISO will submit its proposed generic solutions and the alternatives that it considered to Market Participants and to an independent expert for review

and will make the results of the expert's review available to Market Participants.

The independent expert shall review the feasibility of the proposed generic solutions developed pursuant to Sections 40.12.1.3.2, 40.12.1.3.3, and 40.12.1.3.4, and of generic solutions based on the segmentation of any Cluster Study Project under Section 40.12.1.3.1, according to the criteria set forth in Section 40.12.1.3.5.

40.12.1.3.6.1 If the independent expert concludes that one or more generic solutions is not feasible, the ISO shall eliminate that solution from further review.

40.12.1.3.6.2 If the ISO does not adopt the expert's recommendations, it will state in its report to the ISO Operating Committee its reasons for not adopting those recommendations.

40.12.1.3.7 Subject to Section 4.12.1.3.7.1, below, in the event that more than one generic solution or set of solutions satisfies the feasibility requirement of Section 40.12.1.3.5 and 40.12.1.3.6, the ISO shall compare the System Upgrade Facilities that would be necessary to interconnect each such generic solution and shall adopt the solution that is most consistent with Good Utility Practice. For these purposes, in comparing alternative solutions, a generic solution that satisfies sub-load pocket deficiencies shall normally be selected first.

40.12.1.3.7.1 The ISO shall be responsible for determining whether any generic solution or proposed Cluster Study Project meets Applicable Reliability Requirements.

40.12.1.4 With the exception of those upgrades that were previously allocated to, and accepted by Cluster Study Projects as a part of the Cluster Project Assessment in the Final Decision Round of previous Class Years or Cluster Studies, Interconnection Customers are not responsible for the cost of any System Upgrade Facilities that are identified in the Cluster Baseline Assessment, or any System Upgrade Facilities that resolve in whole or in part a deficiency in the system identified in the Cluster Baseline Assessment.

40.12.1.5 Interconnection Customers are responsible for 100% of the cost of the System Upgrade Facilities that are not already identified in the Cluster Baseline Assessment and are required for their Projects to reliably interconnect to the transmission system in a manner that meets the NYISO Minimum Interconnection Standard. The System Upgrade Facilities necessary to accommodate Cluster Study Projects will be determined by the Phase 1 Study and the Cluster Project Assessment. The criteria and procedures that will be followed to conduct the Cluster Project Assessment are discussed in Section 40.12.2 below.

40.12.1.5.1 If a Connecting Transmission Owner, Affected Transmission Owner, Affected System Operator, or Interconnection Customer elects to construct System Upgrade Facilities that are larger or more extensive than the minimum facilities required to reliably interconnect the proposed Cluster Study Project, and are reasonably related to the interconnection of the proposed project, then the entity that make such election is responsible for the cost of those System Upgrade Facilities in excess of the minimum System Upgrade Facilities required by the Cluster Study Project. If there is Headroom associated with these larger System

Upgrade Facilities and an Interconnection Customer of any subsequent project interconnects and uses the Headroom within ten (10) years of its creation, such subsequent Interconnection Customer shall pay the Connecting Transmission Owner, Affected Transmission Owner, Affected System Operator, or the Interconnection Customer for this Headroom in accordance with these rules, including Section 40.17.

40.12.1.6 The System Upgrade Facilities cost for which an Interconnection Customer is responsible will be determined on a “net” basis; that is, the Interconnection Customer’s System Upgrade Facilities cost will be determined net of the benefits, or System Upgrade Facility cost reductions, that result from the construction and operation of its project and the related upgrades. The net cost responsibility of an Interconnection Customer will not be less than zero. Also, the cost responsibility of the Connecting Transmission Owner for System Upgrade Facilities will be no greater than it would have been without the Interconnection Customer’s project. Specifically, the Connecting Transmission Owner shall not be required to pay (in total) more than 100% of the cost of installing a specific piece of equipment.

40.12.1.6.1 The purpose of this approach is to allocate to the Interconnection Customer the responsibility for the cost of the net impact of its project on the needs of the New York State Transmission System for System Upgrade Facilities. Thus, an Interconnection Customer is responsible for the cost of the System Upgrade Facilities that are required by, or caused by, its project. An Interconnection Customer is not responsible for the cost of System Upgrade

Facilities that would be required anyway, without the construction of its project.

If an Interconnection Customer's project reduces the cost of System Upgrade

Facilities that would be required anyway, that beneficial cost reducing impact will be recognized.

40.12.1.6.2 The net System Upgrade Facilities cost and cost reduction benefits of an Interconnection Customer's project are determined by the ISO by comparing and netting the results of a Cluster Baseline Assessment with the corresponding Cluster Project Assessment in accordance with these rules.

40.12.1.6.3 The net System Upgrade Facilities cost and cost reduction benefits of an Interconnection Customer's project are comprised of those costs and cost reduction benefits caused by (1) the construction of System Upgrade Facilities not contained in the Cluster Baseline Assessment, and (2) eliminating or reducing the need for the construction of System Upgrade Facilities contained in the Cluster Baseline Assessment, due to the construction of System Upgrade Facilities associated with the proposed project.

40.12.1.6.4 The Interconnection Customer's net cost responsibility will be determined using constant dollars. That is, when netting the cost of System Upgrade Facilities required for its project, as identified in the Cluster Project Assessment, with those identified in the Cluster Baseline Assessment, the cost of System Upgrade Facilities in the out-years of the Cluster Baseline Assessment and the out-years of the Cluster Project Assessment will be discounted to a current year value for netting. The cost of out-year System Upgrade Facilities will be

discounted to a current value using the weighted average cost of capital of the Connecting Transmission Owner.

#### **40.12.2 Cluster Project Assessment (CPA) for Cost Allocation Among Interconnection Customers**

The Interconnection Customer's share of the cost of System Upgrade Facilities is allocated among Interconnection Customers based upon the ISO Cluster Project Assessment. The Cluster Project Assessment will be conducted by the ISO to ensure New York State Transmission System compliance with Applicable Reliability Requirements. The ISO will conduct the Cluster Project Assessment, as described in these rules, in cooperation with Market Participants. No Market Participant will have decisional control over any determinative aspect of the Cluster Project Assessment. The ISO will have decisional control over the entire Cluster Project Assessment. If, at any time, the ISO decides that it needs specific expert services from entities such as Market Participants, consultants or engineering firms for it to conduct the Cluster Project Assessment, then the ISO will enter into appropriate contracts with such entities for such input. As it conducts each Cluster Project Assessment, the ISO will provide regularly scheduled status reports and working drafts, with supporting data, to the Operating Committee to ensure that all affected Market Participants have an opportunity to contribute whatever information and input they believe might be helpful to the process. Each completed Cluster Project Assessment will be reviewed and approved by the Operating Committee as part of the Cluster Study Report in accordance with Section 40.11.7. Each Cluster Project Assessment is reviewable by the ISO Board of Directors in accordance with the provisions of the Commission-approved ISO Agreement.

40.12.2.1 The Cluster Project Assessment for each Cluster Study will identify the applicable Connecting Transmission Owner's Attachment Facilities, Distribution

Upgrades and System Upgrade Facilities (collectively, “interconnection facilities”) required for all Cluster Study Projects, with cost estimates, as applicable for the required interconnection facilities.

40.12.2.1.1 For System Upgrade Facilities identified in the Cluster Study, the NYISO, in consultation with the applicable Transmission Owner(s), shall calculate each Interconnection Customer’s share of the costs as follows:

(a) Local System Upgrade Facilities, including all switching stations, shall be allocated first per capita to interconnection facilities interconnecting to the substation at the same voltage level, and then per capita to each Facility sharing the interconnection facility. The System Upgrade Facilities identified through the Cluster Project Assessment will only be those System Upgrade Facilities that are not already included in a Cluster Baseline Assessment. If a Distribution Upgrade is identified in the Cluster Project Assessment, the ISO shall apply the same requirements applicable to System Upgrade Facilities in this Section 40.12.2 to the Distribution Upgrade.

40.12.2.1.2 The costs of any needed Connecting Transmission Owner’s Attachment Facilities and Distribution Upgrades identified in the Cluster Study Process will be directly assigned to Interconnection Customer(s) using such facilities. Where Interconnection Customers in the same Cluster Study agree to share Connecting Transmission Owner’s Attachment Facilities and Distribution Upgrades, the cost of such interconnection facilities shall be allocated based on the number of Facilities sharing use of such interconnection facilities on a per capita basis (*i.e.*,

on a per Facility basis), unless parties mutually agree to a different cost sharing arrangement.

40.12.2.2 For each Cluster Project Assessment, the ISO will utilize the Existing System Representation used for the corresponding Cluster Baseline Assessment.

40.12.2.3 In the case of a new non-Local System Upgrade Facility that has a functional capacity not readily measured in amperes or other discrete electrical units, such as a System Upgrade Facility dedicated to system protection, the *pro rata* impact of each project in the Cluster Study on the reliability of the transmission system will be based upon the number of Projects in the Cluster Study contributing to the need for the new System Upgrade Facility. The *pro rata* impact of each project in the Cluster Study needing such a new System Upgrade Facility will be equal. Accordingly, the *pro rata* contribution of each of the Projects to the need for the new System Upgrade Facility will be equal to  $(1/a)$ , where “a” is the total number of Projects in the Cluster needing the new System Upgrade Facility.

40.12.2.4 In the case of a new non-Local System Upgrade Facility that has a capacity readily measured in amperes or other discrete electrical units, the impact of each project in the Cluster Study will be stated in terms of its *pro rata* contribution to the total electrical impact on each individual System Upgrade Facility in the Cluster Study of all Projects that have at least a *de minimus* impact, as described in Section 40.12.2.5 of these rules. The contribution to electrical impact will be measured in various ways depending on the nature of the

transmission problem primarily causing the need for the individual System Upgrade Facility.

40.12.2.4.1 Contribution to short-circuit current for interrupting duty beyond the rating of equipment.

40.12.2.4.2 Contribution to MW loading on the critical element for thermal overloads under the test conditions that cause the need for a System Upgrade Facility. MW contribution will be calculated by multiplying the associated distribution factor by the declared maximum MW of the project. The distribution factor is calculated by *pro rata* displacement of New York System load by the added generation.

40.12.2.4.3 Contribution to voltage drop on the most critical bus for voltage problems. A critical bus will be defined as representative for voltage conditions during a specific contingency. The *pro rata* impact of each project is measured as the ratio of the voltage drop at the critical bus caused by the project when none of the other Projects are represented, to the voltage drop at the critical bus when all of the Projects in the Cluster Study are represented.

40.12.2.4.4 Contribution to transient stability problems as measured by the fault current calculated for the most critical stability test that is causing the need for the System Upgrade Facility.

40.12.2.5 For each individual electrical impact standard listed in subsections 40.12.2.5.1.1 through 40.12.2.5.1.4 below, an Interconnection Customer will not be responsible for the cost associated with a corresponding System Upgrade Facility if its project's contribution is less than the *de minimus* impacts defined below. The costs of Projects that would otherwise have been allocated to certain

Interconnection Customers' Projects but for the sub-*de minimus* impact exemption, shall be allocated 100 % to the other Interconnection Customers in the Cluster Study according to their *pro rata* contribution.

40.12.2.5.1 *De minimus* impact is defined in terms of any one of the factors listed below in this subsection. Examples of computations used to determine *de minimus* impact are shown in ISO Procedures.

40.12.2.5.1.1 **Short Circuit Contribution:** Equal to or greater than 100 amperes of the existing rating of the equipment that needs to be replaced.

40.12.2.5.1.2 **Thermal Loadings:** Equal to or greater than 10 MW on the most limiting monitored element under the most critical contingency that is causing the need for transmission improvements.

40.12.2.5.1.3 **Voltage Effects:** Equal to or greater than 2% of the voltage drop occurring with all Cluster Study Projects at the most critical bus.

40.12.2.5.1.4 **Stability Effects:** Equal to or greater than 100 amperes of the fault current for the most critical stability test that is causing the need for the System Upgrade Facility.

40.12.2.6 The *pro rata* contribution of each project in the Cluster Study to each of the System Upgrade Facilities identified in the Cluster Project Assessment shall be determined as follows.

40.12.2.6.1 First, in accordance with Section 40.12.1.6 of these rules, the total cost of System Upgrade Facilities identified in the Cluster Project Assessment is compared and netted with the total cost of System Upgrade Facilities identified in the Cluster Baseline Assessment. If the total cost of System Upgrade Facilities

identified in the Cluster Project Assessment does not exceed the total cost of System Upgrade Facilities identified in the Cluster Baseline Assessment, then there is no cost to be allocated among Cluster Study Projects.

40.12.2.6.2 If the total cost of System Upgrade Facilities identified in the Cluster Project Assessment does exceed the total cost of System Upgrade Facilities identified in the Cluster Baseline Assessment by some amount, then this amount (“Overage Cost”) is a cost to be allocated among Cluster Study Projects.

Appendix 9 to this Attachment HH sets out an example of an allocation of Overage Cost among Cluster Study Projects.

40.12.2.6.3 The Overage Cost represents a percentage of the total cost of System Upgrade Facilities identified in the Cluster Project Assessment (“Overage Cost Percentage”).

40.12.2.6.4 Each System Upgrade Facility identified in the Cluster Project Assessment has a cost specified for it in the Cluster Project Assessment.

40.12.2.6.5 The *pro rata* contribution of each project in the Cluster Study to a System Upgrade Facility identified in the Cluster Project Assessment represents a percentage contribution to the need for that System Upgrade Facility (“Contribution Percentage”).

40.12.2.6.6 An individual Cluster Study Project’s *pro rata* responsibility for the cost of each System Upgrade Facility identified in the Cluster Project Assessment is the product of (a) the Overage Cost Percentage; (b) the Cluster Study Project’s Contribution Percentage for the particular System Upgrade Facility; and (c) the

cost of the particular System Upgrade Facility as specified in the Cluster Project Assessment.

40.12.2.6.7 If the least cost solution identified is to install one System Upgrade Facility (*e.g.*, a series reactor) rather than replacing a number of System Upgrade Facilities (*e.g.*, breakers), the ISO staff will determine each Cluster Study Project's Contribution Percentage by calculating what each Cluster Study Project's *pro rata* contribution would have been on the System Upgrade Facilities not replaced (*e.g.*, breakers) and applying that percentage to the System Upgrade Facility that is installed (*e.g.*, series reactor).

#### **40.15 Final Decision Period / Additional SDU Study Decision Period**

##### **40.15.1 ISO Provision of Description and Project Cost Allocation of Connecting Transmission Owner's Attachment Facilities, System Upgrade Facilities, and System Deliverability Upgrades**

The ISO shall provide the Interconnection Customer of each Cluster Study Project with a dollar figure for its share of the cost of the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities required for the reliable interconnection of the Project to the New York State Transmission System ("CTOAF and SUF Project Cost Allocation"). The ISO shall also provide the Interconnection Customer of each Cluster Study Project requesting CRIS with (i) a dollar figure for its share of the cost of the System Deliverability Upgrades required for the megawatt level of CRIS requested for the Cluster Study Project ("SDU Project Cost Allocation"), and (ii) the number of megawatts of Installed Capacity, if any, that are deliverable from the Cluster Study Project with no new System Deliverability Upgrades ("Deliverable MW"). The ISO shall also provide a dollar figure for the total cost of the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades required for interconnection of the Cluster Study Project, as well as a description of the required Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades, their expected in-service date, and a plan for their installation that is sufficient to verify these dollar figures. The ISO shall also provide a dollar figure for the total cost of all Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities required by Projects in the Cluster Study and a dollar figure for the total cost of the System Deliverability Upgrades necessary to support the level of CRIS requested by each Cluster Study Project. Each Cluster Study Project will be

given the Project Cost Allocation(s) and, Deliverable MW, if any associated with its Interconnection Service evaluation election, as soon as practicable prior to the submittal of the Cluster Study Report with the Cluster Project Assessment and Cluster Study Deliverability Study to the ISO Operating Committee.

#### **40.15.2 Decision Rounds in the Final Decision Period for the Cluster Study and the Additional SDU Study Decision Period for the Additional SDU Study**

40.15.2.1 Each Interconnection Customer shall provide notice to the ISO, in writing and via electronic mail, stating whether it shall accept (an “Acceptance Notice”) or not accept (a “Non-Acceptance Notice”) the Project Cost Allocation(s) and Deliverable MW, if any, reported to it by the ISO for its Cluster Study Project:

(i) within thirty (30) Calendar Days – the Initial Decision Round – following, as applicable, (1) approval of the final Cluster Study Report with the Cluster Project Assessment and Cluster Study Deliverability Study by the ISO Operating Committee in accordance with Section 40.11.7; or (2) approval of the final Additional SDU Study report by the ISO Operating Committee in accordance with Section 40.14.2.3, or

(ii) if applicable, within seven (7) Calendar Days – the Subsequent Decision Round – following the ISO’s issuance of a revised Cluster Study report or a revised Additional SDU Study report, as applicable, and accompanying Revised Project Cost Allocation and revised Deliverable MW report, as defined in and pursuant to Section 40.15.3.

40.15.2.2 An Interconnection Customer for a Cluster Study Project that is a multi-unit facility may not submit separate notices for separate portions of the Cluster Study Project (e.g. a Cluster Study Project that is a Co-located Storage Resource may not submit an Acceptance Notice for one of its resources and a Non-Acceptance Notice for the co-located resource).

40.15.2.3 Failure to notify the ISO by the prescribed deadline as to whether an Interconnection Customer accepts or rejects its Project Cost Allocation and Deliverable MW, if any, will be deemed a Non-Acceptance Notice. Each Interconnection Customer may respond with either an Acceptance Notice or a Non-Acceptance Notice to each Project Cost Allocation and Deliverable MW reported to it by the ISO. An Acceptance Notice for Projects not yet in-service must also include a confirmed Initial Backfeed Date and Commercial Operation Date, subject to the limitations set forth in Section 40.6.3.4.

40.15.2.4 An Interconnection Customer that requests to be evaluated for CRIS may accept both its SDU Project Cost Allocation and its CTOAF and SUF Project Cost Allocation. Alternatively, that Interconnection Customer, if it accepts its CTOAF and SUF Project Cost Allocation, may provide a Non-Acceptance Notice for its SDU Project Cost Allocation and at the same time accept, or not accept its Deliverable MW. Or, as another alternative, that same Interconnection Customer may elect to interconnect taking ERIS by providing an Acceptance Notice only for its CTOAF and SUF Project Cost Allocation.

40.15.2.5 An Interconnection Customer that accepts a CTOAF and SUF Project Cost Allocation and/or an SDU Project Cost Allocation will not be provided with the option to accept a Revised Project Cost Allocation following a Subsequent Decision Round unless the Revised Project Cost Allocation provides for (1) an increase of greater than ten percent (10%) in the CTOAF and SUF Project Cost Allocation or the SDU Project Cost Allocation, measured against the last Project Cost Allocation accepted by the Interconnection Customer; or (2) a decrease in the Interconnection Customer's Deliverable MW.

40.15.2.6 If the ISO commences an Additional SDU Study Decision Period separate from the Final Decision Period in accordance with Section 40.14.2, an Interconnection Customer

in the Additional SDU Study must, in the Initial Decision Round or Subsequent Decision Round(s) of the Final Decision Period for the Cluster Study in which the Additional SDU Study was triggered: (1) accept its CTOAF and SUF Project Cost Allocation and proceed with its Additional SDU Study; or (2) reject its CTOAF and SUF Project Cost Allocation and be withdrawn from both the Cluster Study and the Additional SDU Study.

40.15.2.7 As soon as practicable following the end of the Initial Decision Round and any Subsequent Decision Round, as applicable, but not later than two (2) Business Days following the end of such decision round, the ISO shall report to the ISO Operating Committee, all of the Acceptance Notices and Non-Acceptance Notices that were received during that decision round. For any Project that fails to provide a confirmed Initial Backfeed Date and Commercial Operation Date in its Acceptance Notice or that provides a proposed Initial Backfeed Date or Commercial Operation Date with its Acceptance Notice that is beyond the time period permissible by Section 40.6.3.4, the ISO's Queue will reflect the latest possible permissible date, even if that requires the ISO to reject and modify the proposed Initial Backfeed Date or Commercial Operation Date provided in the Cluster Study Project's Acceptance Notice. Subsequent modifications to a Project's Initial Backfeed Date or Commercial Operation Date are governed by Section 40.6.3.4.

40.15.2.8 If, following the Initial Decision Round or any Subsequent Decision Round, each and every Interconnection Customer that remains eligible at that time provides Acceptance Notice(s), each Interconnection Customer must signify its willingness to pay the Connecting Transmission Owner and Affected Transmission Owner(s) for its share of the required Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades that it accepted by (i) satisfying

Headroom payment/security posting obligations, if any, as specified in Section 40.17.1.5 and (ii) paying cash or posting Security in accordance with these rules, for the full amount of its respective Project Cost Allocation within five (5) Business Days after the end of the Initial Decision Round or Subsequent Decision Round, as applicable. Security shall be posted to cover the period ending on the date on which full payment is made to the Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator, as applicable for the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities, and the date(s) on which full payment is made to the Connecting Transmission Owner or Affected Transmission Owner(s) for the System Deliverability Upgrades; *provided, however*, that Security may be posted with a term as short as one year, so long as such Security is replaced no later than fifteen (15) Business Days before its stated expiration. In the event Security is not replaced as required in the preceding sentence, the Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator, shall be entitled to draw upon the Security and convert it to cash, which cash shall be held by the Connecting Transmission Owner or Affected Transmission Owner for the account of the Interconnection Customer. The round of the Final Decision Period or Additional SDU Study Decision Period, as applicable, in which no remaining eligible Interconnection Customers issue a Non-Acceptance Notice or commits a Security Posting Default shall be the final round for that Cluster Study or Additional SDU Study (the "Final Decision Round").

40.15.2.9 At the end of the Initial Decision Round or any Subsequent Decision Round, if one or more of the Interconnection Customers with Cluster Study Projects participating in that decision period provides Non-Acceptance Notice (such event a "Non-Acceptance Event"), then the Interconnection Customer of every Cluster Study Project participating in that

round shall be relieved of its obligation to pay cash or post Security in connection with that version of its Project Cost Allocation for Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades. In addition, following the Initial Decision Round or any Subsequent Decision Round, if all Interconnection Customers for Cluster Study Projects participating in the round provide Acceptance Notices under the Cluster Study Deliverability Study, the CPA or both, but one or more of the Interconnection Customer fails to pay cash or post the Security required hereunder (such event a "Security Posting Default"), then the beneficiaries of the payments and Security posted by the Interconnection Customers that did pay or post Security (*e.g.*, the Connecting Transmission Owners and Affected Transmission Owners) shall surrender the cash and posted Security to the respective Interconnection Customers immediately. The Connecting Transmission Owners or Affected Transmission Owner(s) shall not make any draws or encumbrances on any cash or posted Security unless and until cash has been paid and Security has been posted by all Interconnection Customers that issued Acceptance Notices in the Final Decision Round.

40.15.2.10 Following the Initial Decision Round, or any Subsequent Decision Round, if a Non-Acceptance Event or a Security Posting Default shall have occurred with respect to the CPA, the ISO will withdraw the Interconnection Customer that provided the Non-Acceptance Notice or committed the Security Posting Default with respect to the CTOAF and SUF Project Cost Allocation from the Cluster Study and the Queue pursuant to Section 40.6.4 and subject to the Withdrawal Penalties set forth in Section 40.6.5. If an Interconnection Customer provides an Acceptance Notice and posts the required Security for the CTOAF and SUF Project Cost Allocation for its Cluster Study Project or has done so in a prior Class Year Interconnection

Facilities Study or Cluster Study, but provides a Non-Acceptance Notice with respect to the SDU Project Cost Allocation for its Cluster Study Project, it may provide an Acceptance Notice for its Deliverable MW and interconnect taking CRIS at that level. If the Interconnection Customer either (i) provides a Non-Acceptance Notice with respect to both the SDU Project Cost Allocation and Deliverable MW for its Cluster Study Project, or (ii) commits a Security Posting Default with respect to the SDU Project Cost Allocation for its Cluster Study Project, then the ISO shall remove the Cluster Study Project from the Cluster Study Deliverability Study or Additional SDU Study, as applicable, but, if in the Cluster Study, it may continue to participate in the CPA and interconnect taking ERIS if the Interconnection Customer provides an Acceptance Notice and posts the required Security for its CTOAF and SUF Project Cost Allocation. The Interconnection Customer electing to interconnect taking ERIS may later request, any number of times, to enter a Cluster Study or Expedited Deliverability Study and be evaluated for CRIS, subject to the Cluster Study entry requirements set forth in Section 40.5.4 and the Expedited Deliverability Study entry requirements set forth in Section 40.19.2 of this Attachment HH. The Interconnection Customer's Cluster Study Project may not request to be re-evaluated for ERIS. Once a Cluster Study Project is evaluated for CRIS in a later Cluster Study or Expedited Deliverability Study, the Interconnection Customer for that project may elect to accept either its SDU Project Cost Allocation or its Deliverable MW, or the Interconnection Customer may provide a Non-Acceptance Notice for both its SDU Project Cost Allocation and its Deliverable MW and continue its interconnection taking ERIS. If the Interconnection Customer does provide a Non-Acceptance Notice for both the SDU Project Cost Allocation and Deliverable MW for its Cluster Study Project and continues taking ERIS, the Interconnection Customer may later request for its Cluster Study Project to enter a Cluster Study or Expedited

Deliverability Study, subject to the Cluster Study entry requirements set forth in Section 40.5.4 and Expedited Deliverability Study entry requirements set forth in Section 40.19.2 of this Attachment HH, and be evaluated again for CRIS. If, however, an Interconnection Customer provides a Non-Acceptance Notice or commits a Security Posting Default for the CTOAF and SUF Project Cost Allocation for the Cluster Study Project, that Cluster Study Project shall be removed from both the CPA and, if applicable, the Cluster Study Deliverability Study, and the ISO shall withdraw that Interconnection Customer's Interconnection Request pursuant to Section 40.6.4 and subject to the Withdrawal Penalties set forth in Section 40.6.5.

40.15.2.11 Whenever Projects are removed from a Cluster Project Assessment, Cluster Study Deliverability Study, or Additional SDU Study, the ISO will notify the remaining Interconnection Customers still included in the Cluster Project Assessment, Cluster Study Deliverability Study, or Additional SDU Study, as applicable.

### **40.15.3 Revised Study Results**

Immediately following receipt of Non-Acceptance Notices for any SDU Project Cost Allocations or CTOAF and SUF Project Cost Allocations or Deliverable MW, or upon the occurrence of a Security Posting Default, the ISO shall update the Cluster Study results or Additional SDU Study results for those remaining Interconnection Customers that continue to be included in the then-current Cluster Project Assessment, Cluster Study Deliverability Study, or Additional SDU Study, as applicable, to reflect the impact of Non-Acceptance Notices and any Security Posting Default. The updated Cluster Study or Additional SDU Study, as applicable, shall include updated CTOAF and SUF Project Cost Allocations and updated SDU Project Cost Allocations (each a "Revised Project Cost Allocation") together with a revised Deliverable MW report. The updated Cluster Study shall be issued as soon as practicable, but in no event later

than fourteen (14) Calendar Days following the occurrence of the Non-Acceptance Event or the Security Posting Default that necessitated development of the Revised Project Cost Allocations and revised Deliverable MW report. The ISO shall also provide the additional dollar figures relating to total cost for Interconnection Customers in the Cluster Study or Additional SDU Study, as applicable, and the related information, described in Section 40.15.1, above. Following the issuance of the revised Cluster Project Assessment, Cluster Study Deliverability Study, or Additional SDU Study, as applicable, and the issuance of Revised Project Cost Allocations and the revised Deliverable MW, each remaining Interconnection Customer shall provide notice to the ISO within seven (7) Calendar Days whether it will accept its respective Revised Project Cost Allocation and revised Deliverable MW.

#### **40.15.4 Completion of Final Decision Period/Additional SDU Study Decision Period and Refund of Interconnection Customer's Deposits**

40.15.4.1 The process set forth in Sections 40.15.2 through 40.15.3 shall be repeated until none of the remaining eligible Interconnection Customers in the Cluster Study or Additional SDU Study, as applicable, provides a Non-Acceptance Notice or commits a Security Posting Default.

40.15.4.2 After the ISO's final reconciliation of the Interconnection Customer's costs incurred in the Cluster Study Process pursuant to Section 40.24.3 and Interconnection Customer's payment of all invoices, the ISO will proceed with the return and cancellation process in Section 40.24.3 for the Study Deposit and Readiness Deposit 2 if:

(i) an Interconnection Customer for a Cluster Study Project accepts its CTOAF and SUF Project Cost Allocation and pays cash or posts Security for that allocated amount in the Final Decision Round of the Final Decision Period; or

(ii) an Interconnection Customer for a CRIS-Only Cluster Study Project: (A) accepts its SDU Project Cost Allocation or Deliverable MWs and pays cash or posts Security for any allocated amount in the Final Decision Round of, as applicable, the Final Decision Period or Additional SDU Study Decision Period, or (B) participated in an Additional SDU Study that was not completed in the Cluster Study Process pursuant to Section 40.14.2.

#### **40.15.5 Withdrawal Penalties**

40.15.5.1 If: (i) an Interconnection Customer withdraws the Interconnection Request or CRIS-Only Request for its Cluster Study Project, or the Interconnection Request or CRIS-Only Request for its Cluster Study Project is deemed withdrawn by the ISO, from the ISO's Queue during the Phase 2 Study, the Final Decision Period, the Additional SDU Study, or the Additional SDU Study Decision Period, except for a CRIS-Only Cluster Study Project that is withdrawn because the Additional SDU Study it participated in was not completed in the Cluster Study Process;

(ii) an Interconnection Customer does not accept the CTOAF and SUF Project Cost Allocation for its Cluster Study Project or does not pay cash or post Security for the allocated amount in the Final Decision Period; or

(iii) an Interconnection Customer does not accept the SDU Project Cost Allocation for its CRIS-Only Cluster Study Project or does not pay cash or post Security for the allocated amount in, as applicable, the Final Decision Period or Additional SDU Study Decision Period (except for an Additional SDU Study that is not completed during the Cluster Study Process),

then the Interconnection Customer for the Cluster Study Project shall pay a Withdrawal Payment in an amount equal to one hundred percent (100%) of the initial Study Deposit amount

for the project and twenty percent (20%) of the Readiness Deposit 2 for the project; except for the following:

(A) a CRIS-Only Cluster Study Project shall only pay a Withdrawal Penalty in the amount of one hundred percent (100%) of its initial Study Deposit amount;

(B) if the ISO determined that the Cluster Study Project cannot move forward due to Physical Infeasibility pursuant to Section 40.7.3, then the Cluster Study Project shall not be assessed a Withdrawal Penalty;

(C) if the Interconnection Request or CRIS-Only Request was for a Contingent Project that was withdrawn by the ISO pursuant to Section 40.5.4.1.3, then the Interconnection Request or CRIS-Only Request shall not be assessed a Withdrawal Penalty; and

(D) if the CTOAF and SUF Project Cost Allocation amount is greater than 50% higher than the amount determined in Phase 1 for the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities required for the Cluster Study Project, then the Cluster Study Project shall only pay a Withdrawal Penalty in the amount of one hundred percent (100%) of its initial Study Deposit amount and shall not pay a Withdrawal Penalty based on any of its Readiness Deposit 2.

40.15.5.2 The ISO shall invoice, and Interconnection Customer shall pay, for any Withdrawal Penalty as set forth in Section 40.24.3.

40.15.5.3 The ISO shall apply the collected Withdrawal Penalty Funds pursuant to Section 40.6.5.

## **40.16 Forfeiture of Security/ Future Cost Responsibility**

### **40.16.1 Forfeiture of Security**

40.16.1.1 With the exception of the requirement in Section 40.15.2.9 that cash and Security shall be surrendered back to the issuing Interconnection Customer in connection with another Interconnection Customer's Security Posting Default, once an Interconnection Customer has accepted a Project Cost Allocation(s) or Revised Project Cost Allocation(s) in the Final Decision Round of the Final Decision Period or Additional SDU Study Decision Period, as the case may be, and paid cash or posted Security for that amount, such cash payment and Security shall be irrevocable and shall be subject to forfeiture as provided herein in the event that the Interconnection Customer that paid cash or posted the Security subsequently terminates or abandons development of its Project. Any additional cash or Security subsequently provided by an Interconnection Customer in response to a Cost Estimate Update required for the extension of its project's Commercial Operation Date pursuant to Section 40.6.3.5.3 shall also be irrevocable and subject to the Security forfeiture requirements in this Section 40.16.1.

40.16.1.1.1 For a Project that: accepted a Project Cost Allocation(s) or Revised Project Cost Allocation(s) in the Final Decision Round of the Final Decision Period for a Class Year Study or Additional SDU Study Decision Period completed prior to May 2, 2024, any cash and Security previously posted on a terminated Project will be subject to forfeiture to the extent necessary to defray the cost of the System Upgrade Facilities and System Deliverability Upgrades required for the Projects included in the Annual Transmission Reliability Assessment, Class Year Deliverability Study, or Additional SDU Study, as applicable, but only as described in Section 40.16 and its applicable subsections of this Attachment HH. If a Project's Security is subject to forfeiture to defray the costs of an affected upgrade pursuant to this Section

40.16.1.1.1 and the Security is not in a form that can be readily drawn on by the Connecting Transmission Owner or Affected Transmission Owner, as applicable, to defray the costs of the affected upgrade, Interconnection Customer shall negotiate in good faith with the Connecting Transmission Owner or Affected Transmission Owner, as applicable, to replace the Security with cash or an alternative form of security that can be readily drawn on by the Connecting Transmission Owner or Affected Transmission Owner, as applicable, up to the amount required to satisfy Interconnection Customer's Security obligations, including defraying the costs of the affected upgrade. Connecting Transmission Owner or Affected Transmission Owner, as applicable, shall only be responsible for using Interconnection Customer's Security to defray the costs of an affected upgrade to the extent the Interconnection Customer has provided cash or Security in a form that the Connecting Transmission Owner or Affected Transmission Owner, as applicable, can readily draw on to defray such costs. Any additional cash or Security subsequently provided by an Interconnection Customer in response to a Cost Estimate Update required for the extension of its project's Commercial Operation Date pursuant to Section 40.6.3.5.3.3 shall also be irrevocable and subject to the Security forfeiture requirements in this Section 40.16.1.

40.16.1.1.2 For Projects that accepted a Project Cost Allocation(s) or Revised Project Cost Allocation(s) in the Final Decision Round of the Final Decision Period for a Class Year Study, Cluster Study or Additional SDU Study Decision Period after May 2, 2024, any cash and Security previously posted on a terminated Project will be subject to forfeiture to the extent necessary to defray the cost of the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, System Deliverability Upgrades, or Network Upgrade Facilities required for other projects evaluated in a Class Year Study, Cluster Study

under this Attachment HH, or in a study performed under OATT Section 3.7, OATT Section 3.9, or Attachment P to the OATT, the base cases of which included the Interconnection Customer's Project and its associated Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades, as applicable, as determined by the ISO upon withdrawal of the Interconnection Customer's Project, but only as described in Section 40.16.3 below. If a Project's Security is subject to forfeiture to defray the costs of an affected upgrade pursuant to this Section 40.16.1.1.2 and the Security is not in a form that can be readily drawn on by the Connecting Transmission Owner or Affected Transmission Owner, as applicable, to defray the costs of the affected upgrade, Interconnection Customer shall negotiate in good faith with the Connecting Transmission Owner or Affected Transmission Owner, as applicable, to replace the Security with cash or an alternative form of security that can be readily drawn on by the Connecting Transmission Owner or Affected Transmission Owner, as applicable, up to the amount required to satisfy Interconnection Customer's Security obligations, including defraying the costs of the affected upgrade. Connecting Transmission Owner or Affected Transmission Owner, as applicable, shall only be responsible for using Interconnection Customer's Security to defray the costs of an affected upgrade to the extent the Interconnection Customer has provided cash or Security in a form that the Connecting Transmission Owner or Affected Transmission Owner, as applicable, can readily draw on to defray such costs. Any additional cash or Security subsequently provided by an Interconnection Customer in response to a Cost Estimate Update required for the extension of its project's Commercial Operation Date pursuant to Section 40.6.3.5.3.3 shall also be irrevocable and subject to the Security forfeiture requirements in this Section 40.16.1.1.2.

40.16.1.1.3 For Small Generating Facilities that (i) accepted its Small Generating Facility cost allocation for the System Upgrade Facilities identified in the facilities study report pursuant to Section 32.3.5.7.1 of Attachment Z to the ISO OATT, (ii) agreed as a condition for obtaining an extension of its Small Generating Facility's Commercial Operation Date pursuant to Section 40.6.3.5.3 for its cash or security provided to the Connecting Transmission Owner or Affected Transmission Owner, as applicable, for its System Upgrade Facilities to be subject to these forfeiture requirements; or (iii) accepted a Project Cost Allocation(s) or Revised Project Cost Allocation(s) in the Final Decision Round of the Final Decision Period for a Class Year Study, Cluster Study or Additional SDU Study Decision Period after May 2, 2024, any cash and Security previously posted on a terminated Project will be subject to forfeiture to the extent necessary to defray the cost of the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, System Deliverability Upgrades, or Network Upgrade Facilities required for other projects evaluated in a Class Year Study, Cluster Study under this Attachment HH, or in a study performed under OATT Section 3.7, OATT Section 3.9, or Attachment P to the OATT, the base cases of which included the Interconnection Customer's Project and its associated Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades, as applicable, as determined by the ISO upon withdrawal of the Interconnection Customer's Project, but only as described in Section 40.16.3 below. If a Project's Security is subject to forfeiture to defray the costs of an affected upgrade pursuant to this Section 40.16.1.1.3 and the Security is not in a form that can be readily drawn on by the Connecting Transmission Owner or Affected Transmission Owner, as applicable, to defray the costs of the affected upgrade, Interconnection Customer shall negotiate in good faith with the Connecting Transmission Owner or Affected Transmission

Owner, as applicable, to replace the Security with cash or an alternative form of security that can be readily drawn on by the Connecting Transmission Owner or Affected Transmission Owner, as applicable, up to the amount required to satisfy Interconnection Customer's Security obligations, including defraying the costs of the affected upgrade. Connecting Transmission Owner or Affected Transmission Owner, as applicable, shall only be responsible for using Interconnection Customer's Security to defray the costs of an affected upgrade to the extent the Interconnection Customer has provided cash or Security in a form that the Connecting Transmission Owner or Affected Transmission Owner, as applicable, can readily draw on to defray such costs. Any additional cash or Security subsequently provided by an Interconnection Customer in response to a Cost Estimate Update required for the extension of its project's Commercial Operation Date pursuant to Section 40.6.3.4 shall also be irrevocable and subject to the Security forfeiture requirements in this Section 40.16.1.1.2.

40.16.1.2 Security for Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades constructed by the Interconnection Customer (*i.e.*, facilities for which the Interconnection Customer elects the option to build or constructs with the agreement of the Connecting Transmission Owner or Affected Transmission Owner) shall be reduced after discrete portions of the facilities have been completed, such reductions to be based on cost estimates from the Cluster Study, subject to: (i) review by the Connecting Transmission Owner or Affected Transmission Owner with which Security is posted, (ii) transfer of ownership to the Connecting Transmission Owner or Affected Transmission Owner, as applicable of all subject property, free and clear of any liens, and (iii) transfer of title and any transferable equipment warranties reasonably

acceptable to the Connecting Transmission Owner or Affected Transmission Owner with which Security is posted.

40.16.1.3 For Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades constructed by the Connecting Transmission Owner or Affected Transmission Owner, Security shall be reduced after discrete portions of the facilities have been completed by the Transmission Owner and paid for by the Interconnection Customer, on a dollar-for-dollar basis for payments made to the Connecting Transmission Owner or Affected Transmission Owner pursuant to an E&P Agreement or Standard Interconnection Agreement, subject to the Connecting Transmission Owner's or Affected Transmission Owner's review and approval.

#### **40.16.2 No Interconnection Customer Responsibility for Future Upgrades**

Once an Interconnection Customer has posted Security for its share of the Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities required for its project, and paid cash or posted Security for its share of the System Deliverability Upgrades required for its project, then, except as provided in Section 40.16.3 of these rules, that Interconnection Customer has no further responsibility for the cost of additional Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades that may be required in the future.

40.16.2.1 The Interconnection Agreement will reflect the Interconnection Customer's responsibility for the cost of new Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities and System Deliverability Upgrades, as that responsibility has been determined in accordance with these rules.

40.16.2.2 The cost of those additional Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades needed for future interconnection projects will be shared between future Interconnection Customers and Transmission Owners, and allocated among future Interconnection Customers, in accordance with the rules.

#### **40.16.3 Interconnection Customer's Future Cost Responsibility**

Once an Interconnection Customer, (i) for a Class Year Project or Cluster Study Project, has accepted a Project Cost Allocation or Revised Project Cost Allocation, as the case may be, in the Final Decision Round of the Final Decision Period or Additional SDU Study Decision Period, as applicable, and paid cash or posted Security for that amount, (ii) for a Small Generating Facility, has accepted its cost allocation and paid cash or posted security pursuant to Section 32.3.5.7 of Attachment Z to the OATT, or (iii) has accepted revised costs estimates identified in a Cost Estimate Update and provided cash or posted Security in the revised amount in accordance with Section 40.6.3.5.3.3, then the accepted figure caps the Interconnection Customer's maximum potential responsibility for the cost of Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and System Deliverability Upgrades required for its Project, except as discussed below.

40.16.3.1 If: (i) the portion of the Highway System Deliverability Upgrades required to make the Interconnection Customer's generator, Class Year Transmission Project, or Cluster Study Transmission Project deliverable is less than 90% of the total size of the Highway System Deliverability Upgrade identified for the Interconnection Customer's Project, and (ii) Interconnection Customer elects to commit to pay for its proportionate share of the Highway System Deliverability

Upgrade by posting Security instead of paying cash, then the Interconnection Customer's allocated cost of the Highway System Deliverability Upgrade will be increased during the period of construction deferral by application of a construction inflation adjustment, as discussed in Section 40.13.12.2 of these rules. When deferred construction of the Highway System Deliverability Upgrade commences, the Interconnection Customer will be responsible for actual costs in excess of the secured amount only when the excess results from changes to the operating characteristics of the Interconnection Customer's Project. If the portion of the System Deliverability Upgrades for a Highway System Deliverability Upgrade required to make one or more generators or Class Year Transmission Projects, or Cluster Study Transmission Projects deliverable is ninety percent (90%) or more of the total size (measured in MW) of the System Deliverability Upgrades, construction is not deferred, and those Interconnection Customer will be responsible for actual costs in excess of the secured amount in accordance with the rules in Sections 40.16.3.2 and 40.16.3.4 of this Attachment HH.

40.16.3.2 If the actual cost of the Interconnection Customer's share of required Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, or System Deliverability Upgrades is less than the agreed-to and secured amount, the Interconnection Customer is responsible only for the actual cost figure.

40.16.3.3 If the actual cost of the Interconnection Customer's share of required Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades,

System Upgrade Facilities, or System Deliverability Upgrades would be greater than the agreed-to and secured amount because other Projects have been expanded, accelerated, otherwise modified, or terminated, including Transmission Projects evaluated pursuant to Attachment P to the ISO OATT and their required upgrades, as identified pursuant to Attachment P to the ISO OATT, then the Interconnection Customer is responsible only for the agreed-to and secured amount for its Project. The additional cost is covered by the Interconnection Customers of the modified Projects, in accordance with these cost allocation rules, or by the drawing on the cash that has been paid and the Security that has been posted for terminated Projects, depending on the factors that caused the additional cost. Forfeitable cash and Security will be drawn on only as needed for this purpose, and only to the extent that the terminated Project associated with that Security has caused additional cost.

40.16.3.4 If the actual cost of the Interconnection Customer's share of required Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, or System Deliverability Upgrades is greater than the agreed-to and secured amount because of circumstances that are not within the control of the Connecting Transmission Owner or Affected Transmission Owner(s) (such as, for example: (i) changes to the design or operating characteristics of the Project that impact the scope or cost of related Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, or System Deliverability Upgrades; (ii) any costs that were not within the scope of the Class Year Study, Cluster Study, or Additional SDU

Study, as applicable, that subsequently become known as part of the final construction design, including costs related to detailed design studies such as electro-magnetic transient analyses and subsynchronous resonance analyses; or (iii) cost escalation of materials or labor, or changes in the commercial availability of physical components required for construction), the cost cap shall be adjusted by any such amount, and the Interconnection Customer or the Load Serving Entity will pay the additional costs to the Connecting Transmission Owner or Affected Transmission Owner(s) as such costs are incurred by each of them. However, to the extent that some or all of the excess cost is due to factors within the control of the Connecting Transmission Owner or the Affected Transmission Owner(s) (such as, for example, additional construction man-hours due to Connecting Transmission Owner or the Affected Transmission Owner(s) management, or correcting equipment scope deficiencies due to Connecting Transmission Owner or the Affected Transmission Owner(s) oversights), then that portion of the excess cost will be borne by the Connecting Transmission Owner or the Affected Transmission Owner(s). Disputes between the Interconnection Customer and the Connecting Transmission Owner or Affected Transmission Owner concerning costs in excess of the agreed-to and secured amount will be resolved by the parties in accordance with the terms and conditions of the applicable interconnection or construction agreement.

## **40.19 Expedited Deliverability Study Procedures**

### **40.19.1 Study Start Date**

After the completion of the initial Expedited Deliverability Study, each Expedited Deliverability Study will begin the first Business Day after thirty (30) Calendar Days following the completion of the prior Expedited Deliverability Study; *provided, however*, that an Expedited Deliverability Study may not commence during the period between the posting of, as applicable, the draft Class Year Study or Phase 2 Cluster Study report for Operating Committee approval and commencement of the next Phase 1 Study. If the first Business Day after thirty (30) Calendar Days following the completion of the prior Expedited Deliverability Study falls on a date within the above-described Class Year or Phase 2 Cluster Study decision and settlement period, the Expedited Deliverability Study will begin on the first Business Day after ten (10) Calendar Days following the Class Year Study Start Date or Cluster Study Process Start Date that immediately follows the above-described Class Year Study or Cluster Study Final Decision Period. The ISO will provide notice of the Expedited Deliverability Study start date by (1) sending notice of the start date to those registered through the ISO to be on the distribution lists for the NYISO Operating Committee and its subcommittees; and (2) posting notice of the Expedited Deliverability Study start date.

### **40.19.2 Study Entry Requirements and Schedule**

In order to become eligible to enter an Expedited Deliverability Study, an Interconnection Customer must (1) elect to enter the Expedited Deliverability Study by providing notice to the ISO by the Expedited Deliverability Study start date; (2) must have satisfied the data submission requirements set forth in Section 23.4.5.7.3.6 of the ISO Services Tariff required for Cluster Study Projects requesting CRIS in a Mitigated Capacity Zone and have such data submission deemed complete by the ISO by the Expedited Deliverability Study start date; and (3) must be in

service or have completed one of the following, as applicable: a Class Year Study or Cluster Study for ERIS, a completed facilities study for Small Generating Facilities processed under the Small Generator Interconnection Procedures pursuant to Section 40.3.1, or a utility interconnection study if the facility is not subject to the ISO interconnection procedures under Attachment HH. As set forth in Section 40.13.1, a Project may not be evaluated in both the Cluster Study Process and an Expedited Deliverability Study simultaneously (i.e., an Interconnection Customer with CRIS being evaluated in a Cluster Study Process may not enter an Expedited Deliverability Study for evaluation of the same CRIS request until the Cluster Study has completed, and an Interconnection Customer with CRIS being evaluated in an Expedited Deliverability Study may not enter a Cluster Study Process for evaluation of the same CRIS request until the Expedited Deliverability Study has completed).

A Project that satisfies the eligibility requirements for an Expedited Deliverability Study will become a member of the Expedited Deliverability Study if it satisfies the requirements of Section 40.19.3 of this Attachment HH as it relates to completion of an Expedited Deliverability Study Agreement, submission of the required deposit, and submission of required technical data.

All parties engaged in performing study work as part of the Expedited Deliverability Study are required to use Reasonable Efforts to complete the basic required evaluations in order for the Expedited Deliverability Study to be presented to the NYISO Operating Committee for approval within four (4) months from the date that the ISO confirms receipt of all of the following for all members of the Expedited Deliverability Study: (1) the executed Expedited Deliverability Study Agreement; (2) the \$30,000 Expedited Deliverability Study deposit required by Section 40.19.3 of this Attachment HH; and (3) the technical data required by Section 40.19.3 of this Attachment HH.

### **40.19.3                    Expedited Deliverability Study Agreement and Invoicing of Study Costs**

40.19.3.1 As soon as practicable after an Interconnection Customer has notified the ISO of its request to enter the next Expedited Deliverability Study, the ISO shall tender an Expedited Deliverability Study Agreement in the form of Appendix 8 to this Attachment HH. When the ISO tenders an Expedited Deliverability Study Agreement to an Interconnection Customer, the ISO shall, at the same time, also provide one to the applicable Connecting Transmission Owner. The Expedited Deliverability Study Agreement shall provide that the Interconnection Customer shall compensate the ISO for the actual cost of the Expedited Deliverability Study. When the ISO tenders the Expedited Deliverability Study Agreement to the requesting Interconnection Customer, the ISO shall provide to the Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Expedited Deliverability Study.

40.19.3.2 Within ten (10) Business Days after the ISO tenders the Expedited Deliverability Study Agreement, the Interconnection Customer shall complete the Expedited Deliverability Study Agreement and deliver the completed agreement to the ISO. Interconnection Customer shall indicate, in the data form attached to the Expedited Deliverability Study Agreement, the MW level of requested CRIS up to the levels permitted by Section 40.5.6.5 of this Attachment HH. Interconnection Customer shall, with the completed Expedited Deliverability Study Agreement, deliver to the ISO (1) the required technical data and (2) a study deposit of \$30,000 in accordance with the requirements in Section 40.2.4 of this Attachment HH.

40.19.3.3 The Interconnection Customer, ISO and Connecting Transmission Owner shall execute the Expedited Deliverability Study Agreement no later than ten (10) Calendar Days after the ISO confirms receipt of the completed Expedited Deliverability Study Agreement, the

required technical data, and the required deposit from the Interconnection Customer. The ISO shall provide a copy of the fully executed Expedited Deliverability Study Agreement to the Interconnection Customer and Connecting Transmission Owner.

40.19.3.4 The ISO shall invoice the Interconnection Customer in accordance with the requirements in Section 40.24.3 of this Attachment HH.

#### **40.19.4 No Prioritization of Projects in an Expedited Deliverability Study**

There will be no prioritization of the Projects grouped and studied together in an Expedited Deliverability Study. Each Project in an Expedited Deliverability Study will, with other Projects in the same Expedited Deliverability Study, share in the then currently available functional or electrical capability of the transmission system in accordance with the rules set forth herein. For purposes of this Section 40.19.4, the “then currently available functional or electrical capability of the transmission system” is the functional or electrical capability of the transmission system currently available in the applicable base case.

#### **40.19.5 Expedited Deliverability Study Procedures**

The ISO shall perform the Expedited Deliverability Study in accordance with the requirements for an Expedited Deliverability Study in Section 40.13 of this Attachment HH. The ISO shall coordinate the Expedited Deliverability Study and shall utilize existing studies to the extent practicable in performing the Expedited Deliverability Study. The ISO may request additional information from the Interconnection Customer and Connecting Transmission Owner as may reasonably become necessary consistent with Good Utility Practice during the course of the Expedited Deliverability Study. Upon request from the ISO for additional information required for or related to the Expedited Deliverability Study, the Interconnection Customer and Connecting Transmission Owner shall provide such additional information in a prompt manner.

Within ten (10) Business Days of providing a draft Expedited Deliverability Study report to an Interconnection Customer, the ISO, Connecting Transmission Owner, and Affected System Operator(s) shall meet with the Interconnection Customer to discuss the results of the Expedited Deliverability Study.

The ISO shall use Reasonable Efforts to complete the study and present the Expedited Deliverability Study report to the Operating Committee within the timeframe set forth in Section 40.19.2 of this Attachment HH; *provided, however*, an Expedited Deliverability Study report shall not proceed to the Operating Committee between Operating Committee approval of a Phase 2 Study and commencement of the next Phase 1 Study. An Expedited Deliverability Study may not proceed to the Operating Committee until after ten (10) Calendar Days following the completion of the Phase 2 Study. After Operating Committee approval of the Expedited Deliverability Study report, the Interconnection Customer will be subject to the decision process set forth in Section 40.19.6.

Before Operating Committee approval of the Expedited Deliverability Study, if the pending Cluster Study proceeds to the Final Decision Period and a Cluster Study Project accepts or rejects a Project Cost Allocation that the ISO determines may impact the deliverability of a Project in the Expedited Deliverability Study, the assumptions used in the Expedited Deliverability Study will be updated before the commencement of the next Phase 1 Study.

At the request of an Interconnection Customer subject to an Expedited Deliverability Study, or at any time the ISO determines that it will not meet the required timeframe for completing the Expedited Deliverability Study, the ISO shall notify the Interconnection Customer as to the schedule status of the Expedited Deliverability Study. If the ISO is unable to complete the Expedited Deliverability Study within the initial schedule, it shall notify the

Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required.

Upon request, the ISO shall provide the Interconnection Customer supporting documentation, workpapers, and databases or data developed in the preparation of the Expedited Deliverability Study, subject to non-disclosure arrangements consistent with Section 40.24.1.

#### **40.19.6 Expedited Deliverability Study Decision Process**

Within 5 Business Days following approval of the Expedited Deliverability Study by the Operating Committee (such 5 Business Day period to be referred to as the “Expedited Deliverability Study Initial Decision Period”), each Interconnection Customer in the Expedited Deliverability Study shall provide notice to the ISO, in writing via electronic mail, stating whether it shall accept (an “Expedited Deliverability Study Acceptance Notice”) or not accept (an “Expedited Deliverability Study Non-Acceptance Notice”) the Deliverable MW, if any, reported to it by the ISO in the Expedited Deliverability Study report. Failure to notify the ISO by the prescribed deadline as to whether an Interconnection Customer accepts or rejects its Deliverable MW, if any, will be deemed an Expedited Deliverability Study Non-Acceptance Notice. As soon as practicable following the end of the Expedited Deliverability Study Initial Decision Period, the ISO shall report to all Cluster Study Projects, in writing via electronic mail, all of the decisions submitted by Interconnection Customers in the Expedited Deliverability Study.

At the end of the Expedited Deliverability Study Initial Decision Period, if one or more of the Interconnection Customers provides an Expedited Deliverability Study Non-Acceptance Notice (such event an “Expedited Deliverability Study Non-Acceptance Event”), the Interconnection Customer that provided the Expedited Deliverability Study Non-Acceptance

Notice will be removed from the then current Expedited Deliverability Study and the ISO shall update the Expedited Deliverability Study results for those remaining Interconnection Customers in the Expedited Deliverability Study to reflect the impact of the Projects withdrawn from the Expedited Deliverability Study. The revised Expedited Deliverability Study report shall include updated Deliverable MW, if any, and shall be issued within 10 Business Days following the occurrence of an Expedited Deliverability Study Non-Acceptance Event. Each remaining Interconnection Customer shall be deemed to have accepted its respective Deliverable MW identified in the revised Expedited Deliverability Study report.

## **40.23 Fast Track Process**

### **40.23.1 Applicability**

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Generating Facility with a Connecting Transmission Owner's Distribution System if the Generating Facility's capacity does not exceed the size limits identified in the table below. Generating Facilities below these limits are eligible for review under the Fast Track Process. However, eligibility for the Fast Track Process is distinct from the Fast Track Process itself, and eligibility does not imply or indicate that a Generating Facility will pass the Fast Track Process screens in Section 40.23.2.1 below or the supplemental review screens in Section 40.23.4.4 below.

To the extent the Fast Track Request is withdrawn or deemed withdrawn by the ISO, the Interconnection Customer may submit an Interconnection Request in a Cluster Study Application Window.

Eligibility for the Fast Track Process is determined based upon the generator type, the size of the generator, voltage of the line and the location of and type of line at the Point of Interconnection. All Facilities connecting to lines greater than 69 kilovolt (kV) are ineligible for the Fast Track Process regardless of size. All synchronous and induction machines must be no larger than 2 MW to be eligible for the Fast Track Process, regardless of location. For certified inverter-based systems, the size limit varies according to the voltage of the line at the proposed Point of Interconnection. Certified inverter-based Facilities located within 2.5 electrical circuit miles of a substation and on a mainline (as defined in the table below) are eligible for the Fast Track Process under the higher thresholds according to the table below. In addition to the size threshold, the Interconnection Customer's proposed Generating Facility must meet the codes,

standards, and certification requirements of Appendices 10 and 11 of these procedures, or the ISO, in consultation with the Connecting Transmission Owner, has to have reviewed the design or tested the proposed Generating Facility and is satisfied that it is safe to operate.

Fast Track Eligibility for Inverter-Based Systems		
Line Voltage	Fast Track Eligibility Regardless of Location	Fast Track Eligibility on a Mainline <sup>1</sup> and $\leq 2.5$ Electrical Circuit Miles from Substation <sup>2</sup>
$< 5$ kV	$\leq 500$ kW	$\leq 500$ kW
$\geq 5$ kV and $< 15$ kV	$\leq 2$ MW	$\leq 3$ MW
$\geq 15$ kV and $< 30$ kV	$\leq 3$ MW	$\leq 4$ MW
$\geq 30$ kV and $\leq 69$ kV	$\leq 4$ MW	$\leq 5$ MW

<sup>1</sup> For purposes of this table, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

<sup>2</sup> An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a Pre-Application Report pursuant to Section 40.4.2.

#### **40.23.2 Initial Review**

Within 15 Business Days after the ISO notifies the Interconnection Customer it has received a complete Fast Track Request in the form set forth in Appendix 13 to this Attachment HH, the ISO, in consultation with the Connecting Transmission Owner, shall perform an initial review using the screens set forth below, shall notify the Interconnection Customer of the results, and include with the notification copies of the analysis and data underlying the determinations under the screens.

#### **40.23.2.1 Screens**

40.23.2.1.1 The proposed Generating Facility's Point of Interconnection must be on a portion of the Connecting Transmission Owner's Distribution System.

40.23.2.1.2 For interconnection of a proposed Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Generating Facility, on the circuit shall not exceed 15% of the line section annual peak load as most recently measured at the substation. A line section is that portion of a Connecting Transmission Owner's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

40.23.2.1.3 For interconnection of a proposed Generating Facility to the load side of spot network protectors, the proposed Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5% of a spot network's maximum load or 50 kW.<sup>1</sup>

<sup>1</sup> A spot network is a type of Distribution System found within modern commercial buildings to provide high reliability of service to a single customer. (Standard Handbook for Electrical Engineers, Donald Fink, McGraw Hill Book Company.)

40.23.2.1.4 The proposed Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

40.23.2.1.5 The proposed Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and

line reclosers), or Interconnection Customer equipment on the system to exceed 87.5% of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5% of the short circuit interrupting capability.

40.23.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Connecting Transmission Owner's electric power system due to a loss of ground during the operating time of any anti-islanding function.

<b>Primary Distribution Line Type</b>	<b>Type of Interconnection to Primary Distribution Line</b>	<b>Result/Criteria</b>
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

40.23.2.1.7 If the proposed Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Generating Facility, shall not exceed 20 kW.

40.23.2.1.8 If the proposed Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

40.23.2.1.9 The Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the

Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (*e.g.*, three or four transmission busses from the point of interconnection).

40.23.2.1.10 No construction of facilities by the Connecting Transmission Owner on its own system shall be required to accommodate the Generating Facility.

40.23.2.2 If the proposed interconnection passes the screens, the Fast Track Request shall be approved and the ISO will provide the Interconnection Customer and the Connecting Transmission Owner a draft interconnection agreement within five Business Days after the determination.

40.23.2.3 If the proposed interconnection fails the screens, but the ISO, in consultation with the Connecting Transmission Owner, determines that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the ISO shall provide the Interconnection Customer and the Connecting Transmission Owner a draft interconnection agreement within five Business Days after the determination. To the extent appropriate, the ISO shall notify any Affected System or Connecting Transmission Owner prior to the determination to allow for potential input by the Affected System or Connecting Transmission Owner. For purposes of this section, Affected System may include the portions of the New York State Transmission System that may be potentially affected.

40.23.2.4 If the proposed interconnection fails the screens, but the ISO, in consultation with the Connecting Transmission Owner, does not or cannot

determine from the initial review that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider Minor Modifications or further study, the ISO shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

#### **40.23.3 Customer Options Meeting**

If the ISO, in consultation with the Connecting Transmission Owner, determines the Fast Track Request cannot be approved without: (1) Minor Modifications at minimal cost, (2) a supplemental study or other additional studies or actions, or (3) incurring significant cost to address safety, reliability, or power quality problems, the ISO shall notify the Interconnection Customer of that determination within five Business Days after the determination and provide copies of all data and analyses underlying its conclusion. Within ten Business Days of the ISO's determination, the ISO shall offer to convene a customer options meeting with the Interconnection Customer and the Connecting Transmission Owner to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine, in consultation with the Connecting Transmission Owner, what further steps are needed to permit the Generating Facility to be connected safely and reliably. At the time of notification of the ISO's determination, or at the customer options meeting:

40.23.3.1 The Connecting Transmission Owner shall offer to perform facility modifications or Minor Modifications to the Connecting Transmission Owner's electric system (*e.g.*, changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Connecting Transmission Owner's electric system. If the Interconnection

Customer agrees to pay for the modifications to the Connecting Transmission Owner's electric system, the ISO will provide the Interconnection Customer and the Connecting Transmission Owner with a draft interconnection agreement within ten Business Days of the customer options meeting; or

40.23.3.2 The ISO shall offer to perform a supplemental review in accordance with Section 40.23.4 and provide a non-binding good faith estimate of the costs of such review.

#### **40.23.4 Supplemental Review**

40.23.4.1 To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing and submit a deposit – in accordance with the requirements in Section 40.2.4 – to the ISO for the estimated costs of the supplemental review in the amount of the good faith estimate of the costs of such review by the ISO, in consultation with the Connecting Transmission Owner, both within 15 Business Days of the offer. If the written agreement and deposit have not been received by the ISO within that timeframe, the Fast Track Request shall be withdrawn by the ISO.

40.23.4.2 The Interconnection Customer may specify the order in which the ISO, in consultation with the Connecting Transmission Owner, will complete the screens in Section 40.23.4.4.

40.23.4.3 The Interconnection Customer shall be responsible for the ISO's and the Connecting Transmission Owner's actual costs for the supplemental review conducted by the ISO in accordance with the requirements in Section 40.24.3 of this Attachment HH.

40.23.4.4 Within 30 Business Days following receipt of the deposit for a supplemental review, the ISO, in consultation with the Connecting Transmission Owner, shall: (1) perform a supplemental review using the screens set forth below; (2) notify in writing the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the ISO's and Connecting Transmission Owner's determination under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the ISO shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in Section 40.23.4.4.1, within two Business Days of making such determination to obtain the Interconnection Customer's permission to: (1) continue evaluating the proposed interconnection under this Section 40.23.4.4 or (2) terminate the supplemental review upon withdrawal of the Fast Track Request by the Interconnection Customer.

40.23.4.4.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed Generating Facility) are available, can be calculated, can be estimated from existing data, or can be determined from a power flow model, the aggregate generating facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed Generating Facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the ISO, in consultation with the

CTO, shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under Section 40.23.4.4.

40.23.4.4.1.1 The type of generation used by the proposed Generating Facility will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of this screen. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (*i.e.*, 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.

40.23.4.4.1.2 When this screen is being applied to a Generating Facility that serves some station service load, only the net injection into the Connecting Transmission Owner's electric system will be considered as part of the aggregate generation.

40.23.4.4.1.3 The ISO, in consultation with the Connecting Transmission Owner will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

40.23.4.4.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuations is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice

similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.

40.23.4.4.3 Safety and Reliability Screen: The location of the proposed Generating Facility and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Cluster Study Process. The ISO, in consultation with the Connecting Transmission Owner, shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

40.23.4.4.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (*e.g.*, several large commercial customers).

40.23.4.4.3.2 Whether the loading along the line section is uniform or even.

40.23.4.4.3.3 Whether the proposed Generating Facility is located in close proximity to the substation (*i.e.*, less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a mainline rated for normal and emergency ampacity.

40.23.4.4.3.4 Whether the proposed Generating Facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

40.23.4.4.3.5 Whether operational flexibility is reduced by the proposed Generating Facility, such that transfer of the line section(s) of the Generating Facility to a

neighboring distribution circuit/substation may trigger overloads or voltage issues.

40.23.4.4.3.6 Whether the proposed Generating Facility employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

40.23.4.5 If the proposed interconnection passes the supplemental screens in Sections 40.23.4.4.1, 40.23.4.4.2, and 40.23.4.4.3 above, the Fast Track Request shall be approved and the ISO will provide the Interconnection Customer and the Connecting Transmission Owner with an executable interconnection agreement with the timeframes established in Sections 40.23.4.5.1 and 40.23.4.5.2 below. If the proposed interconnection fails any of the supplemental review screens, the Fact Track Request shall be withdrawn by the ISO.

40.23.4.5.1 If the proposed interconnection passes the supplemental screens in Sections 40.23.4.4.1, 40.23.4.4.2, and 40.23.4.4.3 above and does not require construction of facilities by the Connecting Transmission Owner on its own system, the interconnection agreement shall be provided within ten Business Days after the notification of the supplemental review results.

40.23.4.5.2 If interconnection facilities or Minor Modifications to the Connecting Transmission Owner's system are required for the proposed interconnection to pass the supplemental screens in Sections 40.23.4.4.1, 40.23.4.4.2, and 40.23.4.4.3 above, and the Interconnection Customer agrees to pay for the modifications to the Connecting Transmission Owner's electric system, the interconnection agreement, along with a non-binding good faith estimate for the

interconnection facilities and/or Minor Modifications, shall be provided to the Interconnection Customer within 15 Business Days after receiving written notification of the supplemental review results.

40.23.4.5.3 If the proposed interconnection would require more than interconnection facilities or Minor Modifications to the Connecting Transmission Owner's system to pass the supplemental screens in Sections 40.23.4.4.1, 40.23.4.4.2, and 40.23.4.4.3 above, the ISO shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results, that the Fast Track Request shall be withdrawn by the ISO from the Queue.

## **40.24 Miscellaneous**

### **40.24.1 Confidentiality**

Certain information exchanged by the Parties during the administration of these Standard Interconnection Procedures shall constitute confidential information (“Confidential Information”) and shall be subject to this Section 40.24.1.

The following shall constitute Confidential Information: (1) any non-public information that is treated as confidential by the disclosing Party and which the disclosing Party identifies as Confidential Information in writing at the time, or promptly after the time, of disclosure; or (2) information designated as Confidential Information by the ISO Code of Conduct contained in Attachment F to the ISO OATT.

If requested by either Party receiving information, the Party supplying information shall provide in writing, the basis for asserting that the information referred to in this Section warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

#### **40.24.1.1 Scope**

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential;

(4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the Standard Interconnection Agreement; or (6) is required, in accordance with Section 40.24.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the Standard Interconnection Agreement. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party that it no longer is confidential.

#### **40.24.1.2 Release of Confidential Information**

No Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by FERC Standards of Conduct requirements), employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section 40.24.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section 40.24.1.

#### **40.24.1.3 Rights**

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to another Party. The disclosure by each Party to the other Parties of

Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### **40.24.1.4 No Warranties**

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

#### **40.24.1.5 Standard of Care**

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements, including the ISO OATT and ISO Services Tariff. The ISO shall, in all cases, treat the information it receives in accordance with the requirements of Attachment F to the ISO OATT.

#### **40.24.1.6 Order of Disclosure**

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of the Standard Interconnection Agreement. Notwithstanding the

absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

#### **40.24.1.7 Remedies**

The Parties agree that monetary damages would be inadequate to compensate a Party for another Party's breach of its obligations under this Section 40.24.1. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this Section 40.24.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this Section 40.24.1, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 40.24.1.

#### **40.24.1.8 Disclosure to FERC, its Staff, or a State**

Notwithstanding anything in this Section 40.24.1 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to these Standard Interconnection Procedures or the ISO OATT, the Party

shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Parties to the Standard Interconnection Agreement when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time either of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner consistent with applicable state rules or regulations. A Party shall not be liable for any losses, consequential or otherwise, resulting from that Party divulging Confidential Information pursuant to a FERC or state regulatory body request under this paragraph.

40.24.1.9      Subject to the exception in Section 40.24.1.8 of these Standard Interconnection Procedures, no Party shall disclose Confidential Information to any person not employed or retained by the Party possessing the Confidential Information, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the supplying Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under these Standard Interconnection Procedures, the ISO OATT or ISO Services Tariff.

Prior to any disclosures of a Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Parties in writing and agrees to assert confidentiality and cooperate with the other Parties in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

40.24.1.10 This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

40.24.1.11 The ISO and Connecting Transmission Owner shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

#### **40.24.2 Delegation of Responsibility**

The ISO may use the services of subcontractors as it deems appropriate to perform its obligations under these Standard Interconnection Procedures. The ISO shall remain primarily liable to the Interconnection Customer for the performance of such subcontractors and compliance with its obligations under these Standard Interconnection Procedures. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

### **40.24.3 Payments and Invoicing**

#### **40.24.3.1 Obligation to Pay Costs under Standard Interconnection Procedures**

40.24.3.1.1 The ISO shall charge and Interconnection Customer shall pay the actual costs of the study work of the Cluster Study Process incurred by the ISO and Transmission Owner under these Standard Interconnection Procedures, after the Interconnection Customer has submitted its Interconnection Request or CRIS-Only Request. In the event an Interconnection Customer withdraws its Interconnection Request or CRIS-Only Request, or its Interconnection Request or CRIS-Only Request is deemed withdrawn by the ISO, prior to the commencement of the Phase 1 Study, Interconnection Customer must pay the ISO the actual costs of processing its Interconnection Request or CRIS-Only Request.

40.24.3.1.2 The ISO shall charge and Interconnection Customer shall pay the actual costs of the study work of an Expedited Deliverability Study performed pursuant to Section 40.19, an Affected System Study performed pursuant to Section 40.8.3, a Fast Track Process supplemental review performed pursuant to Section 40.23.4, or review of a Facility Modification Request pursuant to Section 40.6.3.2, which costs are incurred by the ISO and Transmission Owners under these Standard Interconnection Procedures.

#### **40.24.3.2 Study Cost Allocation**

##### **40.24.3.2.1 Cluster Study Process Cost Allocation**

40.24.3.2.1.1 Cluster Study Projects shall be responsible for Cluster Study costs in the following manner: (1) each Cluster Study Project shall pay the actual cost of studying the Attachment Facilities and Distribution Upgrades for its own

facility; (2) each Cluster Study Project shall pay the actual cost of studying Local System Upgrade Facilities for its own facility; and (3) each Cluster Study Project shall pay an equal share of all other Cluster Study costs (*i.e.*, those not related to Attachment Facilities, Distribution Upgrades or Local System Upgrade Facilities).

40.24.3.2.1.2 With respect to the costs of studying the Attachment Facilities and Distribution Upgrades referenced above, if more than one Cluster Study Project contributes to the need for particular Attachment Facilities or Distribution Upgrades, those Cluster Study Projects shall share equally in the cost to study those Attachment Facilities or Distribution Upgrades.

40.24.3.2.1.3 With respect to the costs of studying the Local System Upgrade Facilities referenced above, if more than one Cluster Study Project contributes to the need for particular Local System Upgrade Facilities, those Cluster Study Projects shall share equally in the cost to study those Local System Upgrade Facilities.

40.24.3.2.1.4 Notwithstanding the above study cost allocation requirements, no Interconnection Customer electing to be evaluated only for ERIS shall be responsible for any cost of any CRIS evaluation in the Cluster Study, and any Cluster Study Project that elects, pursuant to Section 40.6.4.1, to withdraw from the Cluster Study, withdraw its CRIS request, or elect to have no System Deliverability Upgrade identified to make the project deliverable at its level of requested CRIS, shall not be responsible for the costs of any additional detailed studies required for System Deliverability Upgrades.

#### **40.24.3.2.2 Expedited Deliverability Study Process Cost Allocation**

Each project participating in an Expedited Deliverability Study shall pay an equal share of the study costs for the study.

#### **40.24.3.2.3 Affected System Study Process Cost Allocation**

Each project participating in an Affected System Study shall pay an equal share of the Affected System Study costs required for the identification of the need for any Affected Network Upgrade Facilities. With respect to the costs of identifying any Affected System Network Upgrades, if more than one project contributes to the need for particular Affected System Network Upgrade, those projects shall share equally in the cost to study the Affected System Network Upgrade.

#### **40.24.3.2.4 Fast Track Process Supplemental Review**

The entity for which the ISO performs a supplemental review under the Fast Track Process in accordance with Section 40.23.4 shall be responsible for the study costs concerning the supplemental review.

#### **40.24.3.2.5 Facility Modification Request Study**

The entity for which the ISO performs a study in response to its Facility Modification Request in accordance with Section 40.6.3.2 shall be responsible for the study costs concerning the Facility Modification Request.

### **40.24.3.3 Obligation to Pay Withdrawal Penalties and Application of Withdrawal Penalties**

40.24.3.3.1 The ISO shall charge, and Interconnection Customer shall pay, any Withdrawal Penalty assessed under Sections 40.6.5, 40.7.6, 40.10.9, and 40.15.5. Any Withdrawal Penalty is in addition to the Interconnection Customer's responsibility to pay for costs described in Section 40.24.3.1.

40.24.3.3.2 A Withdrawal Penalty that is calculated as a percentage of a Study Deposit amount will be calculated using the initial Study Deposit amount provided by the Interconnection Customer with its Interconnection Request or CRIS-Only Request, regardless of whether the ISO has had to draw on the Study Deposit to recover any study costs that Interconnection Customer has not paid.

40.24.3.3.3 The ISO shall apply the collected Withdrawal Penalty Funds pursuant to Section 40.6.5.

40.24.3.3.4 The ISO shall not be liable for unpaid Withdrawal Penalties and may not collect them from other Interconnection Customers or Transmission Customers.

#### **40.24.3.4 Invoicing and Payment**

40.24.3.4.1 The ISO shall invoice the Interconnection Customer monthly for the costs described in Section 40.24.3.1. The ISO shall invoice for Withdrawal Penalties after they are assessed.

40.24.3.4.2 The Interconnection Customer shall pay the invoiced amount to the ISO within thirty (30) calendar days of the ISO's issuance of the invoice. Except as otherwise provided in Section 40.24.3.4.5, if the Interconnection Customer does not pay its invoice within the timeframe described above, it shall be subject to withdrawal pursuant to Section 40.6.4 to this Attachment HH and will be assessed interest on any unpaid invoiced amounts calculated in accordance with section 35.19a(a)(2) of FERC's regulations.

40.24.3.4.3 This section applies to deposits provided under this Attachment HH with the exception of Site Control Deposits. The ISO shall hold deposits provided by Interconnection Customer until settlement of the final invoices. If

Interconnection Customer has not paid all invoices, including invoices for Withdrawal Penalties, the NYISO shall (i) recover any unpaid costs described in Section 40.24.3.1 from Interconnection Customer's deposits and then (ii) recover any Withdrawal Penalties from Interconnection Customer's deposits. After the ISO has recovered all unpaid costs and penalties, if any, from Interconnection Customer's deposits, the ISO will (i) refund to the Interconnection Customer any remaining refundable cash portion of its deposits, and (ii) provide written authorization for Interconnection Customer to request that the bank cancel any remaining letter of credit or surety bond provided as a deposit.

40.24.3.4.4 Any invoices for the Cluster Study must be submitted to the ISO within sixty (60) days of completion of the subject Interconnection Study and shall include a detailed and itemized accounting of the incurred cost of the study work for the Cluster Study. After the conclusion of the Cluster Study Process or if, prior to the conclusion of the Cluster Study Process, the Interconnection Customer withdraws or is withdrawn by the ISO from the Queue, the ISO shall issue a final invoice to Interconnection Customer, which Interconnection Customer shall pay within the timeframe set forth in Section 40.24.3.4.2.

40.24.3.4.5 In the event of an Interconnection Customer's dispute over invoiced amounts, the Interconnection Customer shall: (i) timely pay any undisputed amounts to the ISO, and (ii) pay into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If the Interconnection Customer fails to meet these two requirements, then the ISO shall not be obligated to perform or continue to perform any study work on behalf of

the Interconnection Customer's Interconnection Request, CRIS-Only Request, or other study request under this Attachment HH. Disputes arising under this section shall be addressed through the Dispute Resolution Procedures set forth in Section 40.24.5 to this Attachment HH. Within thirty (30) Calendar Days after resolution of the dispute, the Interconnection Customer will pay the ISO any amounts due with interest actually earned on such amounts.

40.24.3.4.6 Neither the ISO nor Transmission Owner shall be obligated to perform or continue to perform any study work on behalf of an Interconnection Customer's Interconnection Request, CRIS-Only Request, or other study request under this Attachment HH unless Interconnection Customer has paid all undisputed amounts in compliance with Section 40.24.3.4.5.

#### **40.24.4 Third Parties Conducting Studies**

The ISO, Connecting Transmission Owner, Affected Transmission Owner, and Affected System Operator may utilize a Transmission Owner or other third party to perform its respective obligations under the Cluster Study Process. In all cases, use of a third party shall be in accord with Article 26 of the Standard Interconnection Agreement (Subcontractors), limited to situations where the ISO determines that doing so will help maintain or accelerate the Cluster Study, and the relevant ISO OATT procedures and protocols as would apply if the ISO were to conduct the Cluster Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes.

#### **40.24.5 Disputes**

##### **40.24.5.1 Submission**

In the event any Party has a dispute, or asserts a claim, that arises out of or in connection with the Standard Interconnection Agreement, these Standard Interconnection Procedures, or their performance (a “Dispute”), such Party shall provide the other Parties with written notice of the Dispute (“Notice of Dispute”). If the ISO is not identified as a party to the Dispute, the Party providing the Notice of Dispute shall also provide this notice to the ISO for the ISO to participate solely for purposes of assisting the other Parties in resolving the claim or dispute. Such Dispute shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Parties. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Parties’ receipt of the Notice of Dispute, such Dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such Dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of the Standard Interconnection Agreement.

##### **40.24.5.2 External Arbitration Procedures**

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the Dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrators so chosen shall within twenty (20) Calendar Days select one of them to chair the arbitration panel. In each case,

the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association (“Arbitration Rules”) and any applicable FERC regulations or RTO rules; *provided, however*, that in the event of a conflict between the Arbitration Rules and the terms of this Section 40.24.5, the terms of this Section 40.24.5 shall prevail.

#### **40.24.5.3 Arbitration Decisions**

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the Standard Interconnection Agreement and Standard Interconnection Procedures and shall have no power to modify or change any provision of the Standard Interconnection Agreement and Standard Interconnection Procedures in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, or System Deliverability Upgrades.

#### **40.24.5.4 Costs**

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel; or (2) one-third the cost of the single arbitrator jointly chosen by the Parties.

#### **40.24.5.5 Non-Binding Dispute Resolution Procedures**

If a Party has submitted a Notice of Dispute pursuant to Section 40.24.5.1 and the Parties are unable to resolve the claim or dispute through unassisted or assisted negotiations within the thirty (30) Calendar Days provided in that section, and the Parties cannot reach mutual agreement to pursue the Section 40.24.5 arbitration process, a Party may request that the ISO engage in non-binding Dispute Resolution pursuant to this section by providing written notice to the ISO (“Request for Non-Binding Dispute Resolution”). Such Request for Non-Binding Disputes Resolution shall contain: (i) the name of the Party making the request, (ii) an indication of the Interconnection Customer, Connecting Transmission Owner, Affected Transmission Owner, and/or other potentially affected parties, to the extent known, (iii) a description of the dispute with sufficient detail to apprise the ISO, Interconnection Customer, Connecting Transmission Owner, Affected Transmission Owner, and/or other potentially affected parties the nature of the claim, (iv) copies of any materials that the Interconnection Customer has relied on to support its initial Notice of Dispute pursuant to Section 40.24.5.1, if applicable, and (v) citations to the ISO Tariffs and other relevant materials upon which the Party’s dispute relies. Conversely, any Party may file a Request for Non-Binding Dispute Resolution pursuant to this section without first seeking mutual agreement to pursue the Section 40.24.5 arbitration process. The process in Section 40.24.5.5 shall serve as an alternative to, and not a replacement of, the

Section 40.24.5 arbitration process. Pursuant to this process, the ISO must within thirty (30) Calendar Days of receipt of the Request for Non-Binding Dispute Resolution appoint a neutral decision-maker that is an independent subcontractor that shall not have any current or past substantial business or financial relationships with either Party. Any individual appointed as a neutral decision-maker shall make known to the disputing parties any such disqualifying relationship or interest and a new neutral decision-maker shall be appointed, unless express written consent is provided by each Party to the dispute.

Unless otherwise agreed by the Parties, the neutral decision-maker shall render a decision within sixty (60) Calendar Days of appointment and shall notify the Parties in writing of such decision and reasons therefore. This neutral decision-maker shall be authorized only to interpret and apply the provisions of the Standard Interconnection Procedures and Standard Interconnection Agreement and shall have no power to modify or change any provision of the Standard Interconnection Procedures and Standard Interconnection Agreement in any manner. The result reached in this process is not binding, but, unless otherwise agreed, the Parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a Section 40.24.5 arbitration, or in a Federal Power Act section 206 complaint. Each Party shall be responsible for its own costs incurred during the process and the cost of the neutral decision-maker shall be divided equally among each Party to the dispute.

#### **40.24.6 Local Furnishing Bonds and Other Tax-Exempt Financing**

##### **40.24.6.1 Connecting Transmission Owners and Affected Transmission Owner(s) that Own Facilities Financed by Local Furnishing Bonds or Other Tax-Exempt Bonds**

This provision is applicable only to a Connecting Transmission Owner or Affected Transmission Owner(s) that has financed facilities with tax-exempt bonds including, but not

limited to, Local Furnishing Bonds (“Tax-Exempt Bonds”). Notwithstanding any other provision of this Standard Interconnection Agreement and Standard Interconnection Procedures, neither the ISO nor Connecting Transmission Owner shall be required to provide interconnection service to Interconnection Customer, nor shall any Connecting Transmission Owner or Affected Transmission Owner be required to construct System Upgrade Facilities or System Deliverability Upgrades, pursuant to this Standard Interconnection Agreement and Standard Interconnection Procedures, if the provision of such interconnection service or such construction would jeopardize the tax-exempt status of any Tax-Exempt Bonds or impair the ability of Connecting Transmission Owner or Affected Transmission Owner(s) to issue future tax-exempt obligations. For purposes of this provision, Tax-Exempt Bonds shall include the obligations of the Long Island Power Authority, NYPA and Consolidated Edison Company of New York, Inc., the interest on which is not included in gross income under the Internal Revenue Code.

#### **40.24.6.2 Alternate Procedures for Requesting Interconnection Service**

If a Connecting Transmission Owner or Affected Transmission Owner(s) determines that the provision of interconnection service requested by an Interconnection Customer would jeopardize the tax-exempt status of any Tax-Exempt Bond(s) used to finance its facilities that would be used in providing such interconnection service, or impair its ability to issue future tax-exempt obligations, Connecting Transmission Owner or Affected Transmission Owner(s) shall advise the Interconnection Customer and the ISO within thirty (30) Calendar days of receipt of the Interconnection Request.

The Interconnection Customer thereafter may renew its request for interconnection using the process specified in Section 40.5 of the ISO OATT.

## INTERCONNECTION REQUEST

1. The undersigned Interconnection Customer submits this request to interconnect its Facility with the New York State Transmission System or Distribution System pursuant to the Standard Interconnection Procedures in the ISO OATT.
2. This Interconnection Request is for [insert project name]: \_\_\_\_\_, which is (check one of the following):

\_\_\_\_\_ A proposed new Generating Facility

\_\_\_\_\_ A proposed Co-located Storage Resource

\_\_\_\_\_ A proposed Hybrid Storage Resource

\_\_\_\_\_ A proposed multi-unit Generating Facility not seeking to participate as a Co-located Storage Resource or Hybrid Storage Resource

\_\_\_\_\_ A proposed new BTM:NG Resource

\_\_\_\_\_ A proposed new Cluster Study Transmission Project

\_\_\_\_\_ A material modification to a proposed or existing facility (*e.g.*, an increase in the capacity of an existing facility beyond the permissible de minimis increases permitted under Section 40.2.3 of Attachment HH to the ISO OATT)

If capacity addition to an existing facility, please describe: \_\_\_\_\_

3. Is this Project mutually exclusive with another project proposed by the Interconnection Customer or its Affiliate in the current or ongoing Cluster Study (*i.e.*, is the Project an alternative to another Project in the current Application Window or with a Project in an ongoing Cluster Study)?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

Indicate the Queue Position \_\_\_\_\_

If yes, is the Interconnection Customer submitting the Project as a Contingent Project in accordance with Section 40.5.4.1? \_\_\_\_\_ Yes \_\_\_\_\_ No If yes, the Interconnection Customer's Project data will be imported from the existing Project's validated Interconnection Request.

4. The Generating Facility will be used for any of the following (if so, the interconnection may not be subject to the NYISO's Standard Interconnection Procedures; see the NYISO's Transmission Expansion and Interconnection Manual No. 23, Attachment A.)?

Net Metering? Yes \_\_\_ No \_\_\_

To supply power exclusively through sales other than wholesale sales over the New York State (*i.e.*, the Project does not intend to participate in any NYISO-administered market)?

Yes \_\_\_ No \_\_\_

To participate in the wholesale market exclusively through a DER Aggregation?

Yes \_\_\_ No \_\_\_

To exclusively supply power to a Host Load? Yes \_\_\_ No \_\_\_

5. Legal Name of the Interconnection Customer (or, if an individual, individual's name) (must be a single individual or entity):

Name of Interconnection Customer : \_\_\_\_\_

Contact Person: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

6. Address and coordinates of the proposed new Facility site (to the extent known) or, in the case of an existing Facility, the name and specific location of that existing facility: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

7. Requested Point of Interconnection and coordinates of the proposed Point(s) of Interconnection:

POI (name of the substation name (specify PSSE bus number) or

transmission/distribution line name and number (specify from/to PSSE bus number and circuit number)): \_\_\_\_\_

Coordinates of the POI (*i.e.*, Latitude and Longitude) : \_\_\_\_\_

Distances from the POI to the remote substations: \_\_\_\_\_

Nearby streets, roads, intersections: \_\_\_\_\_

8. MW nameplate rating: \_\_\_\_\_ at \_\_\_\_\_ degrees F (if temperature sensitive)

Requested Interconnection Service:

MW of requested ERIS at the POI (maximum summer or winter net MW, whichever is greater): \_\_\_\_\_

(NOTE: An Interconnection Customer may request ERIS below the Generating Facility capacity and the full facility capacity for Cluster Study Transmission Projects subject to the requirements and limitations set forth in Sections 40.5.6.2 and 40.5.6.3 of Attachment HH to the ISO OATT).

- If requesting ERIS for a multi-unit facility, specify the requested ERIS for each Generator: \_\_\_\_\_

- For temperature sensitive resources:

Maximum summer net (net MW at the POI) which can be achieved at 90 degrees F: \_\_\_\_\_

Maximum winter net (net MW at the POI) which can be achieved at 10 degrees F : \_\_\_\_\_

- MW of requested increase in ERIS of an existing facility, as calculated from the baseline ERIS (as defined in Section 40.2.3 of Attachment HH – for temperature-sensitive machines, provide the summer and winter MW vs. temperature curves for both gross MW and net MW corresponding to the requested net MW values provided above): \_\_\_\_\_

MW of requested CRIS at the POI: \_\_\_\_\_

- If requesting CRIS for a multi-unit facility, specify the requested CRIS for each Generator (for each Generator, CRIS cannot exceed ERIS – *i.e.*, Interconnection Customer may not request CRIS for an individual Generator if not also requesting ERIS at or above the requested CRIS level for that specific Generator): \_\_\_\_\_
- For a Resource with Energy Duration Limitations that is requesting CRIS, indicate the maximum injection capability over the selected duration (*e.g.*, 40 MWh over 4 hours for a 10 MW of requested CRIS): \_\_\_\_\_

- If requesting a CRIS transfer, indicate the transferor PTID(s), MW amount and, for a multi-unit Generating Facility, the specific Generator from which and to which the transfer is proposed: \_\_\_\_\_

9. If a Cluster Study Transmission Project, which of the following forms of CRIS does the Interconnection Customer intend to request:

\_\_\_\_\_ Unforced Capacity Deliverability Rights

\_\_\_\_\_ External-to-Rest of State Deliverability Rights

10. General description of the proposed Project:

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- On the one-line diagram indicate the following:
  - the generation capacity attached at each metering location. (Maximum load on CT/PT)

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- On the one-line diagram indicate the location, type and size of auxiliary power. (Minimum load on CT/PT) Amps

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- Will an alternate source of auxiliary power be available during CT/PT maintenance?  
 \_\_\_\_\_ Yes      \_\_\_\_\_ No

- Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation?  
 \_\_\_\_\_ Yes      \_\_\_\_\_ No

(If yes, indicate on one-line diagram).

- What type of control system or PLC will be located at the Interconnection Customer Attachment Facilities?

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- What protocol does the control system or PLC use?

- 
- Provide the site plan layout, depicting the Facility, POI station, transmission line, and property line.

- 
- Physical dimensions of the proposed POI station.

- 
- Total length of collector system (e.g., summation of length of all collector feeders) .

- 
- Line length from Project station to POI station (e.g., length of generation tie-line).

- 
- Type (overhead and/or underground) of line(s) from the proposed Facility to Point(s) of Interconnection (if a portion of the line is overhead and another portion is underground, specify the respective demarcations on the one-line diagram).

- 
- Number of line(s) from the proposed Facility to Point(s) of Interconnection.

- 
- Number of conductors per phase of line(s) from the proposed Facility to Point(s) of Interconnection.

- 
- Tower number, if known:

- 
- Number of third-party easements required for transmission lines, if known:
- 

11. Attach a conceptual breaker one-line diagram of the plant and station facilities. For Interconnection Customer's staged and/or associated projects that share Attachment Facilities or are interconnecting at the same Point of Interconnection, please indicate connection to the Interconnection Customer's proposed, planned, or existing generation, transmission circuits, etc.

The conceptual breaker one-line diagram is a representation of electrical components that are connecting into the NYSTS or Distribution System as applicable. This conceptual breaker one-line diagram should include, at a minimum:

- The Project name, and the Interconnection Customer name on the diagram;
- The facility address (specific location of the Facility);
- Generator or inverter details including the number of inverters or generator units, manufacturer details, model name, number, and version, type, nameplate rating MW and MVA, leading and lagging capability in MVAR, and configuration of the Facility;
- The Facility's electrical components and their characteristics (*i.e.*, generation, transformers (GSU, PSU, current transformer, and potential transformers), breakers, switches, cables/lines/feeders, compensation, FACTs, auxiliary load, buses, etc.) as described in NYISO Manual No. 24, Reliability Analysis Data Manual;
- The capability and voltage levels of the electrical components, their connection to each other and to the New York State Transmission System or Distribution System;
- The Point of Interconnection (name of the substation name (specify the bus) or transmission/distribution line name and number); and
- References to other diagram sheets if there is more than one diagram sheet (*i.e.*, use references to indicate how the diagrams are interconnected).

Acronyms used in the conceptual breaker one-line diagram should follow ANSI Standard Device Numbers & Common Acronyms.

12. A workable Project power flow, short circuit, transient stability modeling data and supporting documentation (as set forth in Attachment A) must be provided with this Interconnection Request form.

13. Proposed Initial Backfeed Date (Month/Year): \_\_\_\_\_

Proposed Synchronization Date (Month/Year): \_\_\_\_\_

Proposed Commercial Operation Date (Month/Year): \_\_\_\_\_

14. \$10,000 non-refundable Application Fee must be submitted with this Interconnection Request form in accordance with Section 40.5.5.1.3 of Attachment HH.

15. A Study Deposit must be submitted with this Interconnection Request form pursuant to Section 40.5.5.1.4 of Attachment HH.

16. Evidence of Site Control as specified in the Section 40.5.5.1.5 of Attachment HH (check one):

- \_\_\_\_\_ a. Is attached to this Interconnection Request, provides full Site Control for the following number of acres: \_\_\_\_\_, and includes an attestation in the form set forth in ISO Procedures from an officer of the company: (i) indicating the amount of acreage covered by the provided Site Control materials and (ii) that such acreage is consistent with the acreage and other parameters for the Facility's technology type set forth in ISO Procedures; or
- \_\_\_\_\_ b. Is attached to this Interconnection Request and provides for Site Control for a new technology type not addressed in ISO Procedures or for less acreage than required for the Facility's technology type as set forth in ISO Procedures.

If b. is selected, Interconnection Customer must submit the following with this Interconnection Request in accordance with the requirements in Section 40.5.5.1.5 of Attachment HH:

- (1) an attestation in the form set forth in ISO Procedures from an officer of the company sufficiently describing and explaining the special circumstances of the project that permits a different acreage amount for Site Control than the requirements in the ISO Procedures; and
- (2) a licensed Professional Engineer (electrical or civil) signed and stamped site plan that depicts that the Site Control provided by the Interconnection Customer can support the proposed arrangement of its Facility.

- \_\_\_\_\_ c. Interconnection Customer is providing a Site Control Deposit due to Regulatory Limitation.

If c. is selected, Interconnection Customer must provide the following with this Interconnection Request in accordance with the requirements in Section 40.5.5.1.5.1 of Attachment HH:

- (1) a signed affidavit from an officer of the company indicating that Site Control is unobtainable due to Regulatory Limitations as such term is defined in ISO Procedures;
- (2) documentation sufficiently describing and explaining the source and effects of such Regulatory Limitations, including a description of any conditions that must be met to satisfy the Regulatory Limitations and the anticipated time by which Interconnection Customer expects to satisfy the regulatory requirements, and
- (3) a Site Control Deposit of \$10,000 per MW, subject to a minimum of \$500,000 and a maximum of \$2,000,000.

17. For an inverter-based resource that is greater than 20 MW, attach the form set forth in ISO Procedures concerning the attestations required by NYSRC Reliability Rule B.5\_\_\_\_\_

18. By submitting this Interconnection Request:

Interconnection Customer represents and warrants that the information and materials it provides with this Interconnection Request are accurate and complete as of the time of this submission.

Interconnection Customer acknowledges that it will be required to execute a Cluster Study Agreement with the NYISO, Connecting Transmission Owner, and any identified Affected Transmission Owner(s) or Affected System Owner(s) following the validation of this Interconnection Request.

Interconnection Customer acknowledges and agrees that it shall pay the study costs incurred under the requirements of the NYISO's Standard Interconnection Procedures in Attachment HH to the NYISO OATT and ISO Procedures in connection with this Interconnection Request, including any study costs that are incurred prior to the full execution of the Cluster Study Agreement for this Interconnection Request.

I certify that I am authorized to sign this Interconnection Request form on Interconnection Customer's behalf, and that the information provided herein is true and accurate to the best of my belief and knowledge after due investigation.

Signature: \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Date: \_\_\_\_\_

## DETAILED GENERATING FACILITY DATA

1. Describe the composition of assets (including MW level) within the Generating Facility, including load reduction assets (*e.g.*, 50 MW wind facility, 20 MW Energy Storage Resource and a load reduction resource with a maximum of 1 MW of load reduction):  
\_\_\_\_\_

2. Maximum Injection Capability of entire Generating Facility over 1 hour:  
\_\_\_\_\_

3. If the facility includes a Resource with Energy Duration Limitations, indicate the maximum injection capability for the entire Generating Facility over the selected duration (*e.g.*, 100 MW over 4 hours): \_\_\_\_\_

4. Provide the following information for each unit within the Generating Facility:

Resource/Fuel type:

\_\_\_ Solar

\_\_\_ Wind

\_\_\_ Hydro

Hydro Type (*e.g.* Run-of-River): \_\_\_\_\_

\_\_\_ Diesel

\_\_\_ Natural Gas

\_\_\_ Fuel Oil

\_\_\_ Other (state type) \_\_\_\_\_

Generator Nameplate Rating: \_\_\_\_\_ MW (Typical)

MVA \_\_\_\_\_ at °F \_\_\_\_\_ Voltage (kV) \_\_\_\_\_

Maximum Leading Reactive Power at Nameplate MW Rating (MVAR): \_\_\_\_\_

Maximum Lagging Reactive Power at Nameplate MW Rating (MVAR): \_\_\_\_\_

Customer-Site Load (new): \_\_\_\_\_MW

Typical Reactive Load: \_\_\_\_\_MVAR

If existing load, provide coincident Summer peak load (if not providing metered load data, provide estimated coincident Summer peak load, together with supporting documentation for such estimated value):  
\_\_\_\_\_

Generator manufacturer, model name & number: \_\_\_\_\_

Inverter manufacturer, model name, number, and version: \_\_\_\_\_

Nameplate Output Power Rating (for IBRs, at the inverter terminal)

Nameplate Output Power Rating in MW: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Nameplate Output Power Rating in MVA: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

**If solar**, total number of solar panels in solar farm to be interconnected pursuant to this

Interconnection Request: \_\_\_\_\_

Inverter manufacturer, model name, number, and version: \_\_\_\_\_

**If wind**, total number of generators in wind farm to be interconnected pursuant to this

Interconnection Request: \_\_\_\_\_

Generator Height: \_\_\_\_

Single phase \_\_\_\_\_ Three Phase \_\_\_\_\_

Wind Model Type: \_\_\_\_ Type 1 \_\_\_\_ Type 2 \_\_\_\_ Type 3 \_\_\_\_ Type 4

**If an Energy Storage Resource or a Resource with Energy Duration Limitations:**

Inverter manufacturer, model name, number, and version: \_\_\_\_\_

Energy storage capability (MWh): \_\_\_\_\_

Minimum Duration for full discharge (i.e., injection) (Hours): \_\_\_\_

Minimum Duration for full charge (i.e., withdrawal) (Hours): \_\_\_\_\_

Maximum withdrawal from the system (i.e., when charging) (MW): \_\_\_\_\_

5. Attach modeling data files and optionally, a modeling data summary:\*

- Power Flow model \_\_\_\_\_
- Short circuit model \_\_\_\_\_
- Dynamic models \_\_\_\_\_

\*PSSE files must be in *.raw* or *.sav* and *.dyr* format. ASPEN files must be in *.olr* format.

To the extent modeling data is inconsistent with information in the validated Interconnection Request (including the one line diagram), the data in the Interconnection Request will be considered the data of record.

6. For a non-synchronous Generating Facility, Interconnection Customer shall provide: (1) a validated user-defined root mean squared (RMS) positive sequence dynamics model; (2) an appropriately parameterized generic library RMS positive sequence dynamics model, including model block diagram of the inverter control and plant control systems, as set forth in the ISO Procedures or a model otherwise approved by the Western Electricity Coordinating Council, that corresponds to Interconnection Customer's Generating Facility; and (3) upon request, a validated electromagnetic transient model. A user-defined model is a set of programming code created by equipment manufacturers or developers that captures the latest features of controllers that are mainly software based and represents the entities' control strategies but does not necessarily correspond to any generic library model. Interconnection Customer must also demonstrate that the model is validated by providing evidence that the equipment behavior is consistent with the model behavior (*e.g.*, an attestation from Interconnection Customer that the model accurately represents the entire Generating Facility; attestations from each equipment manufacturer that the user defined model accurately represents the component of the Generating Facility; or test data).

**ADDITIONAL INFORMATION REQUESTED FOR CLUSTER STUDY  
TRANSMISSION PROJECTS**

Description of proposed project:

- a. General description of the equipment configuration and kV level:

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- b. Transmission technology and manufacturer (*e.g.*, HVDC VSC):

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**ADDITIONAL INFORMATION REQUESTED FOR FACILITIES  
SEEKING ERIS BELOW FULL OUTPUT**

Describe any injection-limiting equipment if the facility is requesting ERIS below its full output:

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**40.25.2 APPENDIX 2 TO ATTACHMENT HH**

**CRIS-ONLY REQUEST**

1. The undersigned Interconnection Customer who submits this request is proposing to develop or own a proposed or an existing Facility requesting Capacity Resource Interconnection Service (“CRIS”).
2. Legal Name of the Interconnection Customer (or, if an individual, individual’s name) (must be a single individual or entity):

Name of Interconnection Customer : \_\_\_\_\_

Contact Person: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

3. Type of CRIS-Only Request:

\_\_\_\_\_ CRIS or increased CRIS for an existing facility

\_\_\_\_\_ CRIS or increased CRIS for a facility that is not existing but has ERI

\_\_\_\_\_ Different location CRIS Transfer (skip to question 14)

\_\_\_\_\_ External CRIS Rights Request (skip to question 13)

4. Queue Position/PTID No./TO or NYSIR queue no. (if applicable): \_\_\_\_\_

5. Project/facility name: \_\_\_\_\_

6. Is this Project mutually exclusive with another project proposed by the Interconnection Customer or its Affiliate in the current ongoing Expedited Deliverability Study, Class Year Study, or Cluster Study?

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

If yes:

Indicate the Queue Position/PTID No./TO or NYSIR queue no. (if applicable): \_\_\_\_\_

Is the Interconnection Customer submitting the Project as a Contingent Project in accordance with Section 40.5.4.1? \_\_\_\_ Yes \_\_\_\_ No

7. Address or location of the proposed new Facility site (to the extent known) or, in the case of an existing Facility, the name and specific location of that existing facility: \_\_\_\_\_

8. MW nameplate rating: \_\_\_\_\_ at \_\_\_\_\_ ° F (if temperature sensitive)

MW of requested CRIS at the POI: \_\_\_\_\_

- If requesting CRIS for a multi-unit facility, specify the requested CRIS for each Generator: \_\_\_\_\_
- For a Resource with Energy Duration Limitations that is requesting CRIS, indicate the maximum injection capability over the selected duration (*e.g.*, 10 MWh over 4 hours) \_\_\_\_\_

9. If a Cluster Study Transmission Project, which of the following forms of CRIS does the Interconnection Customer intend to request:

\_\_\_\_ Unforced Capacity Deliverability Rights

\_\_\_\_ External-to-Rest of State Deliverability Rights

10. General description of the proposed Project (*e.g.*: describe type/size/number/general configuration of the proposed generator units, transmission, transformers, feeders, lines leading to the proposed point of interconnection(s), breakers, etc.):

11. Attach a conceptual breaker one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

The conceptual breaker one-line diagram is a representation of electrical components that are connecting into the NYSTS or Distribution System as applicable. This conceptual breaker one-line diagram should include, at a minimum:

- The Project name, and the Interconnection Customer name on the diagram;

- The facility address (specific location of the Facility);
- The number of inverters or generator units (type, nameplate rating MW and MVA), and configuration of the Facility;
- The Facility's electrical components (*i.e.*, generation, transformers (GSU, PSU, current transformer, and potential transformers), breakers, switches, cables/lines/feeders, compensation, FACTs, auxiliary load, buses, etc.) as described in NYISO Reliability Analysis Data Manual;
- The capability and voltage levels of the electrical components, their connection to each other and to the New York State Transmission System or Distribution System;
- The Point of Interconnection (name of the substation name (specify the bus) or transmission/distribution line name and number); and
- References to other diagram sheets if there is more than one diagram sheet (*i.e.*, use references to indicate how the diagrams are interconnected).

Acronyms used in the conceptual breaker one-line diagram should follow ANSI Standard Device Numbers & Common Acronyms.

12. A workable Project power flow, short circuit, transient stability modeling data and supporting documentation (as set forth in Attachment A) must be provided with this CRIS-Only Request form.

13. Proposed Initial Backfeed Date (Month/Year): \_\_\_\_\_

Proposed Synchronization Date (Month/Year): \_\_\_\_\_

Proposed Commercial Operation Date (Month/Year): \_\_\_\_\_

14. If requesting a CRIS transfer, indicate the following:

- Submitting Entity (Transferor)'s Contact Information
  - Organization name: \_\_\_\_\_
  - Address: \_\_\_\_\_
  - Phone Number: \_\_\_\_\_
  - Email: \_\_\_\_\_
- Receiving Entity (Transferee)'s Contact Information

- Organization name: \_\_\_\_\_
- Address: \_\_\_\_\_
- Phone Number: \_\_\_\_\_
- Email: \_\_\_\_\_
- Queue No., if applicable: \_\_\_\_\_
- Type of Transfer (Check One)
  - \_\_\_\_ Partial CRIS Transfer (CRIS MW to be Transferred: \_\_\_\_\_)
  - \_\_\_\_ Full CRIS Transfer (CRIS MW to be Transferred: \_\_\_\_\_)
- Transferor Facility's New CRIS MW post-transfer: \_\_\_\_\_
- Receiving Entity/Transferee Facility's New CRIS MW post-transfer: \_\_\_\_\_
- Anticipate date of Transfer, if approved: \_\_\_\_\_
- Transferor Facility Information (for a multi-unit Generating Facility, the specific Generator from which the transfer is proposed)
  - Transferor facility  
PTID(s): \_\_\_\_\_
  - Transferor facility's electrical location (*i.e.*, Point of Interconnection): \_\_\_\_\_
  - Transferor facility's Current CRIS MW: \_\_\_\_\_
- Transferee Facility Information (for a multi-unit Generating Facility, the specific Generator to which the transfer is proposed)
  - Transferee facility's PTID(s): \_\_\_\_\_
  - Transferee facility's electrical location: \_\_\_\_\_
  - MW nameplate rating: \_\_\_\_\_ at \_\_\_\_\_ ° F (if temperature sensitive)
  - Transferee facility's current CRIS MW: \_\_\_\_\_

15. If requesting External CRIS, indicate the following:

- \_\_\_\_ Years (term of the requested Award Period (minimum five (5) years)).

- \_\_\_\_\_ MW of External CRIS requested for each month of Summer Capability Period. The same number of MW must be supplied for all months of each Summer Capability Period throughout the Award Period.
- \_\_\_\_\_ MW of External CRIS requested each month of Winter Capability Period (cannot exceed MW committed for Summer Capability Period). None required, but if Requestor does commit MW to any month of Winter Capability Period, Requestor must specify months requested below.
  - \_\_\_\_\_ November
  - \_\_\_\_\_ December
  - \_\_\_\_\_ January
  - \_\_\_\_\_ February
  - \_\_\_\_\_ March
  - \_\_\_\_\_ April
- The External Interface(s) to be used for the External ICAP:
- A Requestor may request external CRIS rights by making either a contract commitment or a non-contract commitment for the award period. A requestor must indicate the type of its commitment, as follows:
  - \_\_\_\_\_ Contract commitment; or
  - \_\_\_\_\_ Non-contract commitment.

16. Detailed generating facility data specified in Attachment A must be submitted with this CRIS-Only Request form.

17. \$5,000 non-refundable Application Fee must be submitted with this CRIS-Only Request form in accordance with Section 40.5.5.1.3 of Attachment HH.

18. A \$50,000 Study Deposit must be submitted with this CRIS-Only Request form pursuant to Section 40.5.5.1.4 of Attachment HH.

19. By submitting this CRIS-Only Request:

Interconnection Customer represents and warrants that the information and materials it provides with this CRIS-Only Request are accurate and complete as of the time of this submission.

Interconnection Customer acknowledges that it will be required to execute a Cluster Study Agreement with the NYISO, Connecting Transmission Owner, and any identified Affected Transmission Owner(s) or Affected System Owner(s) following the validation of this CRIS-Only Request.

Interconnection Customer acknowledges and agrees that it shall pay the study costs incurred under the requirements of the NYISO's Standard Interconnection Procedures in Attachment HH to the NYISO OATT and ISO Procedures in connection with this CRIS-Only Request, including any study costs that are incurred prior to the full execution of the Cluster Study Agreement for this CRIS-Only Request.

*[This CRIS-Only Request to be signed by an officer of the Interconnection Customer or a person authorized to sign for the Interconnection Customer]*

Signature: \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Date: \_\_\_\_\_

## ATTACHMENT A

### DETAILED GENERATING FACILITY DATA

**(Not Applicable for CRIS Transfer and External CRIS Rights Requests)**  
**(Additional data maybe required at subsequent stages of the Cluster Study Process)**

1. Describe the composition of assets (including MW level) within the Generating Facility, including load reduction assets (*e.g.*, 50 MW wind facility, 20 MW Energy Storage Resource and a load reduction resource with a maximum of 1 MW of load reduction):  

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2. Maximum Injection Capability of entire Generating Facility over 1 hour:  

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3. If the facility includes a Resource with Energy Duration Limitations, indicate the maximum injection capability for the entire Generating Facility over the selected duration (*e.g.*, 100 MW over 4 hours):  

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4. Provide the following information for each unit within the Generating Facility:

Resource/Fuel type:

\_\_\_ Solar

\_\_\_ Wind

\_\_\_ Hydro

Hydro Type (*e.g.* Run-of-River): \_\_\_\_\_

\_\_\_ Diesel

\_\_\_ Natural Gas

\_\_\_ Fuel Oil

\_\_\_ Other (state type) \_\_\_\_\_

Generator Nameplate Rating: \_\_\_\_\_ MW (Typical)

MVA \_\_\_\_\_ °F \_\_\_\_\_ Voltage (kV) \_\_\_\_\_

Maximum Reactive Power at Rated Power Leading (MVAR): \_\_\_\_\_

Minimum Reactive Power at Rated Power Lagging (MVAR): \_\_\_\_\_

Customer-Site Load: \_\_\_\_\_ MW

Existing load? Yes \_\_\_\_ No \_\_\_\_

If existing load with metered load data, provide coincident Summer peak load:

\_\_\_\_\_

If new load or existing load without metered load data, provide estimated coincident Summer peak load, together with supporting documentation for such estimated value:

\_\_\_\_\_

Typical Reactive Load: \_\_\_\_\_ MVAR

Generator manufacturer, model name & number: \_\_\_\_\_

Inverter manufacturer, model name, number, and version: \_\_\_\_\_

Nameplate Output Power Rating in MW:\* (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Nameplate Output Power Rating in MVA: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

\* The Nameplate Output Power Rating is at the inverter terminal for IBRs

**If solar**, total number of solar panels in solar farm to be interconnected pursuant to this CRIS-

Only Request: \_\_\_\_\_

Inverter manufacturer, model name, number, and version: \_\_\_\_\_

**If wind**, total number of generators in wind farm to be interconnected pursuant to this CRIS-

Only Request: \_\_\_\_\_

Generator Height: Single phase \_\_\_\_\_ Three Phase \_\_\_\_\_

Wind Model Type: \_\_\_\_ Type 1 \_\_\_\_ Type 2 \_\_\_\_ Type 3 \_\_\_\_ Type 4

**If an Energy Storage Resource or a Resource with Energy Duration Limitations:**

Inverter manufacturer, model name, number, and version: \_\_\_\_\_

Energy storage capability (MWh): \_\_\_\_\_

Minimum Duration for full discharge (*i.e.*, injection) (Hours): \_\_\_\_\_

Minimum Duration for full charge (*i.e.*, withdrawal) (Hours): \_\_\_\_\_

Maximum withdrawal from the system (*i.e.*, when charging) (MW): \_\_\_\_\_

Maximum sustained hour injection in MW hours (calculated at the Minimum Duration for full discharge): \_\_\_\_\_

Primary frequency response operating range for electric storage resource: \_\_\_\_\_

Minimum State of Charge: \_\_\_\_\_ (%)

Maximum State of Charge: \_\_\_\_\_ (%)

5. Attach modeling data files:\*

- Power Flow model \_\_\_\_\_
- Short circuit model \_\_\_\_\_
- Dynamic models \_\_\_\_\_

\* PSSE files must be in *.raw* or *.sav* and *.dyr* format. ASPEN files must be in *.olr* format.

**ADDITIONAL INFORMATION REQUESTED FOR CLUSTER STUDY**  
**TRANSMISSION PROJECTS**

Description of proposed project:

- a. General description of the equipment configuration and kV level:

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- b. Transmission technology and manufacturer (*e.g.*, HVDC VSC):

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#### 40.25.4 APPENDIX 4 TO ATTACHMENT HH

### PRE-APPLICATION REQUEST FORM

#### 1. Instructions

Pursuant to Section 40.4.2 of Attachment HH to the NYISO Open Access Transmission Tariff, a prospective Interconnection Customer (“Requestor”) may request a Pre-Application Report from the NYISO regarding the proposed interconnection of a Generating Facility or Cluster Study Transmission Project at a particular point on the New York State Transmission System or Distribution System. To request a Pre-Application Report, Requestor must complete and execute this request form and submit the form to the NYISO via the NYISO Interconnection Projects Portal, along with submitting a non-refundable fee of \$5,000. Requestor must provide a substantive answer to each of the questions in this request form and should not specify that the requested information is “to be determined” or “not available.” Requestor should direct any questions regarding the requested information and the completion of this form to:

Designated Contact Person:	Stakeholder Services IP Support Team
Telephone Number:	518-356-6060, Option#2
E-Mail Address:	<a href="mailto:stakeholder_services_ipsupport@nyiso.com">stakeholder_services_ipsupport@nyiso.com</a>

Requestor shall submit the fee electronically via wire transfer. Wiring instructions are provided in the NYISO Interconnection Projects Portal.

Upon its confirmation of a completed request form and its receipt of the required fee, the NYISO will send the request form to the relevant Connecting Transmission Owner for completion of the Pre-Application Report in the form set forth in Appendix A to this request form. The Connecting Transmission Owner shall complete this report to the extent readily available data exists. If the ISO, in consultation with the relevant Connecting Transmission Owner, determines that the interconnection, as proposed, does not appear to be subject to the NYISO’s interconnection procedures under the NYISO OATT, (1) the NYISO will inform the Requestor that its proposed interconnection is not subject to the NYISO’s interconnection procedures, and (2) the Connecting Transmission Owner will provide the Requestor with the Pre-Application Report set forth in Appendix A that is completed to the extent possible. The Pre-Application Report is non-binding and does not confer any rights or obligations.

Notwithstanding its request for a Pre-Application Report, a Requestor must still successfully complete the interconnection requirements set forth in Attachment HH to the NYISO OATT to interconnect to the New York State Transmission System or Distribution System, to the extent that the NYISO OATT is applicable to the proposed interconnection.

## 2. Project Overview

<b>Project Name:</b>		
<b>Requestor:</b>	Name:	
	Address:	
<b>Contact Person:</b>	Name:	
	Email:	
	Phone #:	
<b>Project Type</b>	(e.g., generation, transmission, combined resource)	
<b>Energy Source(s):</b>	(e.g. solar, wind, energy storage, etc.)	
<b>Nameplate Size:</b>	MW:	MVA:

For storage facility:

<b>Capacity (MWh):</b>	
<b>Max Charging (MWh/hr):</b>	
<b>Max Discharging (MWh/hr):</b>	
<b>Max aggregate injection (hybrid) (MWh/hr):</b>	

If combined resource, will storage charge from grid? (Yes/No): \_\_\_\_\_

Estimated Initial Backfeed Date: \_\_\_\_\_

## 3. Proposed POI and Project Location:

Connecting Transmission Owner (CTO), if known:

\_\_\_\_\_

Affected Transmission Owner(s), if known:

\_\_\_\_\_

### a. POI

<b>Station Name:</b>	
<b>Line Name:</b>	

POI Location (Decimal Lat / Long): \_\_\_\_\_

Expected POI Voltage (34.5 kV, 115 kV, etc): \_\_\_\_\_

☐ Conceptual or Breaker Level One Line Diagram Provided

### b. Project Location:

☐ Map identifying the location of project in relation to proposed POI (e.g., preliminary general layout, property boundaries, etc.)

**4. New or Existing Service:**

New Service Requested (yes or no): \_\_\_\_\_

If No, and there is existing service, provide:

Customer Account Number: \_\_\_\_\_

Site Load:

	<b>Minimum (kW)</b>	<b>Maximum (kW)</b>
<b>Current</b>		
<b>Proposed</b>		

If known, will the facility be used for the following:

- ☐ Net Metering
- ☐ To supply power only to the Requestor
- ☐ To supply power to others through wholesale sales over the New York State Transmission System or Distribution System.

**5. Additional Information:**

- ☐ Is the project an uprate to a project in the current Queue or an existing facility.

If yes, provide description:

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Additional Information or Comments:

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**6. Requestor Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Pre-Application Request Form is true and correct.

Requestor: \_\_\_\_\_ Date: \_\_\_\_\_

**APPENDIX A**  
**PRE-APPLICATION REPORT**

This Pre-Application Report has been completed based on readily available data. The information provided is preliminary and non-binding and does not confer any rights on the part of the Requestor or obligations on the part of the Connecting Transmission Owner. Information is provided based on applicability to the proposed Point(s) of Interconnection (“POI”).

**1. Project**

This Pre-Application Report is for the following proposed project:

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**2. Proposed POI**

**a. Transmission or Distribution Line**

Line Name	Utility Line Id Number	Bus Numbers and Circuit Id Number (PSS/e From/To)	Voltage (kV)

☐ FERC Jurisdictional Distribution

☐ Networked

☐ Radial

Ratings (MVA):

	Normal	LTE	STE
Summer			
Winter			

Terminal End Stations:

Name	Distance to POI (miles)

For a Generating Facility or Cluster Study Transmission Project and sub-transmission or distribution POIs:

Circuit Loading (MW):

<b>Peak</b>	
<b>Minimum</b>	

Generation (MW):

<b>Existing</b>	
<b>Proposed</b>	

Additional information (e.g., potential new substation bus configuration, transmission constraints, planned transmission upgrades, parallel lines, breaker rating, existing/known constraints):

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**b. Substation**

<b>Name</b>	<b>PSS/e Bus Number</b>	<b>Voltage (kV)</b>

☐ FERC Jurisdictional Distribution

Substation Connected Line Ratings (MVA):

<b>Line Information</b>		<b>Summer</b>			<b>Winter</b>		
<b>Line Name</b>	<b>Utility Line Id Number</b>	<b>Normal</b>	<b>LTE</b>	<b>STE</b>	<b>Normal</b>	<b>LTE</b>	<b>STE</b>

For a Generating Facility or Cluster Study Transmission Project and sub-transmission or distribution POIs:

Customer Load (MW):

<b>Peak</b>	
<b>Minimum</b>	

Generation (MW):

<b>Existing</b>	
<b>Proposed</b>	

Additional information (e.g., known physical feasibility issues, available breaker positions; planned transmission upgrades, breaker rating, existing/known constraints):

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Additional information:

- Known physical feasibility issues: \_\_\_\_\_
- Available breaker positions : \_\_\_\_\_
- Planned transmission upgrades: \_\_\_\_\_
- Breaker rating : \_\_\_\_\_
- Existing/known constraints) : \_\_\_\_\_

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#### 40.25.5 APPENDIX 5 TO ATTACHMENT HH

##### FACILITY MODIFICATION REQUEST

1. The undersigned Interconnection Customer submits this request to modify: (i) an Interconnection Request for a Facility currently in the NYISO's Queue or (ii) an existing Facility that (a) is currently in commercial operation or (b) has an executed interconnection agreement.

2. Queue Position or PTID No. (if applicable): \_\_\_\_\_

Project/Facility Name: \_\_\_\_\_

3. Nature of proposed modification (check all that apply):

\_\_\_ Change in Project name

\_\_\_ Change in Interconnection Customer name

\_\_\_ Change in Point of Interconnection pursuant to Section 40.6.3.1 of Attachment HH

\_\_\_ Change in Electric Output (MW) of the Facility

\_\_\_ Modification of Technical Parameters of Facility's Technology and Transformer Impedances

\_\_\_ Modification to Interconnection Configuration

\_\_\_ Technological Change or Advancement

\_\_\_ Extension of Commercial Operation Date

\_\_\_ Other Modification Not Listed Above

4. Description of proposed modification:

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5. Submit a \$10,000 study deposit (except for a requested modification for a project name change, Interconnection Customer name change, change to Point of Interconnection pursuant to Section 40.6.3.1 of Attachment HH, or a permitted extension of a Commercial Operation Date pursuant to Section 40.6.3.4 of Attachment HH).

6. Attach a revised conceptual breaker one-line diagram and a project location geo map, as applicable, including for a proposed change to a Point of Interconnection.
7. If the modification is a decrease in the facility capacity or requested interconnection service, provide an explanation for the decrease, including a description of the injection-limiting equipment with all the necessary parameters of such equipment, as applicable:

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8. Proposed modification to an Interconnection Request due to a technological advancement, which includes advancements to turbines, inverters, or plant supervisory controls or other similar advancements to the existing technology proposed in the Interconnection Request

- a. If the modification is due to a technological advancement to the technology originally proposed, detail the proposed configuration of the technological advancement and the manner of installation:

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- b. Provide the parameters associated with the proposed technological advancement:

Parameter	Before Application of Proposed Technological Advancement	After Application of Proposed Technological Advancement
Total Project MVA		
MVA/Unit		
Subtransient Impedance ( $R'' + jX''$ ) or equivalent fault current limit for inverter-based technology		
Total Project MW		
MW/Unit		
Total Project MVA <sub>r</sub> Capability		

Mvar Capability/Unit		
Unit kV		
Total Project Power Factor		
Unit Power Factor		
Unit Dynamic Model		
Associated Device(s) Dynamic Model		
Any applicable parameter that will change		
Total Project Single Line Diagram		

- c. If any of the above parameters would change due to the proposed technological advancement, demonstrate that the proposed incorporation of the technological advancement would result in electrical performance that is equal to or better than the electrical performance expected prior to the technology change and not cause any reliability concerns (*i.e.*, not have a material adverse impact on the transmission system with regard to short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability and response). Provide support, including any completed studies, that demonstrate that the technological advancement is permissible and/or non-material under Section 40.6.3.7 of Attachment HH to the OATT.

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9. For a change to the Commercial Operation Date (COD) of the proposed Facility, provide the following:

- a. Original Proposed Commercial Operation Date (Month/Year): \_\_\_\_\_
- b. Revised Proposed Commercial Operation Date (Month/Year): \_\_\_\_\_
- c. For a proposed change five (5) years or more beyond the date for extending the Commercial Operation Date permitted by Section 40.6.3.4 to Attachment HH), Interconnection Customer shall indicate that it is requesting an extension (by checking):

\_\_\_\_\_ on or before May 2, 2028; or

\_\_\_\_\_ through demonstration of reasonable progress.

The Interconnection Customer shall attach, if applicable, an officer certification and

supporting documentation making the demonstrations required in Section 40.6.3.5.1.2 of Attachment HH to the OATT for its requested extension.

The Interconnection Customer shall also attach the milestone schedule agreed upon with the Connecting Transmission Owner that meets the requested extended Commercial Operation Date.

10. As it relates to the requested modification of an Interconnection Request or an existing facility, provide any updates to data required in the Interconnection Request – “Detailed Generating Facility Data” or provided during completed stages of the interconnection study process.

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Attach modeling data files<sup>1</sup>:

- Power flow model
- Short circuit model
- Dynamic model

11. The NYISO, in consultation with the Connecting Transmission Owner(s), may request additional information, if necessary, to further assess the proposed modification.

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<sup>1</sup> PSSE files require in .raw or ,sav and .dyr format. ASPEN files are required as .olr format.

**Attachment A to Appendix 5 –FACILITY MODIFICATION REQUEST**  
**Terms and Conditions of a Facility Modification Request**

These terms and conditions for the review and/or study of a request to modify a proposed Generating Facility, Cluster Study Transmission Project, or Class Year Transmission Project or a material modification to an existing Generating Facility, Cluster Study Transmission Project, or Class Year Transmission Project consistent with the Interconnection Request dated \_\_\_\_\_ (“Studies”), including any project modifications reviewed and approved by the NYISO, (“the Project”) and submitted by \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer”), set forth the respective obligations between Interconnection Customer and the New York Independent System Operator, Inc., a not-for-profit corporation organized and existing under the laws of the State of New York (“NYISO”) (hereinafter the “Terms and Conditions”). By signing below, Interconnection Customer confirms its understanding and acceptance of the Terms and Conditions.

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop the Project; and

**WHEREAS**, Interconnection Customer requests NYISO to evaluate whether the proposed modification to its [Generating Facility, Cluster Study Transmission Project, or Class Year Transmission Project/proposing a capacity addition to an existing Generating Facility, Cluster Study Transmission Project, or Class Year Transmission Project] set forth in the Facility Modification Request would constitute a Material Modification and/or a Permissible Technological Advancement, as applicable, under Attachment HH to the NYISO’s Open Access Transmission Tariff (“OATT”).

**NOW, THEREFORE**, in consideration of and subject to the terms and conditions contained herein, Interconnection Customer and NYISO agree as follows:

- 1.0 When used in these Terms and Conditions, with initial capitalization, the terms specified shall have the meanings indicated in Section 40.1 of Attachment HH to the ISO OATT.
- 2.0 Interconnection Customer requests NYISO to evaluate whether the proposed modification would constitute a Material Modification and/or a Permissible Technical Advancement, as applicable, and if an additional study(ies) is required pursuant to Section 40.6.3.2 and/or Section 40.6.3.7 of Attachment HH to the OATT, NYISO shall perform, or cause to be performed, a study(ies) consistent with Attachment HH to the OATT.
- 3.0 The scope of the study(ies) shall be subject to the description and assumptions set forth in the Facility Modification Request and the data contained therein or provided upon the request of the NYISO.
- 4.0 For requested modifications other than a technological advancement, the NYISO shall commence any necessary additional studies as soon as practicable, but in no event later

than thirty (30) Calendar Days after receiving the Facility Modification Request, study deposit, and all necessary data, except as otherwise indicated in Section 40.6.3.2 to Attachment HH. NYISO shall provide a determination of whether the modifications proposed in the Facility Modification Request would constitute a Material Modification for purposes of Section 40.6.3.3 of Attachment HH to the OATT.

- 5.0 Interconnection Customer shall provide a deposit of \$10,000 with the Facility Modification Request, except for a requested modification for a project name change, Interconnection Customer name change, change to Point of Interconnection pursuant to Section 40.6.3.1 of Attachment HH, or a permitted extension of a Commercial Operation Date pursuant to Section 40.6.3.4 of Attachment HH.
- 6.0 Interconnection Customer shall be responsible for the actual costs incurred by NYISO and any subcontractor hired to perform study work, as computed on a time and materials basis in accordance with the rates provided to the Interconnection Customer at the time that the NYISO notifies the Interconnection Customer that a study(ies) is required to complete its Facility Modification Request. The ISO shall invoice the Interconnection Customer, and Interconnection Customer shall pay the invoiced amounts, in accordance with the requirements in Section 40.24.3 of Attachment HH to the ISO OATT. NYISO shall continue to hold any amounts on deposit, if applicable, until settlement of the final invoice in accordance with the requirements in Section 40.24.3 of Attachment HH.
- 7.0 Miscellaneous.
  - 7.1 Accuracy of Information. Except as Interconnection Customer may otherwise specify in writing when it provides information to NYISO under these Terms and Conditions, Interconnection Customer represents and warrants that the information it provides to NYISO shall be accurate and complete as of the date the information is provided. Interconnection Customer shall promptly provide NYISO with any additional information needed to update information previously provided to the extent permitted by Attachment HH to the ISO OATT.
  - 7.2 Disclaimer of Warranty. In preparing the Studies, NYISO and any subcontractor consultants hired by it shall have to rely on information provided by Interconnection Customer, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, neither NYISO nor any subcontractor consultant hired by NYISO makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy, content, or conclusions of the Studies performed under these Terms and Conditions. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
  - 7.3 Limitation of Liability. The NYISO or any subcontractor consultants engaged by

the NYISO shall not be liable for direct damages, including money damages or other compensation, for actions or omissions by the NYISO or a subcontractor consultant in performing its obligations under this Agreement, except to the extent such act or omission by the NYISO or a subcontractor consultant is found to result from its gross negligence or willful misconduct. In no event shall NYISO or its subcontractor consultants be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, arising under or in connection with these Terms and Conditions or the Studies performed or any reliance on the Studies by Interconnection Customer or third parties, even if NYISO or its subcontractor consultants have been advised of the possibility of such damages. Nor shall any NYISO or its subcontractor consultants be liable for any delay in delivery or for the non-performance or delay in performance of its obligations under these Terms and Conditions, except as otherwise set forth in Attachment HH to the ISO OATT.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 under these Terms and Conditions, Interconnection Customer further agrees that subcontractor consultants hired by NYISO to conduct or review, or to assist in the conducting or reviewing, the study(ies) requested under the Facility Modification Request shall be deemed third-party beneficiaries of these Sections 7.2 and 7.3 under these Terms and Conditions.
- 7.5 Term and Termination. The obligations to conduct the Studies and under these Terms and Conditions shall be effective from the date hereof and, unless earlier terminated under these Terms and Conditions, shall continue in effect until the Study(ies) is completed or Interconnection Customer provides a written request to withdraw its Facility Modification Request. Interconnection Customer or NYISO also may terminate their obligations under these Terms and Conditions upon the withdrawal of Interconnection Customer's Interconnection Request under Section 40.6.4 of Attachment HH.
- 7.6 Governing Law. These Terms and Conditions and any study performed thereunder shall be governed by and construed in accordance with the laws of the State of New York, without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of these Terms and Conditions are deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from these Terms and Conditions and the obligations under these Terms and Conditions shall continue in full force and effect as if each part was not contained herein.
- 7.8 Amendment. No amendment, modification, or waiver of any term or condition hereof shall be effective unless set forth in writing and signed by Interconnection Customer and NYISO hereto.
- 7.9 Survival. All warranties, limitations of liability, and confidentiality provisions provided herein shall survive the expiration or termination hereof.

- 7.10 Independent Contractor. Interconnection Customer agrees that NYISO shall at all times be deemed to be an independent contractor and none of its employees or the employees of its subcontractors shall be considered to be employees of Interconnection Customer as a result of performing any work under these Terms and Conditions.
- 7.11 No Implied Waivers. The failure of Interconnection Customer or NYISO to insist upon or enforce strict performance of any of the provisions of these Terms and Conditions shall not be construed as a waiver or relinquishment to any extent of such party's right to insist or rely on any such provision, rights, and remedies in that or any other instances; rather, the same shall be and remain in full force and effect.
- 7.12 Successors and Assigns. The obligations under these Terms and Conditions, and each and every term and condition hereof, shall be binding upon and inure to the benefit of Interconnection Customer and NYISO and their respective successors and assigns.

**IN WITNESS THEREOF**, Interconnection Customer has agreed to accept and be bound by the Terms and Conditions by its duly authorized officers or agents execution on the day and year first below written.

\_\_\_\_\_  
**[Insert name of Interconnection Customer]**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_