

#### **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 [\*].

**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, 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].

**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 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 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, applied when conducting the Cluster Baseline Assessment and the Cluster Project Assessment; 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.

**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 or Interconnection Customer; described in Section [40.2.6] of this Attachment HH.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Standard Interconnection Agreement, Standard Upgrade Construction Agreement, or Multiparty Standard Upgrade Construction Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Standard Interconnection Agreement, Standard Upgrade Construction Agreement, or Multiparty Standard Upgrade Construction Agreement.

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

**Byway** shall mean all transmission facilities comprising the New York State Transmission System that are neither Highways nor 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 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 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 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 include 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 [\*] 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 [\*] to this Attachment HH.

**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.

**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 or Distribution Upgrade 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.

**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 [\*] 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.

**Default** shall mean the failure of a Party in Breach of the Standard Interconnection Agreement, Standard Upgrade Construction Agreement, or Multiparty Standard Upgrade Construction Agreement to cure such Breach.

**Deliverable MW** shall have the meaning set forth in Section [40.15.1] 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 Resource Interconnection Service (“ERIS”)** shall mean the service provided by the ISO to interconnect the Interconnection Customer’s 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** shall mean a study conducted by the ISO or a third party consultant 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.

**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-to-ROS Deliverability Rights** shall mean 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 [\*] to this Attachment HH.

**Fast Track Process** shall mean the procedure for evaluating an Interconnection Request for a certified Generating Facility that is 20 MW or smaller and 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.



**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, but shall not include: the Developer'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 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 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.

**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 Feedback 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 Feedback 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.

**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.

**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 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 adverse 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.

**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.

**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, fund or commit to fund 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.

**Other Interfaces** shall mean the following interfaces into 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)], and 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.

**Overage Cost** shall mean the dollar amount by which the total cost of System Upgrade Facilities or Distribution 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 or Distribution Upgrades 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 [40.5.3.1] 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 Entry Decision Period** 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 [40.7.1.5] to this Attachment HH.

**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 Entry Decision Period** 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.

**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 reliable interconnection with the 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,

**Physical Infeasibility** 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.



**Project:** The proposed facility as described in a single Interconnection 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 [Studies] 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 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.

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

**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.

**Queue** shall mean the list of: (i) projects that possess a valid 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, 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 have the meaning 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 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 Decision Period, as required by this Attachment HH.

**Site Control** shall mean the exclusive land right sufficient to develop, construct, operate, and maintain the Generating Facility over a term of at least ten (10) years. 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 Generating Facility; (2) an option to purchase or acquire a leasehold site of sufficient size to construct and operate the Generating 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 Generating Facility.. The term “exclusive land right” does not restrict multi-use applications of the site in addition to its use for the Generating 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 and the following conditions are met: (1) a Local System Upgrade Facility must only be required for a single Interconnection Customer in the Cluster and no other Interconnection Customer in that Cluster is required to interconnect to the same Local System Upgrade Facility, and (2) a System Upgrade Facility must only be required for a single Interconnection Customer in the Cluster. 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) Calendar Days of its determination.

**Standard Interconnection Procedures (“Interconnection Procedures” or “IP”)** shall mean the interconnection procedures applicable to an Interconnection 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 [\*] 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 [\*] to this Attachment HH that is made, as applicable, among (i) the ISO, (ii) the Affected System Operator or Affected Transmission Owner, or (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 Network Upgrade Facilities on the New York State Transmission System or Distribution System.

**Standard Multiparty Upgrade Construction Agreement** shall mean the agreement contained in Appendix [\*] 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 Network Upgrade Facilities 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 Period** 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 and 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 in accordance with Section [40.9.5.1]; 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.

**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 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 April 4, 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.

### **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 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, and timely cures any deficiencies identified by the ISO, the Interconnection Request or CRIS-Only Request will be a Cluster Study Project included in the Cluster for that Cluster Study Process.

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

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

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

The ISO will then perform the Phase 2 Study as set forth in Section [40.11]. The ISO will perform assessments built on the Cluster Baseline Assessment and Cluster Project Assessment system representation models 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 reliable interconnection with the 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.

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 [40.18.2.1], 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.

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 Standard Interconnection Procedures also apply to Transmission Projects initially evaluated pursuant to Attachment P to the ISO OATT that have submitted a Transmission Interconnection Application and application fee in accordance with Attachment P to the ISO OATT and that elect to transition to the Standard Interconnection Procedures in order to request CRIS.

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 that is 20 MW or smaller (see Appendices [\*] and [\*] 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 [\*] 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 or 40.2.4.2.2.

##### **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.

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

Nothing in these rules 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.

#### **40.2.11 Inclusion of Black Start Capability at Large Generating Facility**

A Developer proposing, pursuant to this Attachment X, to interconnect a new Large Generating Facility to Zone J or to modify – i.e., materially increase (as defined in Section 30.3.1 of this Attachment X) the capacity of or make a material modification to the operating characteristics of – an existing Large Generating Facility already interconnected to Zone J that will commence Commercial Operation after November 1, 2012, shall include black start capability at the Large Generating Facility; provided, however, the Large 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 Large Generating Facility would not provide a material benefit to system restoration in Zone J, or (ii) the Developer has shown good cause for not including black start

capability at the Large Generating Facility, or

- (B) as of November 1, 2012, the Large 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 Large 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 Interconnection System Reliability Impact Study a separate study to examine whether a new or modified Large Generating Facility would provide a material benefit to system restoration as a black start resource. If requested by the Developer, Consolidated Edison shall perform this separate study contemporaneously with the earlier Optional Interconnection Feasibility Study. 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 the Developer'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 Large Generating Facility having black start capability. Consolidated Edison will provide its study to the ISO and to the Developer(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 a Developer asserts that good cause exists for not including black start capability at a new or modified Large 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 Large 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 Developer to secure financing at commercially competitive terms; or (iii) the inclusion of black start capability would prevent the Developer 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. The Developer will provide a study to the ISO and Consolidated Edison that supports its claim under this section, subject to appropriate confidentiality protections. The Developer 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 Large 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.

### **40.3 Transition Procedures**

#### **40.3.1 Transition Procedures for Interconnection Requests and CRIS-Only Requests Submitted Prior to the Effective Date of Standard Interconnection Procedures**

Upon the effective date of the Standard Interconnection Procedures, the ISO shall withdraw from the Queue all existing Interconnection Requests for Large Generating Facilities, Class Year Transmission Projects, Small Generating Facilities, or Class Year Projects and cease its evaluation of all existing CRIS-Only Requests for Class Year Projects that were submitted prior to the effective date of the Standard Interconnection Procedures pursuant to, as applicable, the Standard Large Facility Interconnection Procedures in Attachment X of the ISO OATT or the Standard Small Generator Interconnection Procedures in Attachment Z of the ISO OATT, except as provided for in the transition requirements set forth in Sections [40.3.1.1] – [\*].

40.3.1.1 The ISO shall retain the Queue Position of a Large Facility or a Small Generating Facility that, as of the effective date of the Standard Interconnection Procedures, (i) has an executed interconnection agreement or an unexecuted interconnection agreement accepted by the Commission, but (ii) has not yet entered Commercial Operation.

40.3.1.2 The ISO shall retain the Queue Position of a Class Year Project or Small Generating Facility that, as of the effective date of the Standard Interconnection Procedures: (A) has either participated in the Class Year Interconnection Facilities Study for Class Year 2021 or a prior Class Year Interconnection Facilities Study or completed a Small Generator facilities study, (B) has either accepted at the conclusion of the Class Year Interconnection Facilities Study its Project Cost Allocation and paid cash or posted Security for its allocated amount or satisfied the requirements of Section 32.3.5.7.1 of Attachment Z to the OATT at the conclusion of Its Small Generator facilities study applicable to the cost allocation for its identified Interconnection Facilities and Upgrades, and (C) is negotiating an interconnection

agreement for the Class Year Project or Small Generating Facility or has requested that such interconnection agreement be filed unexecuted with the Commission. For a Class Year Project for Class Year 2021 or prior Class Years or a Small Generating Facility for which the ISO is negotiating with the Interconnection Customer, Connecting Transmission Owner, Affected System Operator, and/or Affected Transmission Owner, as applicable, an interconnection agreement and/or Engineering, Procurement, or Construction Agreement(s) as of the effective date of the Standard Interconnection Procedures, the parties shall continue to negotiate, as applicable, the Standard Large Generator Interconnection Agreement, Small Generator Interconnection Agreement, and/or Engineering, Procurement, or Construction Agreement pursuant to the terms and forms set forth, as applicable, in Attachment X or Attachment Z to the ISO OATT.

40.3.1.3 The ISO shall retain the Queue Position of a Class Year Project participating in the Class Year Study for Class Year 2023. The ISO shall complete the Class Year Interconnection Facilities Study for Class Year 2023, including invoicing study costs and reconciling final payments and any deposit refunds, pursuant to the requirements for a Class Year Study set forth in Attachments X and S to the ISO OATT. Notwithstanding the requirements in Section 30.11.1 of Attachment X and Section 25.6.2.3.2 of Attachment S to the ISO OATT, a Class Year Project that satisfied the regulatory milestone requirement to enter Class Year 2023 by submitting a qualifying contract or deposit shall not be subject to withdrawal from the Queue if it has not satisfied the applicable regulatory milestone within six (6) months after the date the ISO tenders its draft interconnection agreement. If: (i) the Class Year Project withdraws, or is deemed withdrawn, prior to the completion of Class Year 2023, or (ii) a Class Year Project does not accept its Project Cost Allocation or does not pay

cash or post Security for its allocated amount as determined in Class Year 2023, the Interconnection Request shall be withdrawn from the Queue. If a Class Year Project accepts its Project Cost Allocation and pays cash or posts Security for its allocated amount in Class Year 2023, the ISO shall tender to the Interconnection Customer as soon as practicable following the completion of the Class Year Study a Standard Interconnection Agreement and any required Standard Upgrade Construction Agreement or Multiparty Standard Upgrade Construction Agreement in accordance with the requirements in Section [40.21] to this Attachment HH. If the Interconnection Customer requests tender of an interconnection agreement prior to the completion of the Class Year Study pursuant to the requirements in Section 30.11.3 of Attachment X to the OATT, the ISO will tender the Standard Interconnection Agreement to the Interconnection Customer.

40.3.1.[\*] [\*]

40.3.1.[\*] If the ISO commenced a system impact study of the Affected System impacts on the New York State Transmission System of a generation project that is interconnecting to another region's transmission system that is not completed prior to the effective date of the Standard Interconnection Procedures, the ISO shall complete the study in accordance with the agreed upon terms of such study. If the study identifies upgrades are required on the New York State Transmission System, the developer may submit a Transmission Interconnection Application for the upgrade in accordance with the requirements in Attachment P to the ISO OATT and ISO Procedures.

40.3.1.[\*] All projects that remain in the Queue following the effective date of the Standard Interconnection Procedures in accordance with the transition requirements in this

Section [40.3.1] shall be subject to the requirements in this Attachment HH to the ISO OATT except as otherwise indicated in this Section [40.3.1].

#### **40.3.2 New Transmission Provider**

If the ISO transfers its control of the New York State Transmission System to a successor transmission provider during the period when an Interconnection Request is pending, the ISO shall transfer to the successor transmission provider any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by these Standard Interconnection Procedures shall be paid by or refunded to the Interconnection Customer, as appropriate. The ISO shall coordinate with the successor transmission provider to complete any Interconnection Request (including Interconnection Studies), as appropriate, that the ISO has begun but has not completed. If the ISO has tendered a draft Standard Interconnection Agreement to the Interconnection Customer but the Interconnection Customer has not either executed that interconnection agreement or requested the filing of an unexecuted Standard Interconnection Agreement with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the successor transmission provider.

#### **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; (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 Energy 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 Facility or Cluster Study Transmission Facility (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 [\*] to this Attachment HH, and (ii) a non-refundable pre-application fee of \$5,000 in cash for each point of interconnection, 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 up to two points 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 and any Affected Transmission Owner(s) as follows: 25% to the ISO and 75% to the Connecting Transmission Owner and any Affected Transmission Owner(s), which 75% will be allocated by the Connecting Transmission Owner and any Affected Transmission Owner(s) among themselves.

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 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 [\*] 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 does not appear to be subject to the ISO's Standard Interconnection Procedures, the Connecting Transmission Owner 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 July 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 determined 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 schedule for the next Cluster Study Process, including the Cluster Study Process Start Date, which shall be consistent with the following requirements:

(i) the Phase 1 Study Start Date of the next Cluster Study Process will be the first Business Day after eighty (80) Calendar Days following the scheduled date for the Operating Committee's approval of the Cluster Study Report, and

(ii) the ISO will then set the Cluster Study Process Start Date, the date for commencing the Customer Engagement Window, and the date for commencing the Phase 1 Entry Decision Period for that next Cluster Study Process by working backwards from the Phase 1 Study Start 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.

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*, the period shall be a one hundred five (105) 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 an Interconnection Customer's 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 the 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.

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 the Final Decision Round of the applicable Class Year Study or 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 in the new Cluster Study Process and shall be subject to all of the same requirements in the Cluster Study Process as any other project, including the option to withdraw and any Withdrawal Penalties.

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 the Final Decision Round of the later of the applicable Class Year Study, 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 or does not accept the cost allocation or Deliverable MWs described in subpart (i), then the Contingent Project shall

continue 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 the option to withdraw and any Withdrawal Penalties.

40.5.4.1.3.3 If the Pending Project is a Class Year Project or 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 the Final Decision Round of the later of the applicable Class Year Study, 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 Class Year Study, 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 in the new Cluster Study Process and shall be subject to all of the same requirements in the Cluster Study Process as any other project, including the option to withdraw and any Withdrawal Penalties, or

(iii) if the Interconnection Customer accepts the cost allocation for ERIS as described in subpart (i), but does not accept the SDU Project Cost Allocation or



the Deliverable MWs required for the fully requested CRIS amount described in subpart (i), 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 for, any Study Deposit amount, Readiness Deposit(s), and Site Control Deposit that the Interconnection Customer provided for the Contingent Project that is 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 an 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 in the new Cluster Study Process and be subject to all of the same requirements in the Cluster Study Process as any other project, including the option to withdraw and any Withdrawal Penalties.

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

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 the form of 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 the form of Appendix [\*] to these Standard Interconnection Procedures.

40.5.5.1.2 A Cluster Study Agreement in the form of Appendix [\*] to these Standard Interconnection Procedures executed by the Interconnection Customer.

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; *provided, further*, that the Interconnection Customer shall not be required to provide the Application Fee if the Facility is a Merchant Transmission Facility that was initially evaluated pursuant to Attachment P to the OATT, submitted a Transmission Interconnection Application and application fee in accordance with Attachment P to the OATT, and elects to transition to the Standard Interconnection Procedures in order to request CRIS to the extent permitted by Section 22.3.2 of Attachment P to the ISO OATT. 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 ERIS 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 must demonstrate with its Interconnection Request full Site Control of the Facility consistent with the acreage and other parameters for the Facility's technology type set forth in ISO Procedures; *provided, however*, that, 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 provide an attestation 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 Study 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 attestations required by NYSRC Reliability Rule B.5 in the form set forth in ISO Procedures.

40.5.5.1.9 Interconnection Customer must submit with the Interconnection Request any Connecting Transmission Owner and/or Affected Transmission Owner requested technical information for purposes of Connecting Transmission Owner's and/or Affected Transmission Owner's performance of the Phase 1 Study,

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 propose mutually exclusive Cluster Study Projects with prior projects in the Queue or projects proposed 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 secure the necessary regulatory approvals from the applicable federal, state, 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 ten (10) 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 may submit separate Interconnection Requests or a single Interconnection Request; *provided however*, a multi-unit Facility can only be evaluated under a single Interconnection Request if (1) the Facility is proposed by a single Interconnection Customer; (2) the individual Generators comprising the Facility are co-located behind the same Point of Interconnection; and (3) units in the Facility propose to interconnect at two Points of Interconnection within the same Capacity Region. 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 ERIS for the Facility, such ERIS to be allocated among the multiple Generators comprising the Facility as requested by Interconnection Customer in its Interconnection Request; *provided however*, the requested allocation for ERIS for the Intermittent Power Resource in a Co-located Storage Resource cannot exceed the Point of Injection limit plus the full withdrawal capability of the Energy Storage Resource. 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**

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*, 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**

- (iv) 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 Developer-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 or single technology facility with multiple units, each proposed to be assigned a single PTID), 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, 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 Distributed Energy Resource, the entire Co-located Storage Resource or the entire multi-unit single technology resource); *provided, however*, if the Project includes a Resource with Energy Duration Limitation, its expected maximum injection capability in MW is limited by the Developer-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 or Distributed Energy Resource) cannot exceed the injection limit of the co-located units. For a Facility that requests CRIS for part of a multi-unit facility, after combining with another existing or proposed co-located facility, the requested MW level of CRIS cannot exceed the permissible levels of CRIS

that may have been requested pursuant to this Section [40.5.6.5] for the entire 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*, 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 Resources 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, 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, or Section 40.18.2.5 of Attachment S 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**

##### **40.5.7.1 Acknowledgment and Assessment of Interconnection Request**

40.5.7.1.1 Within five (5) 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 request and attach a copy of the received Interconnection Request or CRIS-Only Request to the acknowledgement it returns to Interconnection Customer;
- (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 the ISO will not review for deficiencies any Connecting Transmission Owner-specific information submitted by the Interconnection Customer pursuant to Section [40.5.5.1.9], which information will be reviewed by the applicable Connecting 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) forward a copy of the Interconnection Request or the CRIS-Only Request and its acknowledgement to the Connecting Transmission Owner(s) and any 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; *provided, however*, that any



Interconnection Request that is submitted for a proposed project subject to the ISO's competitive selection process in the ISO's Comprehensive System Planning Process in Attachment Y to the ISO OATT shall not be forwarded to the Connecting Transmission Owner(s) or Affected Transmission Owner(s) until the close of the applicable solicitation window;

(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 If the ISO determines that the Interconnection Request or CRIS-Only Request is valid, the ISO will provide Interconnection Customer with a fully executed version of the Cluster Study Agreement.

#### **40.5.7.2 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: (i) all items in Section [40.5.5] have been received and confirmed by the ISO, except for any Connecting Transmission Owner-specific information submitted by the Interconnection Customer pursuant to Section [40.5.5.1.9], [and (ii) the applicable solicitation window has closed for any Interconnection Request that is submitted for a proposed project subject to the ISO's competitive selection process in the ISO's Comprehensive System Planning Process in Attachment Y to the ISO OATT.] 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. [However, for any Interconnection Request that is submitted for a proposed project subject to the ISO's competitive selection process in the ISO's Comprehensive System Planning Process in Attachment Y to the ISO OATT and that fails to meet the requirements set forth in Section 22.4.2.1, the ISO shall notify the Interconnection Customer and the Connecting Transmission Owner(s) no later than ten (10) Business Days following the close of the applicable solicitation window.]

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 Transmission Cluster Study), the ISO will review the Interconnection Customer's submitted information and, if it determine 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; *provided, however,* for any Interconnection Request that is submitted for a proposed project subject to the ISO's competitive selection process in the ISO's Comprehensive System Planning Process in Attachment Y of the ISO OATT, such information will not be forwarded to the Connecting

Transmission Owner(s) [and Affected Transmission Owner(s)] until the close of the applicable solicitation window.

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. 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 the cure period provided in Section [40.6.4]).

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

40.5.7.3.1 For any Connecting Transmission Owner or Affected Transmission Owner-specific information requests in the Interconnection Request, the Transmission Owner shall review Interconnection Customer's submission of this information pursuant to Section [40.5.5.1.9] and shall identify any deficiencies within fourteen (14) Calendar Days of the ISO's validation of an Interconnection Customer's Interconnection Request and within ten (10) Calendar Days of any additional information submission by Interconnection Customers pursuant to Section [40.5.7.3.2]. The Transmission Owner's review of this information request is separate from the ISO's review of the validity of the Interconnection Request.

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

40.5.7.3.3 If Interconnection Customer does not cure a deficiency in the Transmission Owner-specific information prior to five (5) Business Days of the conclusion of the Customer Engagement Window, the Interconnection Request shall be withdrawn pursuant to Section [40.6.4] (without the cure period provided in Section [40.6.4]).

#### **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 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 10 Business Days of the information request. If: (i) Interconnection Customer 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 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. The list will identify, for each Interconnection Request: (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 Feedback Date, Synchronization Date and Commercial Operation Date; (v) the status of the Interconnection Request, including Queue

Position; (vi) the identity of the Interconnection Customer; (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); 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. The ISO shall post to its OASIS site any deviations from the study timelines set forth herein. 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's 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 such entity: (i) 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 cancel any remaining letter of credit 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 [\*] 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..

Except as otherwise provided in Section [40.6.3.1], an Interconnection Customer cannot request a modification to the information provided in its Interconnection Request or CRIS-Only Request for its Cluster Study Project during the Application Window 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 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]. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost.



**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 the proposed Commercial Operation Date is within four (4) years from the following date:

**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] Such request will not be a Material Modification only if the ISO determines that the requirements in Sections [40.6.3.5.1, 40.6.3.5.2, and 40.6.3.5.3] have been met:

- 40.6.3.5.1 Interconnection Customer must demonstrate (via an Officer certification) that it has made reasonable progress in the development of its project against milestones set forth in the Interconnection Agreement or Section [40.6.3.5.2](*e.g.*, completion of engineering design, major equipment orders, commencement and continuation of construction of the Facility and associated Attachment Facilities, Distribution Upgrades, or System Upgrade Facilities, as applicable).
- 40.6.3.5.2 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 that meets the requested extended Commercial Operation Date. The Connecting Transmission Owner's agreement to the revised milestone schedule cannot be unreasonably withheld.
- 40.6.3.5.3 The ISO, in consultation with the Connecting Transmission Owner or Affected Transmission Owner, has determined that: (i) a Cost Estimate Update is not required to update the cost estimates of the Connecting 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 agrees 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, any 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 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, 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 Attachment Facilities, Distribution Upgrades, or System Upgrade Facilities

identified in the Small Generator facilities study, Class Year Study, or Cluster Study for the Facility.

40.6.3.5.3.3 If the Cost Estimate Update identifies revised cost estimates, the Interconnection Customer will only be permitted to proceed with its requested Commercial Operation Date extension if it accepts within ten (10) Business Days of the conclusion of the re-study its cost allocation for, and provides cash or posts Security to, the Connecting Transmission Owner for, the revised cost estimates. In such case, the updated cost estimates will be included in the interconnection agreement for the project. If the project has an effective interconnection agreement, the parties will amend the agreement to include this information. 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].

**40.6.3.6** As soon as it becomes apparent to Interconnection Customer that the most recent proposed Initial Feedback Date posted on the Queue is infeasible, and also prior to the expiration of the proposed Initial Feedback Date posted on the ISO Queue, Interconnection Customer is obligated to provide the ISO with notice of any proposed extensions of proposed Initial Feedback 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.

**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. 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 [\*] 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:

(i) for a failure to timely make a payment or submit or maintain a deposit required by Attachment HH, an Interconnection Customer shall have a ten (10) Business Day cure period to submit payment or deposit in an acceptable form to the ISO, and

(ii) the cure period set forth in this Section [40.6.4.1] does not extend 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 or in Section [40.5.7.3.3] for an Interconnection Customer to cure a deficiency in its submission of the required Connecting Transmission Owner-specific information..

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 incur 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 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, (ii) invoice Interconnection Customer for remaining study costs and any Withdrawal Penalties applicable to Interconnection Requests submitted in a Cluster Study Process; and (iii) after Interconnection Customer has paid all invoices, upon Interconnection Customer's request, refund to the Interconnection Customer any refundable cash portion of the Interconnection Customer's Study Deposit and Readiness Deposit(s) or cancel any remaining letter of credit provided as a deposit. The ISO shall also refund to the Interconnection Customer the refundable cash portion of the Interconnection Customer's Site Control Deposit, if applicable, or cancel any remaining letter of credit provided as a deposit.

40.6.4.4 In the event of such withdrawal, the ISO and Connecting Transmission Owner, subject to the confidentiality provisions of Section [40.24.1], shall provide, at Interconnection Customer's request, all information that the ISO and Connecting Transmission Owner developed for any completed 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, 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, 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 withdrawn 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 withdrawn at or before the completion of the later of: (i) the Phase 2 Study or (ii) the Additional SDU Study for that Cluster Study Process.

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 that accepted their Deliverable MW or Project Cost Allocation and paid cash or posted Security (if any required) for any System Deliverability Upgrades ("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 Phase 2 Study or Additional SDU Study 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 withdrawn 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/ Phase 1 Entry Decision Period**

### **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; *provided, however*, the period shall be a ninety (90) Calendar Day period for the Transition Cluster Study Process.

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 for that Cluster. The list shall identify for each Interconnection Request: (1) the requested amount of Energy Resource Interconnection Service and/ Capacity Resource Interconnection Service; (2) the location by county and state; (3) the station or transmission line or lines of the requested Point of Interconnection; (4) the projected Initial Feedback 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, or storage; (7) the number of proposed generator leads; and (8) Queue Position.

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, 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 Form set forth in Appendix [\*]. 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 in connection with the proposed

interconnection of a Cluster Study Project (except for CRIS-Only Cluster Study Projects) pursuant to Section [40.5.7.1.1] 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, or (b) adjacent usable vacant land is not available, or (c) proposals by Interconnection Customer are inconsistent with Good Utility Practice or Applicable Reliability Requirements; or
- (2) 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
- (3) (i) the project capacity exceeds the ratings of equipment at the substation selected for the Point of Interconnection, (ii) 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 (iii) an alternative upgrade is not physically feasible (e.g., higher voltage Point of Interconnection substation). For purposes of this subpart (3), “commercially available” equipment shall mean equipment manufactured by an approved supplier of a particular Connecting Transmission Owner and conforming with engineering specifications and procedures of the Connecting Transmission Owner.



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].

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, for all of the 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 Physically Infeasible assessment, the Transmission Owner: (i) will assume for all Contingent Projects, that their associated 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 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.

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 Phase 1 Entry Decision Period**

40.7.5.1 The Phase 1 Entry Decision Period 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 The Phase 1 Entry Decision Period 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 the Phase 1 Entry Decision Period, 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 Feedback 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.

#### **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, from the ISO's Queue during the Customer Engagement Window or at the Phase 1 Entry Decision Period, 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 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 there is no 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 Interconnection Customer for any Withdrawal Penalty under this Section [40.7.6.2].

40.7.6.2.1.1 Any Withdrawal Penalty that the Interconnection Customer is subject to in Section [40.7.6.2] is in addition to the Interconnection Customer's responsibility to pay for any study costs it incurs in the Cluster Study Process.

40.7.6.2.1.2 The Interconnection Customer shall pay the invoiced amount for the Withdrawal Penalty within thirty (30) calendar days of the ISO's issuance of the invoice. Except as otherwise provided in Section [40.24.3.8], if the Interconnection Customer does not pay its invoice within the timeframe described above, the ISO shall recover any unpaid amounts from the Interconnection Customer's Study Deposit. The ISO shall not

be liable for unpaid penalty amounts and may not collect them from other Interconnection Customers or Transmission Customers.

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

## **40.8 Affected Systems**

### **40.8.1 Coordination with Affected Systems within the New York Control Area**

40.8.1.1 The ISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems within the New York Control Area with Affected System Operators, as soon as they are identified – either by their own accord, by the Connecting Transmission Owner, by the ISO, or by members of the ISO’s Operating Committee or Transmission Planning Advisory Subcommittee of the ISO’s Operating Committee.

40.8.1.2 The ISO will include those results on Affected Transmission Owner systems in the Cluster Study within the time frame specified in these Standard Interconnection Procedures. The ISO will also include results, if available, on other Affected Systems in the New York Control Area. The ISO will invite such Affected System Operators to all meetings held with the Interconnection Customer as required by these Standard Interconnection Procedures. The Interconnection Customer will cooperate with the ISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems. An Affected System Operator shall cooperate with the ISO and Connecting Transmission Owner with whom interconnection has been requested in all matters related to the type and/or conduct of studies and the determination of modifications to Affected Systems.

40.8.1.3 Upon completion of a Cluster Study in which an Interconnection Customer accepts its Project Cost Allocation for System Upgrade Facilities and/or System Deliverability Upgrades and pays cash or posts Security for such upgrades as required by this Attachment HH, the ISO will tender, as applicable, a Standard Upgrade Construction Agreement or Standard Multiparty Upgrade Construction Agreement to the Interconnection Customer(s) and Affected

Transmission Owner(s) or Affected System Operator(s) in accordance with the requirements in Section [40.21] to this Attachment HH for the engineering, procurement and construction of the System Upgrade Facilities and/or System Deliverability Upgrades on the Affected System.

40.8.1.4 For identified Affected Transmission Owner(s) of facilities that are electrically adjacent to the Point of Interconnection and that have design criteria, operational criteria, or other local planning criteria applicable to either (1) the substation to which the Interconnection Customer proposes to interconnect; or (2) the substation that will be required to be built to accommodate the interconnection, the ISO shall provide such Affected Transmission Owner(s) with the opportunity to review and provide comments on all study scopes, study reports and drafts thereof for the project, and will be included on communications regarding the project and meetings discussing the project or any of its studies, where such communications or meetings involve the ISO, Interconnection Customer and Connecting Transmission Owner.

#### **40.8.2 Coordination with External Affected Systems**

40.8.2.1 The ISO will identify potential impacts on External Affected Systems during the Customer Engagement Window once the Cluster Year Projects participating in the Cluster for that Cluster Study Process have been confirmed. If the ISO subsequently identifies additional potential impacts on an External Affected System during its performance of the Cluster Study, the ISO will notify the External Affected System Operator of the impacts.

40.8.2.2 At the time of initial notification, the ISO must provide an impacted Interconnection Customer with a list of potential Affected Systems, along with relevant contact information for such systems.

40.8.2.3 The ISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on External Affected Systems with External Affected



System Operators. Interconnection Customer will cooperate with the ISO and External Affected System Operator in all matters related to the conduct of studies and the determination of modifications to the External Affected Systems.

**40.8.3 Study of Impacts to New York State Transmission System [or Distribution System] of an Affected System Interconnection Customer's Proposed Interconnection to Another Region's Transmission System**

[\*]

## **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) the Phase 2 Study Entry Decision Period 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 models 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**

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. Within this period, the scheduled duration for the Connecting Transmission Owners' and Affected Transmission Owners' submission of the draft and final Phase 1 Study reports are set forth in Section [40.10.5].

(ii) The scheduled duration of the Phase 2 Study process will be a two hundred seventy (270) Calendar Day period between the start date of the Phase 2 Study and the ISO's presentation of the draft Cluster Study Report to the Operating Committee for its approval.

#### **40.9.3 Metrics and Reporting Obligation**

[\*]

#### **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 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 Other Interfaces 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 New York 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 (“CRIS”) 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 (“ERIS”) 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.

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

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

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

40.10.1.2 The Phase 1 Study period shall conclude with the ISO's presentation of the Phase 1 Cost Estimates Summary Report to the ISO's Operating Committee for its approval.

40.10.1.3 The duration of the Phase 1 Study shall be set forth in Section [40.9.2].

### **40.10.2 ISO Development Work for Cluster Study System Representation Models Prior to Commencement of Phase 1 Study**

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 models. 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 system. The CBA determines the cost allocation of required facilities between Transmission Owners and Cluster Study Projects. The ISO will develop the CBA for a given Cluster Study during the Application Window and

Customer Engagement Window for that Cluster Study Process. The short-circuit CBA base case must be completed before the Phase 1 Study for that Cluster Study Process can commence.

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 work on the CPA for a given Cluster Study during the Customer Engagement Window.

### **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;

(ii) all proposed Projects, together with their associated System Upgrade Facilities and System Deliverability Upgrades, as applicable, that have accepted their cost allocation in a prior Class Year Study or Cluster Study cost allocation process or in accordance with Section 32.3.5.7 of Attachment Z; *provided however*, that System Deliverability Upgrades where construction has been deferred pursuant to Sections [40.13.12.2 and 40.13.12.3] will only be included if

construction of the System Deliverability Upgrades has been triggered under Section [40.13.12.3];

(iii) 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;

(iv) 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;

(v) 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;

(vi) 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);

(vii) 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

(viii) 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 Following the start date of the Phase 1 Study, the ISO will submit to the Connecting Transmission Owners and Affected Transmission Owners an updated Cluster Study Project List and the CPA short-circuit model. 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 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 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. 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. 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.

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 cost estimates will be based on the assumption that the activities for which the Transmission Owner calculates cost estimates 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].

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

The Connecting Transmission Owner or Affected Transmission Owner 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 model pursuant to Section [40.10.4.1]. The Interconnection Customer and the ISO shall then have ten (10) Business Days to review the draft reports and provide any comments to the applicable Connecting Transmission Owner or Affected Transmission Owner. The Connecting Transmission Owners and Affected Transmission Owners then have seven (7) Business Days to review comments and to submit the finalized Phase 1 Study reports to the ISO and the Interconnection Customer.

#### **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 its stakeholder Transmission Planning Advisory Subcommittee. Following its receipt of the finalized Phase 1 Study reports and no later than the conclusion of the Phase 1 Study time period set forth in Section [40.10.1.3], 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 Cost Recovery for Preparatory Work for Phase 2 Study**



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, the ISO will invoice Interconnection Customers for such study costs.

#### **40.10.8 Phase 2 Entry Decision Period**

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

40.10.8.2 The Phase 2 Entry Decision Period 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 the Phase 2 Entry Decision Period, 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 [40.5.4.4].

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 the Phase 2 Entry Decision Period 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 the Phase 2 Entry Decision Period 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 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, from the ISO's Queue during the Phase 1 Study or at the Phase 2 Entry Decision Period, 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.

40.10.9.3.1 The ISO shall invoice Interconnection Customer for any Withdrawal Penalty under this Section [40.10.9.2].

40.10.9.3.1 Any Withdrawal Penalty that the Interconnection Customer is subject to in Section [40.10.9.2] is in addition to the Interconnection Customer's responsibility to pay for any study costs it incurs in the Cluster Study Process.

40.10.9.3.2 The Interconnection Customer shall pay the invoiced amount for the Withdrawal Penalty within thirty (30) calendar days of the ISO's issuance of the invoice. Except as otherwise provided in Section [40.24.3.8], if the Interconnection Customer does not pay its invoice within the timeframe described above, the ISO shall recover any unpaid amounts, as applicable, from the Interconnection Customer's Study Deposit and

its Readiness Deposit 1. The ISO shall not be liable for unpaid penalty amounts and may not collect them from other Interconnection Customers or Transmission Customers.

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 Start Date and Duration**

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

40.11.1.2 The Phase 2 Study period shall conclude with the ISO's presentation of the Cluster Study Report to the ISO's Operating Committee for approval.

40.11.1.3 The duration of the Phase 2 Study shall be set forth in Section [40.9.2].

### **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 that are built on the CBA and CPA system representation model 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]. The Connecting Transmission Owner will perform the individual breaker analysis required for the ISO's short-circuit analysis and the bus flow analysis required for the ISO's thermal analysis.

40.11.2.2 During the Phase 2 Study, the Connecting Transmission Owners and Affected Transmission Owners shall update the Connecting Transmission Owners' Attachment Facilities, Distribution Upgrades, and System Upgrade Facilities identified in the Phase 1 Study for individual Cluster Study Projects and the related cost estimates.

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.

#### **40.1.3 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 assess the amount of requested CRIS that would be deliverable without System Deliverability Upgrades, if any; identify the System Deliverability Upgrades required to make the requested CRIS fully deliverable; and determine whether an Additional SDU Study for a new System Deliverability Upgrade is required. If an Additional SDU Study is required, 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 SUFs, Distribution Upgrades, and SDUs Identified in Phase 2 Study**

[\*]

#### **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 determine whether the above technologies should be used, consistent with Good Utility Practice and other applicable regulatory requirements. 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 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.

40.11.5.3 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 Cluster Study Projects**

**40.11.6.1** At the completion of the first calendar quarter following the start date of the Phase 2 Study, and at the conclusion of each subsequent calendar quarter, Interconnection Customer shall submit to the ISO an updated proposed Initial Feedback Date, an updated proposed Synchronization Date, and an updated proposed Commercial Operation Date..

**40.11.6.2** At the completion of the first month following the start date of the Phase 2 Study, and at the conclusion of every other month, for each Cluster Study Project not yet in-service, the Cluster Study Project, that Cluster Study Project's Connecting Transmission Owner and each Affected Transmission Owner(s) shall report on the progress of their respective activities to the ISO and to each other. Such reports shall be in a format consistent with, and include the content required by, applicable ISO Procedures. In these reports provided every other month, each Cluster Study Project and Connecting Transmission Owner and Affected Transmission Owner(s) shall report any material variance from earlier schedule estimates for their respective activities, and the reasons for such variance. In addition, the Connecting

Transmission Owner and Affected Transmission Owner(s) shall report any material variance from earlier cost estimates for its activities, and the reasons for such variance.

**40.11.7 Draft Cluster Study Report**

The ISO will present the draft Cluster Study Report for the ISO's Operating Committee approval. 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.

**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 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 Operating Committee. 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 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 Connecting Transmission Owner criteria included in FERC Form No. 715 (collectively “Applicable Reliability Requirements”). In order for the ISO to recognize any revisions to Connecting Transmission Owner criteria as Applicable Reliability Requirements under this Attachment HH, the Connecting Transmission Owner shall present proposed revisions to such criteria to the 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 staff 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 staff 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 Operating Committee, and its effectiveness will be subject to the approval of the Operating Committee. In its report to the 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 the following year 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 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 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 [40.12.1.3.7], 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 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 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 ISO staff 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 Developers**

The Interconnection Customer' 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. 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 System Upgrade Facilities required for all Cluster Study Projects, with cost estimates for the System Upgrade Facilities. The System Upgrade Facilities identified through the Cluster Project Assessment will only be those System Upgrade Facilities that are not already included in an 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.

40.12.2.2 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 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 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 [40.12.5] 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 6.(a)(1) through 6.(a)(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 percent to the other Interconnection Customers in the Class Year 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 [\*] 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).



**40.13 Deliverability Studies and Cost Allocation Methodology for CRIS**

**40.13.1 Cluster Study Deliverability Study and Non-Cluster Study Expedited Deliverability Study**

An Interconnection Customer requesting CRIS for a Project larger than 2 MW may elect to enter either the Cluster Study Process pursuant to the requirements in Section [40.5.4] to this Attachment HH or an Expedited Deliverability Study pursuant to the requirements in Section [40.23] to this Attachment HH; *provided, however*, an Interconnection Customer may not be evaluated in both studies 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. 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 Cluster Study deliverability evaluation first evaluates whether a Project satisfies the NYISO Deliverability Interconnection Standard at its full amount of requested CRIS. If a Project is not deliverable for its full amount of requested CRIS, the Cluster Study proceeds to identify and cost allocate System Deliverability Upgrades required to make the Project fully deliverable for the full amount of requested CRIS.

An Expedited Deliverability Study only evaluates whether a Project satisfies the NYISO Deliverability Interconnection Standard at its full amount of requested CRIS; it does not identify or cost allocate System Deliverability Upgrades. An Interconnection Customer evaluated in an Expedited Deliverability Study and deemed undeliverable at its full amount of requested CRIS may (1) enter a Cluster Study Process in a subsequent Application Window in accordance with the requirements in Section [40.5] to obtain a Project Cost Allocation for required System

Deliverability Upgrades; or (2) enter into a subsequent Expedited Deliverability Study or a Cluster Study Process with the same or different CRIS request.

#### **40.13.1.1 Cost Allocation Among Interconnection Customers in a Cluster**

Each Project in a Cluster Study Deliverability Study – i.e., a Cluster Study or CRIS Project – will share in the then currently available deliverability capability of the New York State Transmission System, and will also share in the cost of any System Deliverability Upgrades required for its Project to qualify for CRIS at the requested level. The total cost of the System Deliverability Upgrades required for all the Projects in the Cluster for the Cluster Study will be allocated among the Projects in the Cluster based on the pro rata impact of each Cluster Study CRIS Project on the deliverability of the New York State Transmission System, that is, the pro rata contribution of each Project in the Cluster Study Deliverability Study to the total cost of each of the System Deliverability Upgrades identified in the Cluster Study Deliverability Study. In addition to this allocation of cost responsibility for System Deliverability Upgrades among the Projects in a Cluster, the cost of certain Highway System Deliverability Upgrades will be shared with Load Serving Entities and subsequent Developers, as described below in Section 40.13.12 of these rules.

#### **40.13.1.2 Expedited Deliverability Study**

The Expedited Deliverability Study shall be performed concurrently for all Projects that meet the entry requirements set forth in Section [40.19] of this Attachment HH as a combined Expedited Deliverability Study.

#### **40.13.2 Categories of transmission facilities**

For purposes of applying the NYISO Deliverability Interconnection Standard, transmission facilities comprising the New York State Transmission System will be categorized as either Byways or Highways or Other Interfaces.

##### **40.13.2.1 Byways**

The Interconnection Customer of a Cluster Study CRIS Project will pay its pro rata share of one hundred percent (100%) of the cost of the System Deliverability Upgrades to any Byway needed to make the Cluster Study CRIS Project deliverable in accordance with these rules. The System Deliverability Upgrades on the Byway or Byways will be identified by the ISO, with input from the Connecting Transmission Owner and from the Affected Transmission Owner(s), in the Cluster Study Deliverability Study.

The Transmission Owner(s) responsible for constructing a System Deliverability Upgrade on a Byway shall request Incremental TCCs with respect to the System Deliverability Upgrade in accordance with the requirements of Section 19.2.4 of Attachment M of the ISO OATT. An Interconnection Customer paying to upgrade a Byway will receive the right to accept any Incremental TCCs awarded by the ISO in proportion to its contribution to the total cost of the System Deliverability Upgrade. The ISO shall round any non-whole MW quantities to a whole number of Incremental TCCs in a manner that ensures that the sum of all individual allocations to eligible entities is equal to the total number of Incremental TCCs awarded to the System Deliverability Upgrade; *provided, however*, that an Interconnection Customer will not be entitled to receive any Incremental TCCs if the whole number value determined by the ISO for the Interconnection Customer's proportionate share is zero. If an Interconnection Customer elects to accept its proportionate share of any Incremental TCCs resulting from the System

Deliverability Upgrade, the Interconnection Customer shall be the Primary Holder of such Incremental TCCs. If an Interconnection Customer declines an award of its proportionate share of any Incremental TCCs resulting from the System Deliverability Upgrade, or subsequently terminates the Incremental TCCs it elected to receive in accordance with Section 19.2.4.9 of Attachment M of the ISO OATT, the declined or terminated Incremental TCCs will be deemed reserved to the extent necessary to facilitate the potential for transfers to subsequent Interconnection Customers that pay for the use of Headroom pursuant to this Attachment HH on a System Deliverability Upgrade that has been awarded Incremental TCCs. Incremental TCCs that are declined or terminated by an Interconnection Customer and not otherwise deemed reserved will be deemed permanently terminated. Incremental TCCs related to a System Deliverability Upgrade that were previously deemed reserved as a result of prior declination or termination will be deemed permanently terminated when the Headroom on the System Deliverability Upgrade ceases to exist or is otherwise reduced to zero in accordance with Section [40.17.1.4.3] of this Attachment HH.

An Interconnection Customer paying to upgrade a Byway will be eligible to receive Headroom payments in accordance with these rules. A subsequent Interconnection Customer paying for use of Headroom on a System Deliverability Upgrade on a Byway will be entitled to receive Incremental TCCs, to the extent Incremental TCCs have been awarded by the ISO for the System Deliverability Upgrade, in proportion to its contribution to the total cost of the System Deliverability Upgrade, as determined based on its required Headroom payments. The ISO shall round any non-whole MW quantities to a whole number of Incremental TCCs in a manner that ensures that the sum of all individual allocations to eligible entities is equal to the total number of Incremental TCCs awarded to the System Deliverability Upgrade; *provided, however*, that a

subsequent Interconnection Customer will not be entitled to receive any Incremental TCCs if the whole number value determined by the ISO for the subsequent Interconnection Customer's proportionate share is zero. If an Interconnection Customer that initially paid for a System Deliverability Upgrade on a Byway elected to receive its proportionate share of any Incremental TCCs related to the System Deliverability Upgrade and continues to hold such Incremental TCCs, any Incremental TCCs that a subsequent Interconnection Customer is eligible to receive will be made available by reducing the Incremental TCCs related to the System Deliverability Upgrade held by the Interconnection Customer that initially paid for the System Deliverability Upgrade in proportion to the Headroom payments received by such Interconnection Customer from the subsequent Interconnection Customer making such Headroom payments. If an Interconnection Customer that initially paid for a System Deliverability Upgrade on a Byway declined to receive its proportionate share of any Incremental TCCs related to the System Deliverability Upgrade or subsequently terminated the Incremental TCCs it elected to receive, any Incremental TCCs that a subsequent Interconnection Customer is eligible to receive will be made available from the Incremental TCCs related to the System Deliverability Upgrade that were previously deemed reserved as a result of prior declination or termination in proportion to the Headroom payments received by the Interconnection Customer that initially paid for the System Deliverability Upgrade from the subsequent Interconnection Customer making such Headroom payments. If a subsequent Interconnection Customer elects to accept its proportionate share of any Incremental TCCs, the subsequent Interconnection Customer shall be the Primary Holder of such Incremental TCCs; *provided, however*, that Incremental TCCs that were previously deemed reserved and are transferred to a subsequent Interconnection Customer will become effective on the first day of the Capability Period that commences following the next

Centralized TCC Auction conducted after the subsequent Interconnection Customer makes the necessary Headroom payment and elects to receive its proportionate share of Incremental TCCs. If a subsequent Interconnection Customer declines an award of its proportionate share of any Incremental TCCs resulting from its Headroom payments, or subsequently terminates the Incremental TCCs it elected to receive in accordance with Section 19.2.4.9 of Attachment M of the ISO OATT, the declined or terminated Incremental TCCs will be deemed permanently terminated.

Any Incremental TCCs resulting from a System Deliverability Upgrade on a Byway, regardless of the Primary Holder thereof, may not be sold or transferred through a Centralized TCC Auction, Reconfiguration Auction or the Secondary Market.

#### **40.13.2.2 Highways**

The Interconnection Customer of a Cluster Study CRIS Project will pay an allocated share of the cost of the System Deliverability Upgrades to any Highway needed to make the Cluster Study Project deliverable in accordance with these rules. The System Deliverability Upgrades on the Highway or Highways, and the Interconnection Customer's allocated share of the cost of those System Deliverability Upgrades, will be identified by the ISO, with input from the Connecting Transmission Owner and from the Affected Transmission Owner(s), in the Cluster Study Deliverability Study.

The Transmission Owner(s) responsible for constructing a Highway System Deliverability Upgrade shall request Incremental TCCs with respect to the Highway System Deliverability Upgrade in accordance with the requirements of Section 19.2.4 of Attachment M of the ISO OATT. An Interconnection Customer paying for Highway System Deliverability Upgrades will receive the right to accept any Incremental TCCs awarded by the ISO, in

proportion to its contribution to the to the total cost of the Highway System Deliverability Upgrade. The ISO shall round any non-whole MW quantities to a whole number of Incremental TCCs in a manner that ensures that the sum of all individual allocations to eligible entities is equal to the total number of Incremental TCCs awarded to the Highway System Deliverability Upgrade; *provided, however*, that an Interconnection Customer will not be entitled to receive any Incremental TCCs if the whole number value determined by the ISO for the subsequent Interconnection Customer's proportionate share is zero. If an Interconnection Customer elects to accept its proportionate share of any Incremental TCCs resulting from the Highway System Deliverability Upgrade, the Interconnection Customer shall be the Primary Holder of such Incremental TCCs. If an Interconnection Customer declines an award of its proportionate share of any Incremental TCCs resulting from the Highway System Deliverability Upgrade, or subsequently terminates the Incremental TCCs it elected to receive in accordance with Section 19.2.4.9 of Attachment M of the ISO OATT, the declined or terminated Incremental TCCs will be deemed reserved to the extent necessary to facilitate the potential for transfers to subsequent Interconnection Customers that pay for the use of Headroom pursuant to this Attachment HH on a Highway System Deliverability Upgrade that has been awarded Incremental TCCs. Incremental TCCs that are declined or terminated by an Interconnection Customer and not otherwise deemed reserved will be deemed permanently terminated. Incremental TCCs related to a Highway System Deliverability Upgrade that were previously deemed reserved as a result of prior declination or termination will be deemed permanently terminated when the Headroom on the Highway System Deliverability Upgrade ceases to exist or is otherwise reduced to zero in accordance with Section [40.17.1.4.3] of this Attachment HH.

The Transmission Owner(s) responsible for constructing a Highway System Deliverability Upgrade shall also be awarded, and be the Primary Holder of, any Incremental TCCs related to the portion of a Highway System Deliverability Upgrade funded by Load Serving Entities pursuant to Section [40.13.12] of this Attachment HH, in proportion to the contribution of the Load Serving Entities to the total cost of the Highway System Deliverability Upgrade. The ISO shall round any non-whole MW quantities to a whole number of Incremental TCCs in a manner that ensures that the sum of all individual allocations to eligible entities is equal to the total number of Incremental TCCs awarded to the Highway System Deliverability Upgrade; *provided, however*, that no Incremental TCCs will be awarded to the Transmission Owner(s) responsible for constructing a Highway System Deliverability Upgrade for the portion of a Highway System Deliverability Upgrade funded by Load Serving Entities if the whole number value determined by the ISO for the Load Serving Entities' proportionate share is zero.

An Interconnection Customer paying for a Highway System Deliverability Upgrade will be eligible to receive Headroom payments in accordance with these rules to the extent that it pays for System Deliverability Upgrade capacity in excess of that required to provide the requested level of CRIS and Load Serving Entities have not funded a portion of the costs of the Highway System Deliverability Upgrade pursuant to Section [40.13.12] of this Attachment HH. If Load Serving Entities have funded a portion of a Highway System Deliverability Upgrade pursuant to Section [40.13.12] of this Attachment HH, the Transmission Owner(s) responsible for constructing the Highway System Deliverability Upgrade will be eligible to receive any and all Headroom payments related to the System Deliverability Upgrade in accordance with these rules on behalf, and for the benefit, of the Load Serving Entities that funded a portion of the System Deliverability Upgrade.



A subsequent Interconnection Customer paying for use of Headroom on System Deliverability Upgrades will be entitled to receive Incremental TCCs, to the extent Incremental TCCs have been awarded by the ISO for the System Deliverability Upgrade, in proportion to its contribution to the total cost of the Highway System Deliverability Upgrade, as determined based on its required Headroom payments. The ISO shall round any non-whole MW quantities to a whole number of Incremental TCCs in a manner that ensures that the sum of all individual allocations to eligible entities is equal to the total number of Incremental TCCs awarded to the Highway System Deliverability Upgrade; *provided, however*, that a subsequent Interconnection Customer will not be entitled to receive any Incremental TCCs if the whole number value determined by the ISO for the Interconnection Customer's proportionate share is zero. If: (i) an Interconnection Customer that initially paid for a Highway System Deliverability Upgrade paid for capacity in excess of that required to provide its requested level of CRIS; (ii) Load Serving Entities have not funded a portion of the costs of the Highway System Deliverability Upgrade pursuant to Section [40.13.12] of this Attachment HH; and (iii) the Interconnection Customer elected to receive its proportionate share of any Incremental TCCs related to the System Deliverability Upgrade and continues to hold such Incremental TCCs, any Incremental TCCs that a subsequent Interconnection Customer is eligible to receive will be made available by reducing the Incremental TCCs related to the System Deliverability Upgrade held by the Interconnection Customer that initially funded the System Deliverability Upgrade in proportion to the Headroom payments received by such Interconnection Customer from the subsequent Interconnection Customer making such Headroom payments. If: (i) an Interconnection Customer that initially paid for a Highway System Deliverability Upgrade paid for capacity in excess of that required to provide its requested level of CRIS; (ii) Load Serving Entities have not

funded a portion of the costs of the Highway System Deliverability Upgrade pursuant to Section [40.13.12] of this Attachment HH; and (iii) the Interconnection Customer declined to receive its proportionate share of any Incremental TCCs related to the System Deliverability Upgrade or subsequently terminated the Incremental TCCs it elected to receive, any Incremental TCCs that a subsequent Interconnection Customer is eligible to receive will be made available from the Incremental TCCs related to the System Deliverability Upgrade that were previously deemed reserved as a result of prior declination or termination in proportion to the Headroom payments received by the Interconnection Customer that initially paid for the System Deliverability Upgrade from the subsequent Interconnection Customer making such Headroom payments. If Load Serving Entities have funded a portion of a Highway System Deliverability Upgrade pursuant to Section [40.13.12] of this Attachment HH, any Incremental TCCs that a subsequent Interconnection Customer is eligible to receive will be made available by reducing the Incremental TCCs related to the System Deliverability Upgrade held by the Transmission Owner(s) responsible for constructing the System Deliverability Upgrade. If a subsequent Interconnection Customer elects to accept its proportionate share of any Incremental TCCs, the subsequent Interconnection Customer shall be the Primary Holder of such Incremental TCCs; *provided, however,* that Incremental TCCs that were previously deemed reserved and are transferred to a subsequent Interconnection Customer will become effective on the first day of the Capability Period that commences following the next Centralized TCC Auction conducted after the subsequent Interconnection Customer makes the necessary Headroom payment and elects to receive its proportionate share of Incremental TCCs. If a subsequent Interconnection Customer declines an award of its proportionate share of any Incremental TCCs resulting from its Headroom payments, or subsequently terminates the Incremental TCCs it elected to receive in

accordance with Section 19.2.4.9 of Attachment M of the ISO OATT, the declined or terminated Incremental TCCs will be deemed permanently terminated.

Any Incremental TCCs resulting from a Highway System Deliverability Upgrade, regardless of the Primary Holder thereof, may not be sold or transferred through a Centralized TCC Auction, Reconfiguration Auction or the Secondary Market.

#### **40.13.2.3 Other Interfaces**

If the Cluster Study CRIS Project degrades the transfer capability of any one of the Other Interfaces below the transfer capability identified in the current CBA, then the Interconnection Customer will pay its pro rata share of one hundred percent (100%) of the cost of the System Deliverability Upgrades needed to restore the transfer capability of the Other Interfaces degraded by its proposed Project to what the transfer capability of those Other Interfaces would have been without its Project, as that transfer capability was measured in the current CBA. Where two or more Projects would cause degradation of an Other Interface's transfer capability, the cost of the necessary System Deliverability Upgrades to restore the original transfer capability of the interface shall be shared on a pro rata basis, based on the MW of degradation that each Project would cause.

#### **40.13.3.3 Capacity Regions**

40.13.3.1 The deliverability test will be applied within each of the four (4) Capacity Regions: (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). To be declared deliverable a generator or Cluster Study Transmission Project must only be deliverable, at its requested CRIS MW, throughout each of the Capacity Regions in which the Project is interconnected or is interconnecting, or, if requesting CRIS for External-to-ROS

Deliverability Rights, throughout the Rest of State Capacity Region. For example, a proposed generator or Cluster Study Transmission Project from an external Control Area interconnecting in the Rest of State Capacity Region (i.e., Load Zones A-F) will be required to demonstrate deliverability throughout the Rest of State Capacity Region (i.e., Load Zones A-F), but will not be required to demonstrate deliverability to or within any of the following Capacity Regions: Lower Hudson Valley (i.e., Load Zones G, H and I); New York City (i.e., Load Zone J); or Long Island (i.e., Load Zone K).

40.13.3.2 A proposed Cluster Study Transmission Project internal to the NYCA that is requesting CRIS for UDRs must be deliverable both throughout the Capacity Region to which it proposes to inject Energy and throughout the Capacity Region from which it proposes to withdraw Energy. For example, a Cluster Study Transmission Project that proposes to withdraw Energy from the Rest of State Capacity Region (i.e., Load Zones A-F) and inject Energy into New York City (i.e., Load Zone J) must demonstrate deliverability throughout the Rest of State Capacity Region and demonstrate deliverability throughout the New York City Capacity Region.

#### **40.13.4 Participation in Capacity Markets**

40.13.4.1 An Interconnection Customer, in order to be eligible to become an Installed Capacity Supplier or receive Unforced Capacity Deliverability Rights or External-to-ROS Deliverability Rights, must obtain CRIS pursuant to the procedures set forth in this Attachment HH. An Interconnection Customer must enter a Cluster Study Deliverability Study or Expedited Deliverability Study in order to obtain CRIS, unless otherwise provided for in this Attachment HH. The MW amount of CRIS requested by an Interconnection Customer, stated in MW of Installed Capacity (“ICAP”), cannot exceed the MW levels specified in Section [40.5.6.5] of this Attachment HH. All requests for CRIS must be in tenths of a MW.

The ISO will perform the Cluster Study Deliverability Study and Expedited Deliverability Study in accordance with these rules and with input of Market Participants, to determine the deliverability of the Projects requesting CRIS in each study. The Expedited Deliverability Study will only determine the extent to which the Project is deliverable at the full amount of requested CRIS. The Cluster Study Deliverability Study will determine deliverability at the full amount of requested CRIS and, if not deliverable, will identify and allocate the cost of the System Deliverability Upgrades needed to make deliverable each Cluster Study CRIS Project. In order to be eligible to become an Installed Capacity Supplier or receive Unforced Capacity Deliverability Rights or External-to-ROS Deliverability Rights, an Interconnection Customer must: (i) be found fully deliverable at the requested CRIS level in an Expedited Deliverability Study or (ii) in a Cluster Study, either (1) accept its deliverable MW in a Cluster Study or Expedited Deliverability Study; or (2) pay cash or post Security, in accordance with these rules, for the System Deliverability Upgrades needed for its Project to be deliverable at the requested level of CRIS.

#### **40.13.5 The Pre-Existing System**

Where the Existing System Representation demonstrates deliverability issues, an Interconnection Customer electing CRIS need only address the incremental deliverability of its CRIS request, not the deliverability of the pre-existing system depicted in the Existing System Representation. Likewise, Transmission Owners will not be responsible for curing any pre-existing issues related to the deliverability of generators.

#### **40.13.6 CRIS Values**

Through a Class Year Study, an Interconnection Customer may elect no CRIS, partial CRIS, or full CRIS for its Project by satisfying the applicable sections of this Attachment HH.

Through an Expedited Deliverability Study, an Interconnection Customer may elect CRIS or partial CRIS to the extent its requested CRIS is deliverable pursuant to the NYISO Deliverability Interconnection Standard.

Each Project qualifying for CRIS will have two CRIS values per Project: one for the Summer Capability Period and one for the Winter Capability Period. For Projects comprised of multiple Generators, the Project's CRIS, subject to the maximum permissible requested CRIS pursuant to Section [40.5.6.5] of this Attachment HH, shall be allocated among the multiple Generators, and shall be allocated among the multiple Generators, as requested by Interconnection Customer (to the extent permissible under Section [40.5.6.5] of this Attachment HH). The Project's CRIS and allocation of CRIS among its units, as applicable, will be specified by ISO in the Class Year Deliverability Study report approved by the ISO Operating Committee.

The Project's CRIS value for the Summer Capability Period will be set using the deliverability test methodology and procedures described below. The Project's CRIS value for the Winter Capability Period will be determined by the applicable process below:

**40.13.6.1 Winter CRIS will be calculated as follows:**

Winter CRIS MW = (Summer CRIS MW x Maximum Net Output at 10 degrees Fahrenheit)/Maximum Net Output at 90 degrees Fahrenheit

Where:

Maximum Net Output at 10 degrees Fahrenheit = the Project's maximum net output at 10 degrees Fahrenheit determined pursuant to the Project's ISO-approved temperature curve; and

Maximum Net Output at 90 degrees Fahrenheit = the Project's maximum net output at 90 degrees Fahrenheit determined pursuant to the Project's ISO-approved temperature curve.

40.13.6.1.1 For facilities with Summer CRIS, the following additional provision

applies: For such facilities for which there is an ISO-accepted temperature curve

used for determining the Project's DMNC, Winter CRIS will be calculated using such temperature curve, provided the capability represented by the curve does not exceed the Project's ERIS. For facilities for which there is not an ISO-accepted temperature curve used for determining the Project's DMNC, Winter CRIS will be set equal to the Project's Summer CRIS unless the Project provides a temperature curve to the ISO by December 16, 2017, that the ISO subsequently determines is acceptable.

40.13.6.2 Upon an increase to a Project's Summer CRIS pursuant to a permissible increase in Summer CRIS under Sections [40.5.6.6] or [40.18.3] of this Attachment HH (increases in CRIS not requiring a Class Year Study) or pursuant to an increase in Summer CRIS evaluated in a Cluster Study for which an Interconnection Request accepts its Project Cost Allocation for System Deliverability Upgrades and posts Security therefore (if applicable) or accepts its Deliverable MWs, the Winter CRIS will be determined using the formula set forth in Section [40.13.6 (i)], wherein the Summer CRIS MW will be the increased Summer CRIS MW.

#### **40.13.7 Deliverability Study Procedures**

##### **40.13.7.1 Cluster Study Deliverability Study Procedures**

The ISO will conduct the Cluster Study Deliverability Study, as described in these rules, in cooperation with Market Participants. No Market Participant will have decisional control over any determinative aspect of the Cluster Study Deliverability Study. The ISO will have decisional control over the entire Cluster Study Deliverability Study. 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 Study Deliverability Study, then the ISO will enter into appropriate contracts with such entities for such input. The ISO shall utilize existing studies to the extent practicable when it performs the study. As it conducts each Cluster Study Deliverability Study, the ISO will provide regularly scheduled status reports and working drafts, with supporting data, to the Operating Committee or an Operating Committee subcommittee 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 Study Deliverability Study will be reviewed and approved by the Operating Committee, when the Operating Committee approves the CPA for the same Cluster Study. Each Cluster Study Deliverability Study is reviewable by the ISO Board of Directors in accordance with the provisions of the Commission-approved ISO Agreement.

If the ISO determines that an Additional SDU Study is required pursuant to Section [40.14] of this Attachment HH, ISO will notify all Cluster Study Projects that such Additional SDU Study will be conducted, such notice to be provided as soon as practicable after the ISO receives notice from Interconnection Customers in response to the Notice of SDU Requiring Additional Study.

#### **40.13.7.2 Expedited Deliverability Study Procedures**

The ISO will conduct the Expedited Deliverability Study, as described in these rules in cooperation with Market Participants. No Market Participant will have decisional control over any determinative aspect of the Expedited Deliverability Study. The ISO will have decisional control over the entire Expedited Deliverability Study. 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 Expedited Deliverability Study, then the ISO will enter



into appropriate contracts with such entities for such input. The ISO shall utilize existing studies to the extent practicable when it performs the study. As it conducts each Expedited Deliverability Study, the ISO will provide regularly scheduled status reports and working drafts, with supporting data, to the Operating Committee or an Operating Committee subcommittee 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 Expedited Deliverability Study will be reviewed and approved by the Operating Committee. Each Expedited Deliverability Study is reviewable by the ISO Board of Directors in accordance with the provisions of the Commission-approved ISO Agreement.

#### **40.13.8 Deliverability Test Methodology for Highways and Byways**

##### **40.13.8.1 Definition of NYCA Deliverability**

The NYCA transmission system shall be able to deliver the aggregate of NYCA capacity resources to the aggregate of the NYCA load under summer peak load conditions. This is accomplished, in the Cluster Study, through ensuring the deliverability of each Cluster Study CRIS Project, in the Capacity Region(s) where the Project interconnects. This is accomplished, in the Expedited Deliverability Study, through ensuring the deliverability of each Cluster Study CRIS Request, in the Capacity Region where the Project interconnects.

##### **40.13.8.2 NYCA Deliverability Testing Methodology**

###### **40.13.8.2.1 Cluster Study**

40.13.8.2.1.1 The current CBA for the Cluster Study, developed in accordance with ISO Procedures, will serve as the starting point for the deliverability baseline for testing under summer peak system conditions, subject to ISO Procedures and the following:

All Cluster Study CRIS Projects will be evaluated on an aggregate Cluster basis. Deliverability will be determined through a shift from generation to generation within the Capacity Regions in New York State. Each Capacity Region will be tested on an individual basis.

40.13.8.2.1.2 Each entity requesting External CRIS Rights will request a certain number of MW to be evaluated for deliverability pursuant to Section [40.13.11] of this Attachment HH. The MW of an entity requesting External CRIS Rights will not be derated for the deliverability analysis.

40.13.8.2.1.3 Each Interconnection Customer requesting CRIS will request that a certain number of MW be evaluated for deliverability, such MW not to exceed the maximum levels set forth in Section [40.6.5] of this Attachment HH. The MW requested by an Interconnection Customer will represent Installed Capacity, and will be derated for the deliverability analysis, as set forth in this Section [40.13.8.2.1.3]. The CRIS MW requested by a Resource with an Energy Duration Limitation will represent Installed Capacity based on the Interconnection Customer-selected duration (i.e., its expected maximum injection capability in MW hours for the Interconnection Customer-selected duration). The CRIS MW requested by a Cluster Study Transmission Project seeking UDRs will represent Installed Capacity at the point of injection. At the conclusion of the analysis, the ISO will reconvert only the deliverable MW and report them in terms of MW of Installed Capacity using the same derating factor utilized at the beginning of the deliverability analysis.

Facilities requesting CRIS and existing facilities with CRIS will be modeled in the deliverability analysis at MW levels described herein. A derated generator capacity incorporating availability is used. This derated generator capacity is calculated for each resource using a UCAP Deration Factor (“UCDF”). The UCDF used is an average value based on historical performance on a Capacity Region basis, as determined in accordance with ISO Procedures. The UCDF for all generators that are not Intermittent Power Resources (resources that are not Intermittent Power Resources include Energy Storage Resources) or Limited Control Run of River Hydro is the average EFORd. All generators that are not Intermittent Power Resources or Limited Control Run of River Hydro in the same Capacity Region will use the same UCDF. The UCDF for Intermittent Power Resources and Limited Control Run of River Hydro will be calculated based on historical production data by resource type in accordance with ISO Procedures.

Facilities comprised of Generators of different technologies will be derated using a blended UCDF that combines the UCDF of the individual Generators within the Project; *provided, however*, that if the Project includes load reduction, the load reduction would not impact the UCDF of the Project. The UCDF factor for proposed Projects will be applied to the requested CRIS level. For facilities modeled in the CBA, the UCDF will be applied to their CRIS level.

The CRIS MW requested by a Cluster Study Transmission Project or held by an existing facility with UDRs will not be derated at the point of injection (*i.e.*,

sink) for the deliverability analysis. However, the withdrawal capability (*i.e.*, source) of such a facility that is internal to the NYCA will be modeled in the deliverability analysis at the MW of CRIS plus losses of the facility expected to occur at its CRIS injection level, in the manner set forth in Section [40.13.8.2.1.13].

Existing CRIS that will be modeled in the Cluster Study shall include: existing CRIS for facilities not being evaluated in the Cluster Study regardless of outage state, unless (1) that CRIS will expire no later than 12 months (*i.e.*, 365 Calendar Days) after the Phase 1 Study Start Date, except where the facility has provided notice of a proposed CRIS transfer anticipated to be finalized no later than 12 months (*i.e.*, 365 Calendar Days) of the Phase 1 Study Start Date; or (2) the CRIS is associated with a Retired facility that cannot transfer such rights prior to CRIS expiration. For purposes of this Section [40.13.8.2.1.3], “existing CRIS” for Projects that have undergone, as applicable, a prior Class Year Study or Cluster Study deliverability evaluation is CRIS obtained upon completion of a Class Year Study or Cluster Study through which the Interconnection Customer accepted its deliverable MW or accepted its Project Cost Allocation and posted Security for System Deliverability Upgrades, as applicable. For Projects that undergo an Expedited Deliverability Study deliverability evaluation, “existing CRIS” is CRIS that is obtained upon completion of an Expedited Deliverability Study through which the Interconnection Customer was deemed to have accepted its deliverable MW in an Expedited Deliverability Study completed prior to the Phase 1 Study Start Date.

- 40.13.8.2.1.4 Load uncertainties will be addressed in accordance with ISO Procedures by taking the impact of Load Forecast Uncertainty (“LFU”) from the most recent base case IRM and applying it to load.
- 40.13.8.2.1.5 Deliverability base case conditioning steps will be consistent with those used for the Reliability Planning Process and Area Transmission Review transfer limit calculation methodology.
- 40.13.8.2.1.6 In deliverability testing, Emergency transfer criteria and contingency testing will be in conformance with NYSRC rules and correspond to that used in the Reliability Planning Process studies.
- 40.13.8.2.1.7 The ISO will monitor all transmission facilities that are part of the New York State Transmission System.
- 40.13.8.2.1.8 When either the voltage or stability transfer limit of an interface calculated in the CBA is more binding than the calculated thermal transfer limit, then the lower of the CBA voltage or stability transfer limit will be included in the deliverability testing as a proxy limit.
- 40.13.8.2.1.9 External system imports will be adjusted as necessary to eliminate or minimize overloads, other than the following external system imports: (i) the grandfathered import contract rights listed in Attachment E to the Installed Capacity Manual, (ii) the operating protocols set forth in Schedule C of Attachment CC to the ISO OATT, (iii) the appropriate rules for reflecting PJM service to RECo load, (iv) the Existing Transmission Capacity for Native Load listed for the New York State Electric & Gas Corporation in Table 3 of Attachment L to the ISO OATT, and (v) any External CRIS Rights awarded

pursuant to Section [40.13.11] of this Attachment HH, either as a result of the conversion of grandfathered rights over the Quebec (via Chateauguay) Interface or as a result of a Cluster Study Deliverability Study, until, as of the Phase 1 Study Start Date, the time available to renew the External CRIS Rights has expired, as described in Section [40.18.2.4] of this Attachment HH.

40.13.8.2.1.10 Flows associated with generators physically located in the NYCA but selling capacity out of the market will be modeled as such in the deliverability base cases.

40.13.8.2.1.11 Resources and demand are brought into balance in the baseline. If resources are greater than demand in the Capacity Region, existing generators within the Capacity Region are prorated down. If resources are lower than demand in the Capacity Region, additional external resources are included in the model.

40.13.8.2.1.12 PARs within the applicable Capacity Region will be adjusted as necessary, in either direction and within their angle capability, to eliminate or minimize overloads without creating new ones. PARs controlling external ties and ties between the Capacity Regions will be modeled, within their angle capability, to hold the individual tie flows to their respective deliverability baseline schedules, which shall be set recognizing firm commitments and operating protocol set forth in Schedule C of Attachment CC to the ISO OATT.

40.13.8.2.1.13 Deliverability testing will proceed as follows - The generation/load mix is split into two groups of generation and load, one upstream and one downstream for each zone or sub-zone tested within the Capacity Region. All elements that

are part of the New York State Transmission System within the Capacity Region will be monitored. For a Cluster Study Transmission Project seeking UDRs, the MW of requested CRIS plus losses of the facility at the point of withdrawal are modeled as negative generation in the Capacity Region (*i.e.*, as a proxy generating facility withdrawing power from the New York State Transmission System in the Capacity Region.) If there is excess generation upstream (that is, more upstream generation than is necessary to serve the upstream load plus LFU), then the generation excess, considering generator derate factors described in Section [40.13.8.2.2] above, is assumed to displace downstream generation. If the dispatch of the upstream excess generation causes an overload, this overload is flagged as a potential deliverability problem and will be used to determine the amount of capacity that is assigned CRIS status and the overload mitigation.

40.13.8.2.1.14 For Highway interfaces, the generators or Cluster Study Transmission Projects in a Cluster for the Cluster Study, whether or not they are otherwise deliverable, will not be considered deliverable if their aggregate impact degrades the transfer capability of the interface more than the lesser of 25 MW or 2 percent of the transfer capability identified in the CBA and results in an increase to the NYCA LOLE determined for the CBA of .01 or more. The Cluster Study CRIS Projects causing the degradation will be responsible, on a pro rata basis, for restoring transfer capability only to the extent their aggregate degradation of transfer capability, compared to that in the CBA, would not occur but for the Cluster CRIS Projects.

**40.13.8.2.2 Expedited Deliverability Study**

40.13.8.2.2.1 The current Class Year CPA, developed in accordance with ISO

Procedures, will serve as the starting point for the deliverability baseline for testing under summer peak system conditions, subject to ISO Procedures and the following: All projects in the Expedited Deliverability Study will be evaluated on an aggregate Expedited Deliverability Study basis. Deliverability will be determined through a shift from generation to generation within the Capacity Regions in New York State. Each Capacity Region will be tested on an individual basis.

40.13.8.2.2.2 Each Interconnection Customer requesting CRIS will request that a certain

number of MW be evaluated for deliverability, such MW not to exceed the maximum levels set forth in Section [40.5.6.5] of this Attachment HH. The MW requested by an Interconnection Customer will represent Installed Capacity, and will be derated for the deliverability analysis, as set forth in this Section [40.13.8.2.2.2]. The CRIS MW requested by a Resource with an Energy Duration Limitation will represent Installed Capacity based on the Interconnection Customer-selected duration (i.e., its expected maximum injection capability in MW hours for the Interconnection Customer-selected duration). The CRIS MW requested by a Cluster Study Transmission Project seeking UDRs will represent Installed Capacity at the point of injection. At the conclusion of the analysis, the ISO will reconvert only the deliverable MW and report them in terms of MW of Installed Capacity using the same derating factor utilized at the beginning of the deliverability analysis.



Facilities requesting CRIS and existing facilities with CRIS will be modeled in the deliverability analysis at MW levels described herein. A derated generator capacity incorporating availability is used. This derated generator capacity is calculated for each resource using a UCAP Deration Factor (“UCDF”). The UCDF used is an average value based on historical performance on a Capacity Region basis, as determined in accordance with ISO Procedures. The UCDF for all generators that are not Intermittent Power Resources (resources that are not Intermittent Power Resources include Energy Storage Resources) or Limited Control Run of River Hydro is the average EFORD. The UCDF for Intermittent Power Resources and Limited Control Run of River Hydro will be calculated based on historical production data by resource type in accordance with ISO Procedures. Facilities comprised of Generators of different technologies will be derated using a blended UCDF that combines the UCDF of the individual Generators within the Project; *provided, however*, that if the Project includes load reduction, the load reduction would not impact the UCDF of the Project.

The CRIS MW requested by a Cluster Study Transmission Project or held by an existing facility with UDRs will not be derated at the point of injection (*i.e.*, sink) for the deliverability analysis. However, the withdrawal capability (*i.e.*, source) of such a facility that is internal to the NYCA will be modeled in the deliverability analysis at the MW of CRIS plus losses of the facility expected to occur at its CRIS injection level, in the manner set forth in Section [40.13.8.2.2.13].

The UCDF factor for proposed Projects will be applied to the requested CRIS level. For facilities modeled in the CPA, the UCDF will be applied to their CRIS level.

40.13.8.2.2.3 CRIS that will be modeled in the Expedited Deliverability Study shall include: (1) existing CRIS, including CRIS obtained in a previous Expedited Deliverability Study, for facilities not being evaluated in the instant Expedited Deliverability Study, regardless of outage state, unless (i) the CRIS will expire no later than four months (*i.e.*, 120 Calendar Days) after the Expedited Deliverability Study Start Date, except where the facility has provided notice of a proposed CRIS transfer anticipated to be finalized no later than four months (*i.e.*, 120 Calendar Days) after the Expedited Deliverability Study Start Date; or (ii) the CRIS is associated with a Retired facility that cannot transfer such rights prior to CRIS expiration; and (2) CRIS requested by Projects in, as applicable, the Class Year Study(ies) or Cluster Study(ies) pending during the Expedited Deliverability Study. For purposes of this section [40.13.8.2.2.3], “existing CRIS” is CRIS that has not expired and CRIS that has been obtained by Projects through Attachment HH. For Projects that undergo a Class Year Study or Cluster Study deliverability evaluation, “existing CRIS,” is CRIS obtained, upon completion of a Class Year Study or Cluster Study through which the Interconnection Customer accepted deliverable MW or accepted its Project Cost Allocation and posted Security for System Deliverability Upgrades, as applicable. For Projects that undergo an Expedited Deliverability Study deliverability evaluation, “existing CRIS,” is CRIS obtained, upon completion of an Expedited Deliverability Study through

which the Interconnection Customer was deemed to have accepted its deliverable MW.

- 40.13.8.2.2.4 Load uncertainties will be addressed in accordance with ISO Procedures by taking the impact of Load Forecast Uncertainty (“LFU”) from the most recent base case IRM and applying it to load.
- 40.13.8.2.2.5 Deliverability base case conditioning steps will be consistent with those used for the Reliability Planning Process and Area Transmission Review transfer limit calculation methodology.
- 40.13.8.2.2.6 In deliverability testing, Emergency transfer criteria and contingency testing will be in conformance with NYSRC rules and correspond to that used in the NYISO Reliability Planning Process studies.
- 40.13.8.2.2.7 The ISO will monitor all transmission facilities that are part of the New York State Transmission System.
- 40.13.8.2.2.8 When either the voltage or stability transfer limit of an interface calculated in the CPA is more binding than the calculated thermal transfer limit, then the lower of the CPA voltage or stability transfer limit will be included in the deliverability testing as a proxy limit.
- 40.13.8.2.2.9 External system imports will be adjusted as necessary to eliminate or minimize overloads, other than the following external system imports: (i) the grandfathered import contract rights listed in Attachment E to the Installed Capacity Manual, (ii) the operating protocols set forth in Schedule C of Attachment CC to the ISO OATT, (iii) the appropriate rules for reflecting PJM service to RECo load, (iv) the Existing Transmission Capacity for Native Load

listed for the New York State Electric & Gas Corporation in Table 3 of Attachment L to the ISO OATT, (v) any External CRIS Rights awarded pursuant to Section [40.13.11], either as a result of the conversion of grandfathered rights over the Quebec (via Chateaugay) Interface or as a result of a Class Year Deliverability Study or a Cluster Study Deliverability Study, until, as of the Expedited Deliverability Study start date, the time available to renew the External CRIS Rights has expired, as described in Section [40.18.2.4].

40.13.8.2.2.10 Flows associated with generators physically located in the NYCA but selling capacity out of the market will be modeled as such in the deliverability base cases.

40.13.8.2.2.11 Resources and demand are brought into balance in the baseline. If resources are greater than demand in the Capacity Region, existing generators within the Capacity Region are prorated down. If resources are lower than demand in the Capacity Region, additional external resources are included in the model.

40.13.8.2.2.12 PARs within the applicable Capacity Region will be adjusted as necessary, in either direction and within their angle capability, to eliminate or minimize overloads without creating new ones. PARs controlling external ties and ties between the Capacity Regions will be modeled, within their angle capability, to hold the individual tie flows to their respective deliverability baseline schedules, which shall be set recognizing firm commitments and operating protocol set forth in Schedule C of Attachment CC to the ISO OATT.

40.13.8.2.2.13 Deliverability testing will proceed as follows - The generation/load mix is split into two groups of generation and load, one upstream and one downstream for each zone or sub-zone tested within the Capacity Region. For a Cluster Study Transmission Project seeking UDRs, the MW of requested CRIS plus losses of the facility at the point of withdrawal are modeled as negative generation in the Capacity Region (*i.e.*, as a proxy generating facility withdrawing power from the New York State Transmission System in the Capacity Region.) All elements that are part of the New York State Transmission System within the Capacity Region will be monitored. If there is excess generation upstream (that is, more upstream generation than is necessary to serve the upstream load plus LFU), then the generation excess, taking into account generator derate factors described in Section [40.13.8.2.2] above, is assumed to displace downstream generation. If the dispatch of the upstream excess generation causes an overload, this overload is flagged as a potential deliverability problem and will be used to determine the amount of partial CRIS, if any, for the applicable Projects in the Expedited Deliverability Study.

40.13.8.2.2.14 For Highway interfaces, the Projects in an Expedited Deliverability Study, whether or not they are otherwise deliverable, will not be considered deliverable if their aggregate impact degrades the transfer capability of the interface more than the lesser of 25 MW or 2 percent of the transfer capability identified in the CPA. To the extent possible, the ISO will determine partial CRIS, if any, for any applicable Project in the Expedited Deliverability Study.

#### **40.13.9 Deliverability Test Methodology for Other Interfaces**

##### **40.13.9.1 Cluster Study Deliverability Test Methodology for Other Interfaces**

The generators or Cluster Study Transmission Projects in a Cluster for a Cluster Study, whether or not they are otherwise deliverable across Highways and Byways, will not be considered deliverable if their aggregate impact degrades the transfer capability of any Other Interface more than the lesser of 25 MW or 2 percent of the transfer capability of the Other Interface identified in the CBA. Each Interconnection Customer will be responsible for its pro rata Cluster share of one hundred percent (100%) of the cost of System Deliverability Upgrades needed to restore transfer capability on the Other Interfaces impacted by the Cluster Study CRIS Projects but only to the extent that the degradation of transfer capability on the Other Interfaces, compared to that measured in the current CBA for the Cluster Study, would not occur but for the aggregate impact of the Cluster Study Projects. Where two or more Projects contribute to the degradation of the transfer capability of an Other Interface, each Project Interconnection Customer shall pay for a share of the required System Deliverability Upgrades based on its contribution to the degradation of the transfer capability. To the extent possible, the ISO will determine partial CRIS, if any, for any applicable Project in the Cluster Study.

##### **40.13.9.2 Expedited Deliverability Study Test Methodology for Other Interfaces**

The Projects in an Expedited Deliverability Study, whether or not they are otherwise deliverable across Highways and Byways, will not be considered deliverable if their aggregate impact degrades the transfer capability of any Other Interface more than the lesser of 25 MW or 2 percent of the transfer capability of the Other Interface identified in the CBA. To the extent possible, the ISO will determine partial CRIS, if any, for any applicable Project in the Expedited Deliverability Study.

#### **40.13.10 Deliverability of External Installed Capacity**

External Installed Capacity not associated with Unforced Capacity Deliverability Rights, External-to-ROS Deliverability Rights or External CRIS Rights will be subject to the deliverability test in Section [40.13.8] and [40.13.9] of this Attachment HH, but not as a part of the Cluster Study Deliverability Study. As described in detail in Section 5.12.2 of the ISO Services Tariff, the deliverability of External Installed Capacity not associated with Unforced Capacity Deliverability Rights, External-to ROS Deliverability Rights or External CRIS Rights will be evaluated separately as a part of the annual process under the ISO Services Tariff that sets import rights for the upcoming Capability Year, to determine the amount of External Installed Capacity that can be imported to the New York Control Area.

#### **40.13.11 CRIS Rights For External Installed Capacity**

An entity, by following the procedures and satisfying the requirements described in this Section [40.13.11], may obtain External CRIS Rights. While the External CRIS Rights are in effect, External Installed Capacity associated with External CRIS Rights is not subject to (1) the deliverability determination described above in Section [40.13.10] of this Attachment HH, (2) the annual deliverability determination applied in the import limit setting process described in Section 5.12.2.2 of the ISO Services Tariff, or (3) to the allocation of import rights described in ISO Procedures.

##### **40.13.11.1 Required Commitment of External Installed Capacity**

An entity requesting External CRIS Rights for a specified number of MW of External Installed Capacity must commit to supply that number of MW of External Installed Capacity for a period of at least five (5) years (“Award Period”). The entity’s commitment to supply the specified number of MW for the Award Period may be based upon either an executed bilateral

contract to supply (“Contract Commitment”), or based upon another kind of long-term commitment (“Non-Contract Commitment”), both as described herein.

#### **40.13.11.1.1 Contract Commitment**

An entity making a Contract Commitment of External Installed Capacity must have one or more executed bilateral contract(s) to supply a specified number of MW of External Installed Capacity (“Contract CRIS MW”) to a Load Serving Entity or Installed Capacity Supplier for an Award Period of at least five (5) years. The entity must have ownership or contract control of External Installed Capacity to fulfill its bilateral supply contract throughout the Award Period, and that otherwise satisfies ISO requirements.

40.13.11.1.1.1 The bilateral supply contract(s) individually or in the aggregate, must be for all months of the Summer Capability Periods over the term of the bilateral supply contract(s), but need not include any of the months of the Winter Capability Periods over that term. The entity seeking External CRIS Rights must specify which, if any, months of the Winter Capability Period it will supply External Installed Capacity under the bilateral supply contract(s) (“Specified Winter Months”).

40.13.11.1.1.2 The bilateral supply contract(s) must be for the same number of MW for all months of the Summer Capability Periods (“Summer Contract CRIS MW”) and the same number of MW for all Specified Winter Months (“Winter Contract CRIS MW”). The Winter Contract CRIS MW level must be less than or equal to the Summer Contract CRIS MW level.

40.13.11.1.1.3 An entity holding External CRIS Rights under a Contract Commitment must certify the bilateral supply contract for every month of the Summer



Capability Periods and all Specified Winter Months for the applicable Contract CRIS MW. The Summer Contract CRIS MW must be certified for every month of the Summer Capability Period, and the Winter Contract CRIS MW must be certified for every Specified Winter Month (if any).

**40.13.11.1.2 Non-Contract Commitment**

An entity holding External CRIS Rights under a Non-Contract Commitment must offer the committed number of MW of External Installed Capacity for every month of the commitment, as described below, in the ISO Installed Capacity auctions for an Award Period of at least five (5) years. The entity must have ownership or contract control of External Installed Capacity to fulfill its Non-Contract Commitment throughout the Award Period.

40.13.11.1.2.1 The Non-Contract Commitment must be made for all months of the Summer Capability Periods over the term of the Award Period, but need not include any months in the Winter Capability Periods. The entity must identify the Specified Winter Months, if any, of the Winter Capability Periods for which it will make the commitment.

40.13.11.1.2.2 The commitment must be for the same number of MW for each month of the Summer Capability Period (“Summer Non-Contract CRIS MW”), and the same number of MW for all Specified Winter Months (“Winter Non-Contract CRIS MW”). The Winter Non-Contract CRIS MW level must be less than or equal to the Summer Contract CRIS MW level.

40.13.11.1.2.3 An entity holding External CRIS Rights under a Non-Contract Commitment must offer the committed capacity (a) in at least one of the following NYCA auctions: the Capability Period Auction, the Monthly Auction

or the ICAP Spot Market Auction, or (b) through a certified and scheduled Bilateral Transaction (as such terms not defined in this Attachment HH are defined in the ISO Services Tariff). The Summer Non-Contract CRIS MW must be offered for every month of the Summer Capability Period, and the Winter Non-Contract CRIS MW must be offered for every Specified Winter Month (if any).

40.13.11.1.2.4 Notwithstanding other capacity mitigation measures that may apply, the offers to sell Installed Capacity into an auction submitted pursuant to this Non-Contract Commitment will be subject to an offer cap for each month of the Summer Capability Periods and each Specified Winter Month. This offer cap will be determined in accordance with the provisions contained in Section 5.12.2.4 of the ISO Services Tariff.

#### **40.13.11.1.3 Failure to Meet Commitment**

If an entity fails to certify or offer the full number of Contract CRIS MW or Non-Contract CRIS MW in accordance with the terms stated above, in Sections [40.13.11.1.1] and [40.13.11.1.2], the entity shall pay the ISO an amount equal to 1.5 times the Installed Capacity Spot Auction Market Clearing Price for the month in which either the capacity under Non-Contract Commitment was not offered or the Contract Commitment to supply ICAP was not certified (“Supply Failure”), times the number of MW committed under the Non-Contract or Contract Commitment but not offered.

40.13.11.1.3.1 Within a given Award Period and each subsequent renewal of an Award Period pursuant to Section [40.18.2.4] herein, for the first three instances of a Supply Failure, no additional actions will be taken. Upon the fourth instance within the Award Period or the fourth instance within a subsequent renewal

period of a Supply Failure, the associated External CRIS Rights will be terminated in their entirety with no ability to renew. Entities that had External CRIS Rights terminated may reapply for External CRIS in accordance with Section [40.13.1.4.2] below. Nothing in this Section [40.13.1.3] shall be construed to limit or diminish any provision in the Market Power Mitigation Measures or the Market Monitoring Plan.

#### **40.13.11.1.4 Obtaining External CRIS Rights**

An entity making a Contract Commitment or Non-Contract Commitment of External Installed Capacity may obtain External CRIS Rights for a specified number of MW of External Installed Capacity in one of two different ways, either (i) by converting MW of grandfathered deliverability rights over the External Interface with Quebec (via Chateauguay), or (ii) by having its specified MW of External Installed Capacity evaluated in a Cluster Study Deliverability Study, both as described herein.

40.13.11.1.4.1 One-Time Conversion of Grandfathered Rights. An entity can request to convert a specified number of MW pursuant to the conversion process established in Section 5.12.2.3 of the ISO Services Tariff.

40.13.11.1.4.2 Class Year Deliverability Study. An entity may seek to obtain External CRIS Rights for its External Installed Capacity by requesting that its External Installed Capacity be evaluated for deliverability in a Cluster Study Process. To make such a request an entity must provide to the ISO a completed External CRIS Rights Request stating whether it is making a Contract Commitment or Non-Contract Commitment, the number of MW of External Installed Capacity to be evaluated, and the specific External Interface(s). After the ISO receives a

completed External CRIS Rights Request, an entity making a Contract Commitment or Non-Contract Commitment that satisfies the requirements of Section [40.13.11.1] of this Attachment HH will be eligible to proceed, as follows:

40.13.11.1.4.2.1 The entity is made a Cluster Study Project when the ISO receives the entity's executed Cluster Study Agreement for External Installed Capacity] and all required data and the full deposit.

40.13.11.1.4.2.2 The entity's MW of External Installed Capacity covered by its bilateral contract(s) or, in the case of a Non-Contract Commitment the number of MW committed by the entity, are evaluated for deliverability within the Rest of State Capacity Region. The entity's External Installed Capacity is not subject to the NYISO Minimum Interconnection Standard. The ISO will determine whether the requests for External CRIS Rights within a given Cluster Study exceed the import limit, established pursuant to ISO procedures, for the applicable External Interface that is in effect on the start date of the Phase 1 Study when combined, to the extent not already reflected in the import limit, with the following: (1) awarded External CRIS Rights at the same External Interface, (2) Grandfathered External Installed Capacity Agreements listed in Attachment E of the ISO Installed Capacity Manual at the same External Interface, and (3) the Existing Transmission Capacity for Native Load listed for New York State Electric & Gas Corporation in Table 3 of Attachment L to the ISO OATT (applies to the PJM interface only) ("Combined Total MW"). In addition to the other requirements

stated herein, External CRIS Rights will only be awarded to the extent that the Combined Total MW does not exceed the import limit, as described above.

40.13.11.1.4.2.3 The Cluster Study Deliverability Study report will include an SDU Project Cost Allocation and a Deliverable MW number for the entity's External Installed Capacity.

40.13.11.1.4.2.4 The entity will have the same decision alternatives as other Cluster Study Projects participating in the Cluster Study Deliverability Study only. That is, the entity may either (a) accept its SDU Project Cost Allocation, (b) decline its SDU Project Cost Allocation and accept its Deliverability MW figure, or (c) decline both its SDU Project Cost Allocation and its Deliverable MW. If the entity does decline both its SDU Project Cost Allocation and its Deliverable MW, the entity's External Installed Capacity will be removed from the Cluster Study Deliverability Study.

40.13.11.1.4.2.5 If the entity accepts its SDU Project Cost Allocation, it must pay cash or provide Security for the SDU upgrades, like any other Cluster Study Project.

40.13.11.1.4.2.6 If the entity accepts its SDU Project Cost Allocation and pays cash or posts Security the SDU upgrades as required by this Attachment HH, the entity must also execute and fulfill agreement(s) with the ISO and the Connecting Transmission Owner and any Affected Transmission Owner to cover the engineering, procurement and construction of the SDUs pursuant to Section [40.21].

40.13.11.1.4.2.7 By the end of the Initial Decisional Round of the Final Decision Period (i.e., 30 days from Operating Committee approval of the Cluster Study Deliverability Study), an entity making a Contract Commitment and accepting either its SDU Project Cost Allocation or Deliverable MW quantity, must provide specific contract and resource information to the ISO. Unless entities are supplying External Installed Capacity as Control Area System Resources, requests for External Installed Capacity shall be resource-specific. Entities are permitted to substitute resources located in the same External Control Area. Such substitutions shall be subject to review and approval by ISO consistent with ISO Procedures and deadlines specified therein.

40.13.11.1.4.2.8 If the entity satisfies the requirements described in this Section [40.13.11.1.4], the entity will obtain External CRIS Rights for the number of MW determined to be deliverable, made deliverable through an SDU (with an accepted SDU Project Cost Allocation), or deemed deliverable through a commitment to pay for an SDU.

#### **40.13.12 Cost Allocation for Highway System Deliverability Upgrades**

40.13.12.1 If the portion of the Highway System Deliverability Upgrades (measured in MW) required to make one or more Cluster Study CRIS Projects in a Cluster Study deliverable is ninety percent (90%) or more of the total size (measured in MW) of the System Deliverability Upgrades, each Interconnection Customer(s) of such Cluster Study CRIS Project(s) will be responsible for its pro rata Cluster share of one hundred percent (100%) of the cost of the System Deliverability Upgrades.

40.13.12.2 If the portion of the System Deliverability Upgrades required to make one or more Cluster Study CRIS Projects in a Cluster Study deliverable is less than 90% of the total size (measured in MW) of the Highway System Deliverability Upgrade, the Interconnection Customer(s) will be required to pay or commit to pay for a percentage share of the total cost of the Highway System Deliverability Upgrades equal to the estimated percentage megawatt usage by the Class Year CRIS Project of the total megawatts provided by the System Deliverability Upgrades. Other generators or Cluster Study Transmission Projects in the current Cluster Study Deliverability Study may share in the cost of these System Deliverability Upgrades, on the same basis. Projects in the current Cluster Study Deliverability Study will not be allocated all of the cost of these System Deliverability Upgrades. The rest of the cost of these System Deliverability Upgrades will be allocated to Load Serving Entities and subsequent Interconnection Customers, as described in this Section [40.13.12]. The Interconnection Customer may either (1) make a cash payment of its proportionate share of the upgrade, which will be held by the Connecting Transmission Owner and Affected Transmission Owner(s) in interest-bearing account(s); or (2) post Security (as defined in this Attachment HH) meeting the commercially reasonable requirements of the Connecting Transmission Owner and Affected Transmission Owner(s) for the Interconnection Customer's proportionate share of the cost of the upgrade. The amount(s) of cash or Security that an Interconnection Customer must provide to its Connecting Transmission Owner and any Affected Transmission Owners will be included in the Cluster

Study Deliverability Study report. If the Interconnection Customer chooses to provide Security, its allocated cost will be increased by an annual construction-focused inflation index. The Interconnection Customer will update its Security on an annual basis to reflect this increase. Except for this adjustment for inflation, the cost allocated to the Interconnection Customers will not be increased if the estimated cost of the Highway System Deliverability Upgrade increases. However, the costs allocated to subsequent Interconnection Customers will be based on a current cost estimate of the Highway System Deliverability Upgrade project.

40.13.12.3 If requesting CRIS, the generator or Cluster Study Transmission Project will be considered deliverable, and eligible to become a qualified Installed Capacity Supplier or to receive Unforced Capacity Deliverability Rights or External-to-ROS Deliverability Rights, as applicable and subject to eligibility requirements in the ISO Procedures, when the Project associated with the CRIS request is in service, provided the Interconnection Customer has paid its share of the total cost of System Deliverability Upgrades necessary to support the requested CRIS level, or made a satisfactory commitment to do so. Highway System Deliverability Upgrades--where the System Deliverability Upgrades are below the 90% threshold discussed in Section [40.13.12.2] above--will be constructed and funded either (i) according to Sections [40.13.12.3.1] and [40.13.12.3.2] below, or (ii) according to Section [40.13.12.3.3] below.

40.13.12.3.1 When a threshold of 60% of the most current cost estimate of the System Deliverability Upgrade has been paid or posted as Security by Interconnection



Customers, the Highway System Deliverability Upgrade will be built by the Transmission Owner that owns the facility to be upgraded. If the facility to be constructed will be entirely new, construction should be completed by the Transmission Owner that owns or controls the necessary site or right of way. If no Transmission Owner(s) has such control, construction should be completed by the Transmission Owner in whose Transmission District the facility would be constructed. If the upgrade crosses multiple Transmission Districts, each Transmission Owner will be responsible for the portion of the upgrade in its Transmission District.

40.13.12.3.2 The actual cost of the Highway System Deliverability Upgrade project above that paid for by Interconnection Customers will be funded by Load Serving Entities, using the rate mechanism contained in Schedule 12 of the ISO OATT. Load Serving Entity funding responsibility for the Highway System Deliverability Upgrade will be allocated among Load Serving Entities based on their proportionate share of the ICAP requirement in the statewide capacity market, adjusted to subtract their locational capacity requirements; *provided, however*, Load Serving Entities will not be responsible for actual costs in excess of their share of the final Class Year estimated cost of the Highway System Deliverability Upgrade if the excess results from causes, as described in Section [40.16.2.4] of this Attachment HH, within the control of a Transmission Owner(s) responsible for constructing the Highway System Deliverability Upgrade.

40.13.12.3.3 If the ISO triggers a transmission project under the Reliability Planning Process, selects a transmission project under the Short-Term Reliability Process,

selects a transmission upgrade under the Public Policy Transmission Planning Process, or results in a Regulated Economic Transmission Project being approved under the Economic Planning Process (collectively “CSPP transmission upgrade”) and the CSPP transmission upgrade requires construction of a transmission facility that provides the same or greater transfer limit capability as the Highway facility identified as a Highway System Deliverability Upgrade to be constructed earlier than would be the case pursuant to Section [40.13.12.3.1], the CSPP transmission upgrade will be constructed as determined in the CSPP or the Short-Term Reliability Process, as applicable. Funds collected from Interconnection Customers (pursuant to Section [40.13.12.2], above) will be used to cover a portion of the regulated solution costs to the extent that the funds collected from Interconnection Customers were collected for System Deliverability Upgrades that are actually constructed by the regulated solution. To the extent this is true, these funds originally collected (or posted as Security) for System Deliverability Upgrades will be used as an offset to the total CSPP transmission upgrade cost, with the remainder of the upgrade cost to be allocated per the requirements of the CSPP, as set forth in Section 31.5 of Attachment Y to the ISO OATT, or the Short-Term Reliability Process, as set forth in Section 38.22 of Attachment FF to the ISO OATT.

To the extent funds collected from Interconnection Customers for System Deliverability Upgrades are insufficient to cover the entire cost of the CSPP transmission upgrades, the Interconnection Customers’ contribution to the System Deliverability Upgrades allocated to the CSPP transmission upgrades will not

exceed the Interconnection Customers' respective Project Cost Allocations for the System Deliverability Upgrade. To the extent funds collected from Interconnection Customers for System Deliverability Upgrades exceed the cost of the CSPP transmission upgrades, the funds collected for the System Deliverability Upgrades will be allocated to the CSPP transmission upgrade pro rata with the Interconnection Customers' contribution to the System Deliverability Upgrades, and excess funds or Security for System Deliverability Upgrades above the cost of the CSPP transmission upgrade will be returned to the Interconnection Customers.

40.13.12.4 If an Interconnection Customer has accepted its Project Cost Allocation, the Interconnection Customer may elect before the construction of an identified Highway System Deliverability Upgrade is commenced, to be retested for deliverability by entering a Cluster Study. The Interconnection Customer's cost responsibility for System Deliverability Upgrades shall not increase as a result of such retesting. It may decrease or be eliminated. If the Interconnection Customer's Project is found to be deliverable without the System Deliverability Upgrades previously identified, the Affected System Operator, Affected Transmission Owner, or Connecting Transmission Owner will terminate Interconnection Customer's Security posting, or will return the Interconnection Customer's cash payment with the interest earned.

40.13.12.5 When the Highway System Deliverability Upgrades are placed in to Commercial Operation and any resulting Incremental TCCs related to the Highway System Deliverability Upgrade become effective in accordance with Section 19.2.4 of Attachment M of the ISO OATT, an Interconnection Customer

electing to receive its proportionate share of such Incremental TCCs, as further described in Section [40.13.2.2] of this Attachment HH, will receive its proportionate share of such Incremental TCCs.

40.13.12.5.1 Load Serving Entities required by this Section [40.13.12] to fund a portion of the costs of a Highway System Deliverability Upgrade will receive the corresponding financial value of any Incremental TCCs related to the System Deliverability Upgrade held by the Transmission Owner(s) responsible for constructing the Highway System Deliverability Upgrade, as further described in Section [40.13.2.2] of this Attachment HH. The corresponding financial value of any such Incremental TCCs will be accounted for in determining the applicable Highway Facilities Charge in accordance with Schedule 12 of the ISO OATT. The eligibility of the Load Serving Entities to the financial value of any Incremental TCCs related to the System Deliverability Upgrade held by the Transmission Owner(s) responsible for constructing the Highway System Deliverability Upgrade shall commence as of the date such Incremental TCCs become effective in accordance with Section 19.2.4 of Attachment M to the OATT and continue until the earlier of: (i) the expiration of any such Incremental TCCs; or (ii) the termination of the obligation of the Load Serving Entities to fund a portion of the costs of the Highway System Deliverability Upgrade.

40.13.12.6 As new generators, Class Year Transmission Projects, and Cluster Study Transmission Projects come on line and use the Headroom on System Deliverability Upgrades created by a prior Highway System Deliverability Upgrade, the Interconnection Customers of those new facilities will reimburse the

prior Interconnection Customers or will compensate the Load Serving Entities who funded the System Deliverability Upgrades for use of the Headroom created by the prior Interconnection Customers and Load Serving Entities in accordance with Sections [40.17.1.4] and [40.17.1.5] of these rules.

40.13.12.6.1 In accordance with Section [40.13.2.2] of this Attachment HH, as subsequent Interconnection Customers make Headroom payments to prior Interconnection Customers and if a subsequent Interconnection Customer elects to receive its proportionate share of any Incremental TCCs related to the Highway System Deliverability Upgrade, such Incremental TCCs will be transferred to the subsequent Interconnection Customers; *provided, however*, that Incremental TCCs that were previously deemed reserved and are transferred to a subsequent Interconnection Customer will become effective on the first day of the Capability Period that commences following the next Centralized TCC Auction conducted after the subsequent Interconnection Customer makes the necessary Headroom payment and elects to receive its proportionate share of Incremental TCCs.

40.13.12.6.2 In accordance with Section [40.13.2.2] of this Attachment HH, as subsequent Interconnection Customers compensate Load Serving Entities for use of their Headroom by providing any such Headroom payments to the Transmission Owner(s) responsible for constructing a Highway System Deliverability Upgrade and if a subsequent Interconnection Customer elects to receive its proportionate share of any Incremental TCCs related to the Highway System Deliverability Upgrade, such Incremental TCCs will be transferred to the subsequent Interconnection Customer.

40.13.12.7 The Transmission Owner responsible for constructing a System

Deliverability Upgrade or an Interconnection Customer contributing toward the cost of a System Deliverability Upgrade can elect to construct upgrades that are larger and/or more expensive than the System Deliverability Upgrades identified to support the requested level of CRIS for the Cluster Study CRIS Project in the Cluster Study Deliverability Study, provided that those upgrades are reasonably related to the Cluster Study Project. The party electing to construct the larger upgrade will pay for the incremental cost of the upgrade; i.e., the difference in cost between the cost of the System Deliverability Upgrades as determined by these rules, and the cost of the larger and/or more expensive upgrade.

**40.13.13 Agreements for the Engineering, Procurement, and Construction of System Deliverability Upgrades**

40.13.13.1 If a System Deliverability Upgrade on the Connecting Transmission Owner's system is cost allocated to an Interconnection Customer and such Interconnection Customer accepts its SDU Project Cost Allocation and pays cash or post Security for the System Deliverability Upgrade, the Standard Interconnection Agreement among the Interconnection Customer, Connecting Transmission Owner, and ISO will provide for the engineering, procurement and construction of such System Deliverability Upgrade.

40.13.13.2 If a System Deliverability Upgrade on an Affected System is cost allocated to an Interconnection Customer and such Interconnection Customer accepts its SDU Project Cost Allocation and pays cash or post Security for the System Deliverability Upgrade, the ISO shall tender to the Interconnection Customer and Affected System Operator a Standard Upgrade Construction Agreement in accordance with the requirements in Section [40.21] to this

Attachment HH to provide for the engineering, procurement and construction of the System Deliverability Upgrades on the Affected System.

40.13.13.3 If a System Deliverability Upgrade is cost allocated to multiple Interconnection Customers and multiple Interconnection Customers accept their SDU Project Cost Allocation and pays cash or posts Security for the System Deliverability Upgrade, the ISO shall tender to the Interconnection Customer(s) and, as applicable, Affected System Operator or Connecting Transmission Owner, a Standard Multiparty Upgrade Construction Agreement to provide for the engineering, procurement and construction of the System Deliverability Upgrade.

**40.14 Additional SDU Studies**

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

##### **40.15.1 ISO Provision of Description and Project Cost Allocation of CTOAFs, SUFs, and SDUs**

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 Developer. Each Cluster Study Developer 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 Project Assessment and Cluster Study Deliverability Study to the 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 Project Assessment and Cluster Study Deliverability Study by the Operating Committee (collectively the “Cluster Study Reports”); or (2) approval of the final Additional SDU Study report by the Operating Committee when such approval is prior to completion of the Cluster Baseline Assessment study cases for the following Cluster Study, 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 Feedback 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 CTO 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 CTO and SUF Project Cost Allocation or the SDU Project Cost Allocation; or (2) a decrease in the Interconnection Customer's Deliverable MW.

40.15.2.6 An Interconnection Customer in an Additional SDU Study that has not completed when the Initial Decision Round of the Final Decision Period for the Cluster Study has commenced may, in the Initial Decision Round or Subsequent Decision Round 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; (2) reject its CTOAF and

SUF Project Cost Allocation and be withdrawn from both the Cluster Study and the Additional SDU Study; or (3) wait until the Initial Decision Round of the Final Decision Period that commences pursuant to this Section [40.15.2.1] upon completion of the Additional SDU Study to provide an Acceptance Notice or Non-Acceptance Notice for its CTOAF and SUF Project Cost Allocation and SDU Project Cost Allocation; *provided, however*, that pursuant to this Section [40.15.2], no Initial Decision Round for a Final Decision Period will be triggered by an Additional SDU Study that is ongoing at the time the ISO completes the Cluster Baseline Assessment study cases for the subsequent Cluster Study. The CTOAF and SUF Project Cost Allocation and any Deliverable MW identified in the Cluster Study for an Interconnection Customer in an Additional SDU Study that elects not to accept its CTOAF and SUF Project Cost Allocation with its Cluster Study, but that elects to wait until the Initial Decision Round of the Final Decision Period] that commences pursuant to this Section [40.15.2.1] upon completion of the Additional SDU Study, will be revised in light of the final Cluster Study project cost allocation decisions (i.e., the CTOAF and SUF Cost Allocation and Deliverable MW, if any, may change between the Initial Decision Round of the Final Decision Period for the Cluster Study and the Initial Decision Round of the Additional SDU Study Decision Period for 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 Operating Committee, all of the Acceptance Notices and Non-Acceptance Notices that were received during that decision round. 4or any Project that fails to provide a confirmed Initial Feedback Date and Commercial Operation Date in its Acceptance Notice or that provides a proposed Initial Feedback 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 Feedback Date or Commercial Operation Date provided in the Cluster Study Project's Acceptance Notice. Subsequent modifications to a Project's Initial Feedback 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 that Cluster Study Project, the ISO shall remove the Interconnection Customer from the Class Year 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 Class Year Deliverability Study, and the ISO shall withdraw that Interconnection Customer's Interconnection Request will 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 an 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 study costs incurred in the Cluster Study Process pursuant to Section [40.24.3] and Interconnection Customer’s payment of all invoices, upon Interconnection Customer’s request, the ISO will refund to the Interconnection Customer any refundable cash portion of its Study Deposit and Readiness Deposit 2, and cancel any remaining letter of credit provided as a deposit 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, as applicable, the Final Decision Period or Additional SDU Study Decision Period;

(ii) an Interconnection Customer for a CRIS-Only Cluster Study Project accepts its SDU Project Cost Allocation and pays cash or posts Security for that allocated amount in the Final Decision Round of, as applicable, the Final Decision Period or Additional SDU Study Decision Period, or

(iii) an Interconnection Customer for a Cluster Study Project or CRIS-Only Cluster Study Project participated in an Additional SDU Study that was not completed in the Cluster Study Process pursuant to Section [40.14.2] and the Interconnection Customer’s project is a Contingent Project in the subsequent Cluster Study Process.

**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, 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;

(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, as applicable, the Final Decision Period or Additional SDU Study 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,

then 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 Interconnection Customer for any Withdrawal Penalty under this Section [40.15.5.1].

40.15.5.2.1 Any Withdrawal Penalty that the Interconnection Customer is subject to in Section [40.15.5.1] is in addition to the Interconnection Customer's responsibility to pay for any study costs it incurs in the Cluster Study Process.

40.15.5.2.2 The Interconnection Customer shall pay the invoiced amount for the Withdrawal Penalty within thirty (30) calendar days of the ISO's issuance of the invoice. Except as otherwise provided in Section [40.24.3.8], if the Interconnection Customer does not pay its invoice within the timeframe described above, the ISO shall recover any unpaid amounts, as applicable, from the Interconnection Customer's Study Deposit and its Readiness Deposit 2. The ISO shall not be liable for unpaid penalty amounts and may not collect them from other Interconnection Customers or Transmission Customers.

40.15.5.3 The ISO shall apply the collected Withdrawal Penalty Funds pursuant to Section [40.6.5]. Except as otherwise provided in Section [40.24.3.6], the ISO shall refund an Interconnection Customer that is subject to a Withdrawal Penalty under this Section [40.15.5.1] any Study Deposit amount and Readiness Deposit 2 amount that is not included in the Withdrawal Penalty in accordance with the withdrawal requirements in Section [40.6.4.3].

40.15.5.3.1 Any Withdrawal Penalty that the Interconnection Customer is subject to in Section [40.15.5.2] is in addition to the Interconnection Customer's responsibility to pay for any study costs it incurs in the Cluster Study Process. If Interconnection Customer does not make a payment for its study costs in accordance with Section [40.24.3.6], the ISO may draw on Interconnection Customer's Study Deposit to recover such costs. A Withdrawal Penalty for a Study Deposit is 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.

40.15.5.3.2 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 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 Upgrades required for other projects evaluated in a Class Year Study, Cluster Study under this Attachment HH, or in a study performed under OATT 3.7, OATT 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.

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 Developer 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 Project interconnection agreement executed between an Interconnection Customer and its Connecting Transmission Owner 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 their interconnection or construction agreement.

## **40.17 Headroom**

### **40.17.1 Headroom Accounting**

If, pursuant to these rules, an Interconnection Customer, Connecting Transmission Owner, Affected Transmission Owner, Affected System Operator, or Load Serving Entity (each an “Entity”) pays for any Distribution Upgrades, System Upgrade Facilities or System Deliverability Upgrades, or for any Attachment Facilities or Distribution Upgrades that are later determined to be Distribution Upgrades, System Upgrade Facilities or System Deliverability Upgrades, that create “Headroom”, and pays for the Headroom that is created, then that Entity will be paid the depreciated cost of that Headroom by the Interconnection Customer of any subsequent Project that interconnects and uses the Headroom within the applicable period of time following the creation of the Headroom, as specified in Section [40.17.4.3] herein. The ISO will depreciate Headroom cost in accordance with Section [40.17.3] herein.

40.17.1.1 Interconnection Customers of terminated Projects who have paid for Headroom with forfeited cash or Security instruments, as well as Interconnection Customers of completed Projects who have paid for Headroom, will be repaid in accordance with these rules.

40.17.1.2 The Interconnection Customer of the subsequent Project shall pay the prior Entity as soon as the cost responsibilities of the subsequent Interconnection Customer are determined in accordance with these rules. In the case of Headroom created by Load Serving Entity funding Highway System Deliverability Upgrades pursuant to Schedule 12 of the ISO OATT, the Interconnection Customer of the subsequent Project shall pay the Connecting Transmission Owner, and any Affected Transmission Owner(s) or Affected System Operator, that are receiving

or will receive Load Serving Entity funding for the Highway System Deliverability Upgrades pursuant to Schedule 12 of the ISO OATT. Upon receipt of the Interconnection Customer's Headroom payment, the Connecting Transmission Owner and any Affected Transmission Owner(s) or Affected System Operator, will make the rate adjustment(s) called for by Section 6.12.4.1.3 of Schedule 12 of the ISO OATT.

40.17.1.3 The ISO will determine the depreciated cost of the Distribution Upgrades, System Upgrade Facilities and/or System Deliverability Upgrades associated with the Entity -created Headroom using one of the following two methods:

40.17.1.3.1 In all cases except the case of Highway System Deliverability Upgrades funded by Load Serving Entities pursuant to Schedule 12 of the ISO OATT, the ISO will use the FERC-approved depreciation schedule applied to comparable facilities by the Connecting Transmission Owner or the applicable Affected Transmission Owner or Affected System Operator. The ISO will depreciate the Headroom cost annually, starting with the year when the Headroom account is first established.

40.17.1.3.2 In the case of Highway System Deliverability Upgrades funded by Load Serving Entities pursuant to Schedule 12 of the ISO OATT, the ISO will use the FERC-approved depreciation schedule applied to the particular Highway System Deliverability Upgrades by the Connecting Transmission Owner or the applicable Affected Transmission Owner or Affected System Operator pursuant to Schedule 12 of the ISO OATT. The ISO will depreciate the Headroom cost annually, starting with the year the Highway System Deliverability Upgrade is placed in

service. If a Cluster Study Deliverability Study or Additional SDU Study determines that a Interconnection Customer in such study uses Headroom on such a Highway System Deliverability Upgrade before the Highway System Deliverability Upgrade has been placed in service, the ISO will calculate the Headroom use payment obligation of the Interconnection Customer using the undepreciated cost of the Headroom.

40.17.1.4 Entity-created Headroom will be measured by the ISO in accordance with these rules. The use that a subsequent Project makes of Entity-created Headroom will also be measured by the ISO in accordance with these rules.

40.17.1.4.1 In the case of Headroom on Distribution Upgrades, System Upgrade Facilities that have an excess functional capacity not readily measured in amperes or other discrete electrical units, the use that each subsequent Project makes of the Entity-created Headroom will be measured solely by using the total number of Projects in the current and prior Cluster Studies and Class Years needing or using the System Upgrade Facility.

40.17.1.4.1.1 The use that each Project in a subsequent Cluster Study makes of Headroom on such a Distribution Upgrade or System Upgrade Facility will be measured as an amount equal to  $(1/b)$ , where “b” is the total number of Projects in all prior and current Cluster Studies and Class Years using the System Upgrade Facility.

40.17.1.4.1.2 Each Interconnection Customer in a subsequent Cluster Study that uses Headroom on such a Distribution Upgrade or System Upgrade Facility will make a Headroom payment to all prior Interconnection Customers that have previously

made payments for that Distribution Upgrade or System Upgrade Facility, both the prior Interconnection Customers that have previously made Headroom payments and the Interconnection in the first Class Year or Cluster Study, as applicable, that paid for the original installation of the Distribution Upgrade or System Upgrade Facility. The amount of the Headroom payment to each prior Interconnection that each Interconnection Customer in a subsequent Cluster Study must make for its use of Headroom on such a Distribution Upgrade or System Upgrade Facility will be an amount equal to  $c/(b) \times (d)$ , where “c” is the depreciated cost of the Distribution Upgrade or System Upgrade Facility at the time of the subsequent Cluster Study, “b” is the total number of Projects in all prior and current Class Years and Cluster Studies using the Distribution Upgrade or System Upgrade Facility, and “d” is the total number of Projects in all the prior Class Years and Cluster Studies that have previously made payments for the Distribution Upgrade or System Upgrade Facility, both Headroom payments and payments for original installation.

40.17.1.4.2 In the case of Distribution Upgrades, System Upgrade Facilities or System Deliverability Upgrades that have an excess capacity readily measured in amperes or other discrete electrical units, the use the subsequent Project makes of the Entity-created Headroom will be measured in terms of the electrical impact of the subsequent Project, as that electrical impact is determined by the ISO in accordance with these rules.

40.17.1.4.3 The ISO will publish accounts showing the Headroom for each Interconnection Customer and other Entities, and will update those accounts to



reflect the impact of subsequent Projects. With the exception of Headroom on Highway System Deliverability Upgrades funded by Load Serving Entities pursuant to Schedule 12 of the ISO OATT, the ISO will close the Headroom account of an Entity when the electrical values in the account are reduced to zero or when ten years have passed since the establishment of the account, whichever occurs first.

40.17.1.4.3.1 In the case of Headroom on Highway System Deliverability Upgrades funded by Load Serving Entities pursuant to Schedule 12 of the ISO OATT, the ISO will close the Headroom account of the Load Serving Entity when the MW value in the account is reduced to zero, or at the end of the useful financial life of the Highway System Deliverability Upgrades, whichever occurs first.

40.17.1.4.4 If a subsequent Interconnection Customer uses up all the Headroom of an earlier Entity, and also triggers the need for a new Distribution Upgrade, System Upgrade Facility or System Deliverability Upgrade, then the subsequent Interconnection Customer will pay the Connecting Transmission Owner, Affected Transmission Owner, or Affected System Operator for the new Distribution Upgrade. System Upgrade Facility or System Deliverability Upgrade, but will not pay the earlier Entity for the Headroom used up or the account extinguished. However, the earlier Entity will get a new Headroom account and a pro rata share of the Headroom in the new Distribution Upgrade, System Upgrade Facility or System Deliverability Upgrade purchased by the subsequent Interconnection Customer. The economic value of this pro rata share will be equal to the

economic value of the earlier Entity's Headroom account that was extinguished by the subsequent Interconnection Customer.

40.17.1.5 The Interconnection Customer of the subsequent Project shall pay the prior Entity within the five (5) business day period specified in Section [40.15.2.8] of this Attachment HH. Headroom obligations related to a Distribution Upgrade or System Upgrade Facility that has been fully constructed must be satisfied by cash payment. All remaining Headroom obligations may be satisfied by a form of "Headroom Security" – 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 prior Entity, meeting the requirements of these cost allocation rules, and meeting the respective commercially reasonable requirements of the prior Entity. Headroom Security shall be posted to cover the period ending on the date on which full payment is made to the prior Entity for the Headroom obligation; *provided, however*, that Headroom Security may be posted with a term as short as one year, so long as such Headroom Security is replaced no later than fifteen (15) business days before its stated expiration. In the event Headroom Security is not replaced as required in the preceding sentence, the prior Entity shall be entitled to draw upon the Headroom Security and convert it to cash, which cash shall be held by the prior Entity for the account of the Interconnection Customer.

#### **40.17.2 Headroom Account Adjustments in the CBA**

In addition to the adjustments made by the ISO in Headroom accounts to reflect the impact of subsequent Projects, the ISO will make other adjustments to Headroom accounts when

preparing for each Cluster Baseline Assessment. The ISO will make these adjustments to reflect the impact of changes in the Existing System Representation modeled for the Cluster Baseline Assessment that result from the installation, expansion or retirement of generation and transmission facilities for load growth and changes in load patterns. Such changes in the Existing System Representation can also result from changes in these rules or the criteria, methods or, software used to apply these rules.

40.17.2.1 No compensation will be paid as a result of these changes to the Existing System Representation. However, the ISO will adjust the ratios of dollars to electrical values in each Entity's account to maintain the economic value of the Entity's account that existed before the changes were made in the Existing System Representation.

40.17.2.2 The ISO will make no adjustments to Headroom accounts for the impact of subsequent generic solutions, except in those cases where the generic solution is a Cluster Study Project and the adjustment is made to reflect the impact of the Cluster Study Project.

### **40.17.3 Rate Base Facilities**

With the exception of Interconnection Customer's use of Headroom created by Load Serving Entity funding of Highway System Deliverability Upgrades pursuant to Schedule 12 of the ISO OATT, Interconnection Customers are not charged for their use of any rate base facilities, except to the degree applicable as customers taking service in accordance with the rates, if any, that apply to those facilities.

## **40.18 CRIS Retention, Expiration, Transfer and External CRIS**

### **40.18.1 ERIS Election and future Evaluation for CRIS**

Whenever an Interconnection Customer elects to interconnect taking ERIS only, that Interconnection Customer may, at any later date, ask the ISO to evaluate the Interconnection Customer's Facility for CRIS by applying in accordance with the requirements in this Attachment HH to include the Interconnection Customer's Facility in (1) the next Cluster Study Process and the Cluster Study Deliverability Study to be conducted for that Cluster Study; or (2) the next open Expedited Deliverability Study.

### **40.18.2 CRIS Rights**

#### **40.18.2.1 Retaining CRIS Status**

Facilities awarded CRIS pursuant to this Attachment HH, as allocated among the facilities' individual units, as applicable, will retain such CRIS to the extent specified in Sections [40.18.2.2] and [40.18.2.3] of this Attachment HH, regardless of subsequent changes to the transmission system or the transfer of facility ownership. Facilities awarded CRIS pursuant to this Attachment HH that are withdrawn from the ISO's Queue will not receive any CRIS awarded to the facility through that Queue Position.

#### **40.18.2.2 Full CRIS Termination**

Subject to the requirements set forth in Sections [40.18.2.2.1] through [40.18.2.2.2] and the subsections therein, CRIS will be terminated in full upon request by the facility owner or due to three continuous years of the facility being CRIS-inactive, except as provided in Sections 5.18.2.3.2, 5.18.3.3.2, and 5.18.5 of the ISO Services Tariff. The effective date of CRIS termination pursuant to this Section [40.18.2.2] will be the date the ISO has completed processing the termination request and provided notice of same to the requesting facility owner.

40.18.2.2.1 Voluntary termination. A Facility that (a) is Retired or in a Mothball Outage or (b) is in an ICAP Ineligible Forced Outage, and has been assessed in a STAR or a Generator Deactivation Assessment where the ISO, in coordination with the Responsible Transmission Owner(s), determined that a Generator Deactivation Reliability Need will not result from the Facility's deactivation, may elect to relinquish its CRIS, before that CRIS would otherwise expire under this Attachment HH, upon notification to the ISO by submitting its request in accordance with ISO Procedures. Relinquishment of CRIS under this Section [40.18.2.2.2] may only be in full (*i.e.*, the facility may not elect to relinquish only a portion of its CRIS).

40.18.2.2.2 Termination for CRIS-Inactive Facilities. CRIS will terminate in full after three continuous years of being CRIS-inactive, as defined in Section [40.2.2.2.1], except as provided in Sections 5.18.2.3.2, 5.18.3.3.2, and 5.18.5 of the ISO Services Tariff.

40.18.2.2.2.1 For the purpose of the rules in this Section 40.18.2.2.2, once a facility with CRIS has synchronized, it becomes CRIS-inactive on the last day of the month for which it fails to (i) offer any capacity into ISO capacity auctions, and/or (ii) certify any capacity as an Installed Capacity Supplier through a Bilateral Transaction(s) or Export of capacity to an External Control Area, except as provided in Sections 40.18.2.2.2.1.1 and 40.18.2.2.2.1.2 below.

40.18.2.2.2.1.1 A facility that has synchronized before February 29, 2020 and was not CRIS-inactive under the previously-effective rules due to its activity as a load modifier, will be considered CRIS-inactive no earlier than February 29, 2020, based on its activity on and after that date.

40.18.2.2.2.1.2 A facility that has synchronized before February 29, 2020 but never offered capacity into ISO capacity auctions or certified capacity through a bilateral prior to February 29, 2020 will be considered CRIS-inactive no earlier than February 29, 2020, based on its activity on and after that date.

40.18.2.2.2.2 In the case of a CRIS-inactive facility, the facility's CRIS terminates three years after the facility becomes CRIS-inactive, except as provided in Sections 5.18.2.3.2, 5.18.3.3.2, and 5.18.5 of the ISO Services Tariff, unless the CRIS-inactive facility takes one of the following actions before the end of the three-year period: (1) returns to service and participates in an ISO capacity auction or bilateral transactions or (2) transfers CRIS to another facility as permitted by Sections [40.18.3] and [40.18.4] of this Attachment HH.

#### **40.18.2.3 Partial CRIS Termination**

40.18.2.3.1 For a facility other than a facility that has Unforced Capacity Deliverability Rights or External-to-ROS Deliverability Rights (*i.e.*, generators internal to the NYCA), CRIS utilization is the MW sum for a given month of the Installed Capacity Equivalent of UCAP: (1) offered into ISO capacity auctions; (2) certified through a Bilateral Transaction(s); and (3) exported to an External Control Area. If its CRIS utilization ratio (*i.e.*, ratio of the monthly CRIS utilization to its total applicable seasonal CRIS value) falls at or below 0.9 for every month for three consecutive years, measured on a forward rolling basis from July 3, 2023, the facility's CRIS will be reduced to the MW level of its existing CRIS values multiplied by the sum of (1) its maximum utilization ratio for any month within the prior three-year period and (2) 0.05, rounded to the nearest tenth of a MW. For purposes of calculating CRIS utilization pursuant to this Section [40.18.2.4.1], any months during which a facility is in a Mothball Outage

or ICAP Ineligible Forced Outage are excluded and not considered as part of the three-year period for determining CRIS utilization. If a facility returns to service from a Mothball Outage or an ICAP Ineligible Forced Outage, the three (3)-year period for determining CRIS utilization will not restart, but will resume from the point when the facility entered the Mothball Outage or the ICAP Ineligible Forced Outage. For example, if after two consecutive years of a CRIS utilization ratio at or below 0.9, a facility enters an ICAP Ineligible Forced Outage, the three-year period does not continue during the ICAP Ineligible Forced Outage but resumes the first month the facility is eligible to participate in the ICAP market as determined by Section 5.18.2.2 of the ISO Services Tariff.

40.18.2.3.2 For a facility with CRIS that has Unforced Capacity Deliverability Rights or External-to-ROS Deliverability Rights (“UDR/EDR transmission facility”), if during the three years from the Synchronization Date of the UDR/EDR transmission facility the facility has not demonstrated, consistent with ISO Procedures, that it is capable of delivering MW of Energy to the NYCA interface equivalent to its MW of CRIS, its CRIS MW will be reduced to the maximum MW of Energy the UDR/EDR transmission facility has demonstrated it is capable of delivering to the NYCA interface pursuant to ISO Procedures of any month during this three-year period. For purposes of this Section [40.18.2.3.2], a UDR/EDR transmission facility is capable of delivering Energy to the NYCA interface if it demonstrates deliverability as required by ISO Procedures to be eligible to sell capacity for a particular month, in accordance with the requirements based on the Control Area where the External Installed Capacity Supplier is electrically located.

**40.18.2.4 Term of External CRIS Rights**

40.18.2.4.1 The initial term of External CRIS Rights, whether based on a Contract or Non-Contract Commitment, will be for an Award Period of no less than five (5) years.

40.18.2.4.2 An entity holding External CRIS Rights may renew those rights for one or more subsequent terms, as described below:

40.18.2.4.2.1 An entity holding External CRIS Rights based on a Contract Commitment may renew its External CRIS Rights, provided that the ISO receives from the entity a request to renew on or before the date specified in Section [40.18.2.5.2.3] indicating that the entity has renewed its bilateral contract to supply External Installed Capacity for an additional term of no less than five (5) years. If the entity does so, then that entity's External CRIS Rights will be renewed for the same additional term, without any further evaluation of the deliverability of the External Installed Capacity covered by the renewed bilateral contract.

40.18.2.4.2.2 An entity holding External CRIS Rights based on a Non-Contract Commitment may renew its External CRIS Rights, provided that the ISO receives from the entity a request to renew on or before the date specified in Section [40.18.2.2.2.3]. Any Non-Contract Commitment renewal must be for an additional term of no less than five (5) years. If the entity does so, then that entity's External CRIS Rights will be renewed for the same additional term, without any further evaluation of the deliverability of the External Installed Capacity associated with the Non-Contract Commitment.

40.18.2.4.2.3 Requests for renewal of External CRIS Rights must comply with ISO Procedures be received by the ISO on or before a date defined by the earlier of:



(i) six months prior to the expiration date of the Contract or Non-Contract Commitment, or (ii) one month prior to the Cluster Study Start Date that is prior to the start of the last Summer Capability Period within the current Award Period or renewal of an Award Period.

40.18.2.4.3 External CRIS Rights will terminate at the end of the effective Award Period or renewal of an Award Period if those rights have not been renewed for an additional term, pursuant to the process described above.

**40.18.2.5 CRIS for Facilities Pre-Dating Class Year 2007**

40.18.2.5.1 For Facilities pre-dating Class Year 2007, *i.e.*, facilities interconnected or completely studied for interconnection before the projects in Class Year 2007, the facility shall qualify for CRIS service so long as (i) it is not retired (*e.g.*, identified as retired in a NYISO Load and Capacity Data Report prior to October 5, 2008), (ii) its interconnection agreement is not terminated, and (iii) the facility begins commercial operations within three years of the commercial operation date or comparable commencement date specified in its initial interconnection agreement filing.

40.18.2.5.2 A generator or merchant transmission facility pre-dating Class Year 2007 without an interconnection agreement on October 5, 2008, or one with an initial interconnection agreement filing that does not specify a commercial operation date or any comparable commencement date, shall qualify for CRIS so long as it is not retired (*e.g.*, identified as retired in a NYISO Load and Capacity Data Report) prior to October 5, 2008 and it begins commercial operations within three years of its in-service date specified in the 2008 NYISO Load and Capacity Data Report.

40.18.2.5.3 For generators pre-dating Class Year 2007, the CRIS capacity level will be set at the maximum DMNC level achieved during the five most recent Summer Capability Periods prior to October 5, 2008, even if that DMNC value exceeds nameplate MW.

40.18.2.5.4 For a generator pre-dating Class Year 2007 and not having DMNC levels recorded for five Summer Capability Periods prior to October 5, 2008, its CRIS capacity level will be set, and reset if necessary, at the maximum DMNC level achieved during successive Summer Capability Periods until it has DMNC levels recorded for five Summer Capability Periods. Prior to the establishment of the generator's first DMNC value for a Summer Capability Period, the generator's CRIS level will be set at nameplate MW.

40.18.2.5.5 The CRIS capacity level for intermittent resources pre-dating Class Year 2007 will be set at nameplate MW, and the CRIS capacity level for controllable lines pre-dating Class Year 2007 will be set at the MW of Unforced Capacity Deliverability Rights awarded to them.

40.18.2.5.6 Existing generators that are eligible for CRIS under this Section 40.18.2.5 that wish to obtain CRIS pursuant to this provision must request CRIS within 60 days of May 19, 2016; CRIS cannot be obtained under this Section [40.18.2.5] if not requested by such date.

#### **40.18.2.6 CRIS for Facilities Not Subject to ISO Interconnection Procedures**

All facilities that wish to become eligible to participate as Installed Capacity Suppliers pursuant to the requirements of Section 5.12 of the ISO Services Tariff, must have CRIS, even if the facility is not or was not, when interconnected, subject to the ISO's interconnection procedures.

Facilities not subject to the ISO's interconnection procedures may obtain CRIS rights by (i) entering a Class Year Deliverability Study and satisfying the NYISO Deliverability

Interconnection Standard or (ii) satisfying the requirements set forth in Section 25.9.3.6.1. For a facility subject to this Section [40.18.2.4] that has obtained CRIS on or before February 29, 2020, its CRIS will terminate four (4) years after February 29, 2020 if the Interconnection Customer has failed to provide notice to the ISO that the facility has synchronized. For a facility subject to this Section [40.18.2.6] that obtains CRIS after February 29, 2020, its CRIS will terminate four (4) years after the facility obtains CRIS, if the Interconnection Customer fails to provide notice to the ISO that the facility has synchronized.

40.18.2.6.1 A facility not subject to the ISO's interconnection procedures set forth in the then-applicable Attachments X and Z to the ISO OATT may be eligible to obtain CRIS without being evaluated under the ISO Deliverability Interconnection Standard if it met the following requirements (i) if the facility had not commenced Commercial Operation, it must have completed all required interconnection studies and have had an effective interconnection agreement by May 19, 2016, (ii) if the facility had commenced Commercial Operation by May 19, 2016, it must have had an effective interconnection agreement and must not have been out-of-service for more than three (3) consecutive years; (iii) was not, when first interconnected, subject to the ISO's then-applicable interconnection procedures set forth in Attachments X and Z to the ISO OATT, and (iv) the facility owner must have requested CRIS within 60 days of May 19, 2016. The CRIS level for a facility that qualified for CRIS under this Section [40.18.2.6.1] was set in accordance with Section [40.18.2.6.1.1] and 40.18.2.6.7.1.2.

**40.18.2.6.1.1 BTM:NG Resource**

A BTM:NG Resource's initial CRIS level will be set at its Net-ICAP level. The CRIS level will be set, and reset if necessary, at the maximum Net-ICAP level achieved during successive Summer Capability Periods until the facility has Net-ICAP levels recorded for five Summer Capability Periods. The five-year CRIS set and reset period begins with the first Summer Capability Period, following receipt of an initial CRIS value, for which the BTM:NG Resource's Net-ICAP calculation incorporates a demonstrated Average Coincident Host Load. The final CRIS level will be the highest Net-ICAP recorded for the Summer Capability Period during the five-year set and reset period, excluding the initial CRIS level.

The five-year CRIS set and reset period will terminate early, before five Net-ICAP values have been recorded if any of the following conditions occurs: (i) the BTM:NG Resource ceases to qualify as a BTM:NG Resource pursuant to Section 5.12.1 of the ISO Services Tariff; (ii) the BTM:NG Resource elects to participate as another type of Installed Capacity Supplier, other than as a BTM:NG Resource; or (iii) the BTM:NG Resource's Net ICAP is equal to or less than zero for a Capability Period. Upon an early termination of the five-year CRIS set and reset period, the final CRIS value will be determined based on the available data from the CRIS set and reset period up to the point of early termination – *i.e.*, the highest Net-ICAP value recorded during the CRIS set and reset period prior to the point of early termination.

**40.18.2.6.1.2 Facilities Other than BTM:NG Resources**

Prior to the establishment of the generator's first DMNC value for a Summer Capability Period, the generator's CRIS level will be set at nameplate MW. The CRIS level will be set, and reset if necessary, at the maximum DMNC level achieved during successive Summer Capability Periods until the facility has DMNC levels recorded for five Summer Capability Periods.

**40.18.2.7 CRIS for BTM:NG Resources**

40.18.2.7.1 If meter data is available for both the Load and the generator, the initial CRIS that can be requested is limited to the demonstrated Net-ICAP. If meter data is not available for either the Load or the generator of the BTM:NG Resource, the initial CRIS that can be requested is limited to the Net-ICAP calculation set forth in Section 5.12.1 of the ISO Services Tariff. The initial CRIS level will set at the CRIS MW level: (i) evaluated in, as applicable, the Cluster Study Deliverability Study and (ii) either found to be deliverable or for which the Interconnection Customer accepted its Project Cost Allocation and posted Security for any required System Deliverability Upgrades.

40.18.2.7.2 The CRIS level will be set, and reset if necessary, at the maximum DMNC level achieved during successive Summer Capability Periods, not to exceed the initial CRIS level, until the facility has DMNC levels recorded for five Summer Capability Periods – *i.e.*, the initial CRIS level will act as a cap through the set and reset period and for the final CRIS level. The final CRIS level will be the highest Net-ICAP recorded for the Summer Capability Period during the five-year set and reset period, excluding the initial CRIS level.

40.18.2.7.3 The five-year CRIS set and reset period will terminate early, before five Net-ICAP values have been recorded if any of the following conditions occurs: (i) the BTM:NG Resource ceases to qualify as a BTM:NG Resource pursuant to Section 5.12.1 of the Services Tariff; (ii) the BTM:NG Resource elects to participate as another type of Installed Capacity Supplier, other than as a BTM:NG Resource; or (iii) the BTM:NG Resource's Net ICAP is equal to or less than zero for a Capability Period. Upon an early termination of the five-year CRIS set and reset period, the final CRIS value will be determined based on the available data from the CRIS set and reset period up to the point of early termination – *i.e.*, the highest Net ICAP value recorded during the CRIS set and reset period prior to the point of early termination.

### **40.18.3 Transfer of Deliverability Rights - Same Location**

40.18.3.1 A facility with CRIS (“transferor facility”) may, on or after its Synchronization Date, transfer some or all of its CRIS to a facility at the same electrical location (“transferee facility”), provided that (1) the transferee facility must be operational before the CRIS of the transferor facility terminates pursuant to Section 40.18.2 of this Attachment HH; and (2) the transferor facility, if it is Retired, in a Mothball Outage or is in an ICAP Ineligible Forced Outage, has been assessed in a STAR or a Generator Deactivation Assessment where the ISO, in coordination with the Responsible Transmission Owner(s), determined that a Generator Deactivation Reliability Need will not result from the Facility’s deactivation. For purposes of this Section 40.18.3, “same electrical location” means that the facilities are interconnecting to the same transmission bus at the same kV level. The transferee facility, if it has not already synchronized (*i.e.*, reached its Synchronization Date), will only acquire the transferred CRIS once transferee facility has synchronized (*i.e.*, reached its Synchronization Date). CRIS is stated in MW of Installed Capacity. In the case of transfers between the same or different resource types, those MW of Installed Capacity will be adjusted by the derate factor applicable to the transferor facility (based on the asset-class derate factors used in the most recent Class Year Deliverability Study) before the transfer and, following the transfer, will be readjusted to MW of Installed Capacity in accordance with the derate factor applicable to the transferee facility (based on the asset-class derate factors used in the most recent Class Year Deliverability Study or Cluster Study Deliverability Study). In the case of a Distributed Energy Resource (DER), CRIS rights are requested and awarded at the DER level, not at the individual asset level or at the Aggregation level, and therefore, may only be transferred at the DER level under this Section 40.18.4.

40.18.3.2 For purposes of calculating the period of time a facility is CRIS inactive pursuant to Section 40.18.2.2.3 of this Attachment HH, the period of time the facility is CRIS inactive prior to the transfer does not impart to the transferee facility (*i.e.*, if the transferor facility had been CRIS inactive for two years prior to the transfer, that two years does not transfer with the transferred CRIS. The transferee's CRIS is reset for purposes of Section 40.18.2.2.2).

40.18.3.3 If the transferor facility remains active (*i.e.*, as ERIS-only or with less than its original MW level of CRIS), it must submit a transfer notification form to the ISO in accordance with ISO Procedures before August 1 for the requested transfer to become effective at the later of the start of the next Capability Year (*i.e.*, May 1) or the Synchronization Date of the transferee facility. If transferee facility does not reach its Synchronization Date before the end of the next Capability Year (*i.e.*, April 30), the transfer will not be effective and the CRIS will remain with the transferor. A transferor facility that does not satisfy the above requirements must deactivate prior to transferring its CRIS.

40.18.3.4 If the transferor facility is located in a Mitigated Capacity Zone, it may obtain a final physical withholding determination pursuant to Section 23.4.5.6.5 of the MST. If the transferee facility is located in a Mitigated Capacity Zone and is not an Excluded Facility, pursuant to Section 23.2 of the MST, the transferee facility must, pursuant to Section 23.4.5.7 of the MST, obtain a Buyer-Side Mitigation determination for the transfer to become effective as soon as the start of the next capability month after the date upon which the last of the following occurs: the transferee obtains a Buyer-side Mitigation determination, if applicable; the transferor obtains a physical withholding determination, if applicable; and the facility meets all other applicable requirements in this Section 40.18.3; *provided however*, that if the same-location

CRIS transferor elects to remain active (*i.e.*, as ERIS-only or with less than its original MW level of CRIS), such Buyer-Side Mitigation determination must be obtained before August 1 of the current Capability Year for the transfer to become effective at the later of the start of the next Capability Year (*i.e.*, May 1) or the Synchronization Date of the transferee facility.

#### **40.18.4 Transfer of Deliverability Rights - Different Locations**

CRIS may also be transferred on a bilateral basis between an existing facility within the NYCA (“transferor facility”) and a new facility at a different location within the NYCA (“transferee facility”) to the extent that the transferee facility is found to be deliverable with the transferred. The transferee facility may contract with an existing facility with CRIS to transfer some or all of the existing facility’s CRIS. The transferee facility will be allowed to acquire these rights if it meets the requirements set forth below:

40.18.4.1 Submit an Interconnection Request or CRIS-Only Request in a Cluster Study. CRIS will be stated in MW of Installed Capacity. In the case of transfers between different resource types, those MW of Installed Capacity will be adjusted by the derate factor applicable to the existing facility before the transfer and, following the transfer, will be readjusted to MW of Installed Capacity in accordance with the derate factor applicable to the new project. All derate factors will be based on the asset-class derate factors in the current Cluster Study Deliverability Study.

40.18.4.1.1 The ISO will evaluate the deliverability of the Cluster Study Projects together, with no transfers, to determine the extent to which transferee facilities in the Cluster [for that Cluster Study] are deliverable without the proposed transfers.



40.18.4.1.2 The ISO will then reduce the output of all transferor facilities to see if the new facility counterparties benefit, *i.e.*, their undeliverable capacity is made deliverable, from the proposed transfers; *provided, however*, the transferor facilities will be reduced only to the extent that their reduction does not adversely impact the deliverability of Cluster Study Projects that are not parties to the proposed transactions.

40.18.4.1.3 If the deliverability test conducted by the ISO shows that the transferee facilities in the [Cluster for that Cluster Study] are fully or partially deliverable with these reductions of the established facility counterparties, then the transferee facilities will be given five business days to notify the ISO as to whether transfer transaction is final or not. If any proposed transactions are not finalized, then Sections 40.18.4.1.1 and 40.18.4.1.2 will be repeated until all proposed transactions have been terminated or finalized.

40.18.4.2 For each finalized transaction, the transferor facility will be modeled in the Cluster Study at its reduced output level (current level less CRIS finally transferred adjusted by the applicable derate factors). The Deliverability of Cluster Study Projects not parties to finalized transactions may benefit, but will not be adversely affected, by those transactions.

40.18.4.3 The transferor facility will be restricted in future capacity sales up to levels consistent with the CRIS rights that were transferred to the new project counterparty.

40.18.4.4 The transferee facility will only acquire the transferred CRIS once the transferee facilities becomes operational at the levels necessary to utilize those

rights, provided that (1) the transferee facility must be operational before the CRIS of the transferor facility terminates pursuant to Section 40.18.2 of this Attachment HH; and (2) the transferor facility, if it is Retired, in a Mothball Outage or is in an ICAP Ineligible Forced Outage, has been assessed in a STAR or a Generator Deactivation Assessment where the ISO, in coordination with the Responsible Transmission Owner(s), determined that a Generator Deactivation Reliability Need will not result from the Facility's deactivation.

If the transferor facility is located in a Mitigated Capacity Zone, it may be subject to a final physical withholding determination pursuant to Section 23.4.5.6.1 of the ISO Services Tariff. If the transferee facility is located in a Mitigated Capacity Zone and is not an Excluded Facility, pursuant to Section 23.2 of the ISO Services Tariff, the transferee facility must, pursuant to Section 23.4.5.7 of the ISO Services Tariff, obtain a Buyer-Side Mitigation determination. Transfers may become effective as soon as the start of the next capability month after the date upon which the last of the following occurs: the transferee obtains a Buyer-Side Mitigation determination, if applicable the transfer is found deliverable as described above in Sections 40.18.4.1.1, 40.18.4.1.2 and 40.18.4.1.3, and the facility meets all other applicable requirements in Sections 40.18.4.1 and 40.18.4.1.3.

For purposes of calculating the period of time a facility is CRIS inactive pursuant to Section 40.18.2.2.3 of this Attachment HH, the period of time the facility is CRIS inactive prior to the transfer does not impart to the transferee facility (i.e., if the transferor facility had been CRIS inactive for two years prior to

the transfer, that two years does not transfer with the transferred CRIS. The transferee's CRIS is reset for purposes of Section 40.18.2.2.2).

#### **40.18.5 Transfer of External CRIS Rights**

A holder of External CRIS Rights may transfer some or all of the Contract or Non-Contract CRIS MW that it holds to another entity, provided that the following requirements are met:

40.18.5.1 The entity to receive the External CRIS Rights must, prior to the transfer, make either (i) a Contract Commitment of External Installed Capacity satisfying the requirements of Section [40.13.11.1] of this Attachment H, or (ii) a Non-Contract Commitment of External Installed Capacity satisfying the requirements of Section [40.13.11.2] of this Attachment HH; and

40.18.5.2 The External Installed Capacity of the entity to receive the External CRIS Rights must use the same External Interface(s) used by the External Installed Capacity of the entity currently holding the External CRIS Rights; and

40.18.5.3 The transfer must be for the remaining duration of the Award Period or renewal of an Award Period currently effective for the External CRIS Rights to be transferred; and

40.18.5.4 If the holder of External CRIS Rights transfers some, but not all of its CRIS MW, the number of CRIS MW transferred must be such that, following the transfer, both the holder and the entity receiving External CRIS Rights satisfy the applicable requirements of Section [40.13.11.1] and [40.13.11.2] of this Attachment HH; and

40.18.5.5 The transfer must take place on or before the earlier of:

40.18.5.5.1 Six months prior to the expiration date of the Contract or Non-Contract  
Commitment of the entity currently holding the External CRIS Rights to be  
transferred; or

40.18.5.5.2 One month prior to the Cluster Study Start Date that is prior to the start of  
the last Summer Capability Period within the current Award Period or renewal of  
an Award Period.

## **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*, 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 Cluster Study decision and settlement period, the Expedited Deliverability Study will begin on the first Business Day after ten (10) Calendar Days following the Cluster Study Process Start Date immediately following the above-described Class Year or Cluster Study decision and settlement 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 [\*], 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. 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 [\*] 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.

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 executed Expedited Deliverability Study Agreement, the required technical data and 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 on a monthly basis for the work conducted on the Expedited Deliverability Study. Each Interconnection Customer shall pay an equal share of the actual cost of the combined Expedited Deliverability Study. The Interconnection Customer shall pay invoiced amounts within thirty (30) Calendar Days of receipt of invoice. The ISO shall continue to hold the amounts on deposit in an interest bearing account associated with the Interconnection Customer until settlement of the final invoice.

#### **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 tis 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 Class Year Study or 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 Class Year Study or 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 25.5.9.2.4.

Before Operating Committee approval of the Expedited Deliverability Study, if the pending Class Year Study or Cluster Study proceeds to the final decision and settlement period and a Class Year Project or 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 and 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 Class Year Developers, in writing and 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.

#### **40.20 Engineering & Procurement (“E&P”) Agreement**

Prior to executing a Standard Interconnection Agreement, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and Connecting Transmission Owner shall offer the Interconnection Customer, an E&P Agreement that authorizes the Connecting Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the Connecting Transmission Owner shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of these Standard Interconnection Procedures. The E&P Agreement is an optional procedure, and it will not alter the Interconnection Customer’s Queue Position or Initial Feedback Date. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs. The Interconnection Customer shall, in accordance with Attachment HH to the ISO OATT, pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its Interconnection Request or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, Connecting Transmission Owner may elect: (i) to take title to the equipment, in which event Connecting Transmission Owner shall refund the Interconnection Customer any amounts paid by the Interconnection Customer for such

equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

**40.21 Standard Interconnection Agreement (IA)/ Standard Upgrade Construction Agreement/ Standard Multiparty Upgrade Construction Agreement**

**40.21.1 Tender**

40.21.1.1 Except as set forth in Section 40.21.4, as soon as practicable upon: (i) completion of the decision process in, as applicable, the Final Decision Period or Additional SDU Study Decision Period and Interconnection Customer's satisfaction of the cost allocation and Security posting requirements described in Section [40.15] or (ii) the ISO's completion of an Affected System Study Report as described in Section [40.8.3.7], the ISO shall tender, as applicable:

(i) a draft Standard Interconnection Agreement to the Interconnection Customer and Connecting Transmission Owner in the form of the ISO's Commission-approved Standard Interconnection Agreement, which is in Appendix [\*] to this Attachment HH, together with draft appendices completed to the extent practicable;

(ii) a draft Standard Upgrade Construction Agreement to an Interconnection Customer and an Affected System Operator or Affected Transmission Owner for the engineering, procurement, and construction of System Upgrade Facilities or System Deliverability Upgrades identified on an Affected System in connection with either the evaluation of an Interconnection Customer's Interconnection Request or CRIS-Only Request in the Cluster Study Process or the results of an Affected System Study for an Affected System Interconnection Customer; the draft agreement will be in the form of the ISO's Commission-approved Standard Upgrade Construction Agreement, which is in Appendix [\*] to this Attachment HH, together with draft appendices completed to the extent practicable; and/or

(iii) a draft Standard Multiparty Upgrade Construction Agreement to two or more Interconnection Customers and an Affected System Operator, Affected Transmission Owner, or

Connecting Transmission Owner for the engineering, procurement, and construction of System Upgrade Facilities or System Deliverability Upgrades identified on an Affected System or Connecting Transmission Owner's system in connection with either the evaluation of two or more Interconnection Customers' Interconnection Request(s) or CRIS-Only Request(s) in the Cluster Study Process or the results of an Affected System Study for two or more Affected System Interconnection Customers; the draft agreement will be in the form of the ISO's Commission-approved Standard Multiparty Developer Upgrade Construction Agreement, which is in Appendix [\*] to this Attachment HH, together with draft appendices completed to the extent practicable.

#### **40.21.2 Negotiation**

The ISO, the Interconnection Customer(s), and, as applicable, the Connecting Transmission Owner, Affected System Operator, or Affected Transmission Owner shall finalize the appendices and negotiate concerning any disputed provisions of the draft Standard Interconnection Agreement, Standard Upgrade Construction Agreement, or Standard Multiparty Upgrade Construction Agreement and its appendices subject to the time limitation specified below in this Section 40.21.2. If the Interconnection Customer(or the Interconnection Customers acting jointly in the case of a Standard Multiparty Upgrade Construction Agreement) determines that negotiations of the applicable agreement are at an impasse, it may request termination of the negotiations at any time after tender of the draft agreement pursuant to Section 40.21.1 and request submission of the unexecuted agreement to FERC or initiate Dispute Resolution procedures pursuant to Section [40.24.5]. If the Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to request either the filing of the unexecuted agreement or initiate Dispute Resolution, it shall be deemed to have

withdrawn its Interconnection Request or CRIS-Only Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed the agreement, requested filing of an unexecuted agreement, or initiated Dispute Resolution procedures pursuant to Section [40.24.5] within one hundred eighty (180) days of tender of the draft agreement, it shall be deemed to have withdrawn its Interconnection Request or CRIS-Only Request.

**40.21.2.1 Delay in Standard Interconnection Agreement Execution, or Filing Unexecuted, to Await Affected System Study Report from External Affected System**

If Interconnection Customer has not received its Affected System Study Report from the External Affected System Operator prior to the date that it would be required to execute its Standard Interconnection Agreement (or request that its Standard Interconnection Agreement be filed unexecuted) pursuant to Section 40.21.2, the ISO shall, upon request of Interconnection Customer, extend this deadline to thirty (30) Calendar Days after Interconnection Customer's receipt of the Affected System Study Report. If Interconnection Customer, after delaying the Standard Interconnection Agreement execution, or requesting unexecuted filing, to await the Affected System Study Report, decides to proceed to the Standard Interconnection Agreement execution, or request unexecuted filing, without those results, it may notify ISO of its intent to proceed with Standard Interconnection Agreement execution (or request that its Standard Interconnection Agreement be filed unexecuted) pursuant to Section 40.21.3. If the ISO determines that further delay to the Standard Interconnection Agreement execution date would cause a material impact on the cost or timing of an equal- or lower-queued interconnection customer, the ISO must notify Interconnection Customer of such impacts and set the deadline to execute the Standard Interconnection Agreement (or request that



the Standard Interconnection Agreement be filed unexecuted) to thirty (30) Calendar Days after such notice is provided.

#### **40.21.2.2 Identification of Contingent Facilities**

The ISO shall identify Contingent Facilities through the Cluster Study, and specify such Contingent Facilities in the Standard Interconnection Agreement. The method for identifying Contingent Facilities shall be sufficiently transparent as to why the ISO identifies Contingent Facilities and how they relate to the Cluster Study Project. Consistent with the analyses performed in the Cluster Study under Section [40.12], the ISO shall evaluate the impact on short circuit, thermal, voltage, or stability of unbuilt Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, and/or System Deliverability Upgrades associated with Cluster Study Projects. The ISO shall identify those unbuilt facilities in the Cluster Baseline Assessment and the Cluster Project Assessment against which the Cluster Study Project is evaluated as Contingent Facilities if the impact on short circuit, thermal, voltage, or stability of the unbuilt facilities exceeds the de minimis standards set forth in Sections [40.12.2.5.1.1] through [40.12.2.5.1.4]. An Interconnection Customer may also request the ISO to provide the estimated costs and estimated in-service completion time of each identified Contingent Facility when this information is readily available and not commercially sensitive.

#### **40.21.3 Execution and Filing**

The ISO will not tender the execution version of the IA until it has confirmed receipt of the following:

(i) Interconnection Customer's demonstration of continued Site Control pursuant to Section [40.5.5.1.5]; and

(ii) Interconnection Customer has provided the ISO and Connecting Transmission Owner with reasonable evidence that one or more of the following milestones in the development of the Facility, at the Interconnection Customer's election, has been achieved (unless such milestone is inapplicable due to characteristics of the Facility): (a) the execution of a contract for the supply or transportation of fuel to the Generating Facility; (b) the execution of a contract for the supply of cooling water to the Generating Facility; (c) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Generating Facility; (d) execution of a contract (or comparable evidence) for the sale of electric energy or capacity from the Generating Facility; or (e) application for an air, water, or land use permit. The Interconnection Customer(s) shall either: (i) execute originals of the tendered execution version of the agreement, which number will be based on the number of parties to the agreement, and return them to the ISO and, as applicable, Connecting Transmission Owner, Affected System Operator, or Affected Transmission Owner; or (ii) request in writing that the ISO and, as applicable, Connecting Transmission Owner, Affected System Operator, or Affected Transmission Owner file with FERC the applicable agreement in unexecuted form.

As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered agreement from the other parties (if the agreement does not conform with a Commission-approved standard form of the agreement) or the request to file the agreement unexecuted, the ISO and, if applicable, the Connecting Transmission Owner, Affected System Operator, or Affected Transmission Owner shall file the agreement with FERC. The ISO will draft the portions of the agreement and appendices that are in dispute and assume the burden of justifying any departure from the pro forma agreement and appendices. The ISO will provide its explanation of any matters as to which the Parties disagree and support

for the costs that, as applicable, the Connecting Transmission Owner, Affected System Operator, or Affected Transmission Owner proposes to charge to the Interconnection Customer(s) under the agreement. An unexecuted agreement should contain terms and conditions deemed appropriate by the ISO for the Interconnection Request or CRIS-Only Request. The Connecting Transmission Owner, Affected System Operator, or Affected Transmission Owner, as applicable, will provide in the filing any comments it has on the unexecuted agreement, including any alternative positions, it may have with respect to the disputed provisions. If the Parties agree to proceed with the design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted agreement, they may proceed pending Commission action.

**40.21.4 Negotiation and Execution of Standard Interconnection Agreement Prior to Completion of the Cluster Study**

At the request of the Interconnection Customer, the ISO and Connecting Transmission Owner shall begin negotiations with the Interconnection Customer concerning the Standard Interconnection Agreement and its appendices at any time after the Interconnection Customer satisfies the requirements to enter the Phase 2 Study. If the Standard Interconnection Agreement is executed prior to the completion of the Cluster Study Process, the Interconnection Customer must agree, in the Standard Interconnection Agreement, that in, as applicable, the Final Decision Period or Additional SDU Study Decision Period for that Cluster Study, it will accept the Project Cost Allocation and post Security for any Connecting Transmission Owner's Attachment Facilities, Distribution Upgrades, or System Upgrade Facilities that are identified and cost allocated in the Cluster Study even if such Project Cost Allocations exceed the estimates included in the Standard Interconnection Agreement and include equipment not identified in the Standard Interconnection Agreement.

The Interconnection Customer executing a Standard Interconnection Agreement prior to the completion of a Cluster Study cannot participate as an Installed Capacity Supplier until after the Cluster Study is completed and (1) the project is deemed deliverable and accepts its Deliverable MW; or (2) the Interconnection Customer accepts its Project Cost Allocation and pays cash or posts Security for any required System Deliverability Upgrades, unless CRIS was otherwise obtained under this Attachment HH.

To the extent that upgrades or cost estimates in the Cluster Study differ from the amounts or descriptions in the Standard Interconnection Agreement, the Interconnection Customer shall work with the ISO and Connecting Transmission Owner to promptly amend the agreement as needed to incorporate the updated amounts or descriptions.

For purposes of this Section 40.21.4, a Standard Interconnection Agreement includes a Provisional Standard Interconnection Agreement and its appendices requested pursuant to Section [40.22.3] of this Attachment HH.

#### **40.21.5 Commencement of Interconnection Activities**

If the Parties execute the Standard Interconnection Agreement, Standard Upgrade Construction Agreement, or Standard Multiparty Upgrade Construction Agreement, the ISO, the Interconnection Customer(s), and, as applicable, the Connecting Transmission Owner, Affected System Operator, or Affected Transmission Owner shall perform their respective obligations in accordance with the terms of the agreement, subject to modification by FERC. Upon submission of an unexecuted agreement in accordance with Section 40.21.3, the Parties shall promptly comply with the unexecuted agreement, subject to modification by FERC.

#### **40.21.6 Termination of the Standard Interconnection Agreement**

The classification of a Facility as Retired or a Class Year Transmission Project or Cluster Study Transmission Project permanently ceasing Commercial Operation will be grounds for the termination of its interconnection agreement. The ISO will file with the Federal Energy Regulatory Commission a notice of termination of the interconnection agreement as soon as practicable after the Large Generating Facility is Retired or the Class Year Transmission Project or Cluster Study Transmission Project permanently ceases commercial operation. The termination of a non-conforming *pro forma* interconnection agreement will be effective only upon acceptance by the Federal Energy Regulatory Commission of the notice of termination and proposed effective date. Upon the effective date of the termination of the interconnection agreement, access to the Point of Interconnection of the Generating Facility will be available on a non-discriminatory basis pursuant to the ISO's applicable interconnection and transmission expansion processes and procedures.

**40.22 Construction of Connecting Transmission Owner’s Attachment Facilities, System Upgrade Facilities, and System Deliverability Upgrades**

**40.22.1 Schedule**

The Connecting Transmission Owner and Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the Connecting Transmission Owner’s Attachment Facilities, the System Upgrade Facilities, and the System Deliverability Upgrades. If the System Upgrade Facilities or System Deliverability Upgrades involve Affected Transmission Owners, the Affected Transmission Owner and Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of such upgrades.

**40.22.2 Construction Sequencing**

**40.22.2.1 General**

In general, the Initial Feedback Dates of the Interconnection Customers in each Cluster Study seeking interconnection to the New York State Transmission System will determine the sequence of construction of System Upgrade Facilities and System Deliverability Upgrades.

**40.22.2.2 Advance Construction of System Upgrade Facilities and System Deliverability Upgrades that are an Obligation of an Entity other than the Interconnection Customer**

An Interconnection Customer with an interconnection agreement, in order to maintain its Initial Feedback Date, may request that the Connecting Transmission Owner advance to the extent necessary the completion of System Upgrade Facilities and System Deliverability Upgrades that: (i) were assumed, as applicable, in the Cluster Study or Class Year Study for such Interconnection Customer, (ii) are necessary to support such Initial Feedback Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than the Interconnection Customer that is seeking interconnection to the New York State Transmission

System, in time to support such Initial Feedback Date. Upon such request, Connecting Transmission Owner will use Reasonable Efforts to advance the construction of such System Upgrade Facilities and System Deliverability Upgrades to accommodate such request; provided that the Interconnection Customer commits in writing to pay Connecting Transmission Owner any associated expediting costs.

**40.22.2.3 Advancing Construction of System Upgrade Facilities or System Deliverability Upgrades that are Part of an Expansion Plan of the ISO or Connecting Transmission Owner**

An Interconnection Customer with an interconnection agreement, in order to maintain its Initial Feedback Date, may request that the Connecting Transmission Owner advance to the extent necessary the completion of System Upgrade Facilities and System Deliverability Upgrades that: (i) are necessary to support such Initial Feedback Date and (ii) would otherwise not be completed, pursuant to an expansion plan of the ISO or Connecting Transmission Owner, in time to support such Initial Feedback Date. Upon such request, Connecting Transmission Owner will use Reasonable Efforts to advance the construction of such System Upgrade Facilities and System Deliverability Upgrades to accommodate such request; provided that the Interconnection Customer commits in writing to pay Connecting Transmission Owner any associated expediting costs.

**40.22.3 Provisional Interconnection Service**

Subject to the requirements of Section [40.21.4], prior to the completion of the Cluster Study and prior to completion of requisite Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, System Distribution Upgrades, or System Protection Facilities, the Interconnection Customer may request an evaluation for Provisional Interconnection Service. The ISO, in conjunction with the Connecting Transmission Owner(s), shall determine, through

available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if the Interconnection Customer interconnects without modifications to the Facility or the New York State Transmission System (or Distribution System as applicable). The ISO, in conjunction with the Connecting Transmission Owner, shall determine whether any Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, System Deliverability Upgrades, or System Protection Facilities, which are necessary to meet Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice, are in place prior to the commencement of interconnection service from the Facility. Where available studies indicate that the Attachment Facilities, Distribution Upgrades, System Upgrade Facilities, System Deliverability Upgrades, or System Protection Facilities are required for the interconnection of a new, modified and/or expanded Facility but such facilities are not currently in place, the ISO, in conjunction with the Connecting Transmission Owner, will perform a study, at Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Facility in the Provisional Large Facility Interconnection Agreement shall be studied, at Interconnection Customer's expense, and updated annually. The ISO shall issue the study's findings in writing to Interconnection Customer and Connecting Transmission Owner(s). Following a determination by the ISO, in conjunction with the Connecting Transmission Owner, that Interconnection Customer may reliably provide Provisional Interconnection Service, the ISO shall tender to Interconnection Customer and Connecting Transmission Owner, a Provisional Standard Interconnection Agreement. The ISO, Interconnection Customer, and Connecting Transmission Owner may execute the Provisional Standard Interconnection Agreement, or Interconnection Customer may request the filing of an unexecuted Provisional Standard Interconnection



Agreement with the Commission. Interconnection Customer shall assume all risk and liabilities with respect to changes between the Provisional Standard Interconnection Agreement and the Standard Interconnection Agreement, including changes in output limits and the cost responsibilities for the Attachment Facilities, System Upgrade Facilities, System Deliverability Upgrades, and/or System Protection Facilities.

## **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 that is 20 MW or smaller 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 40.21.4.4 below.

To the extent the Fast Track Request is withdrawn or deemed withdrawn, 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 [\*] and [\*] 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, 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.

40.23.2.1.540.2 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 Interconnection 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 Interconnection 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.

40.23.3.3

#### **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 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. .

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. The Interconnection Customer must pay any review costs that exceed the deposit within 20 Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the ISO will return such excess within 20 Business Days of the invoice without interest.



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 (2) terminate the supplemental review upon withdrawal of the Interconnection 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 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, 40.23.4.4.2.4.4.2, and 40.23.4.4.3 above, the Interconnection 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.

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 Interconnection Request shall be withdrawn 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 Article 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 its 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 the 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 Obligation for Study Costs and Invoicing**

40.24.3.1 The ISO shall charge and Interconnection Customer shall pay the actual costs of the administrative and study work incurred by the ISO and Transmission Owner under these Standard Interconnection Procedures, after the Interconnection Customer has submitted its Interconnection Request.

40.24.3.2 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).

40.24.3.3 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.

40.24.3.4 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.

40.24.3.5 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 Project that 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.

40.24.3.6 The ISO shall invoice the Interconnection Customer monthly for incurred administrative and study costs as described above. The Interconnection Customer shall pay the invoiced amount within thirty (30) calendar days of the ISO's issuance of the monthly invoice. Except as otherwise provided in Section [40.24.3.8], if the Interconnection Customer does not pay its monthly invoice within the timeframe described above: (i) it shall be subject to withdrawal pursuant to Section [40.10.9.1] to this Attachment HH, and (ii) the ISO shall recover any unpaid amounts from the Interconnection Customer's Study Deposit amount prior to applying any Withdrawal Penalties to the Study Deposit or refunding any refundable portion of the Study Deposit amount.

40.24.3.7 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 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 [40.24.3.6].

40.24.3.8 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' Interconnection Request. 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.

40.24.3.9 Neither the ISO nor Connecting Transmission Owner shall be obligated to perform or continue to perform any study work on behalf of an Interconnection Customer's Interconnection Request unless Interconnection Customer has paid all undisputed amounts in compliance with Section 40.24.3.8.

#### **4.24.4 Third Parties Conducting Studies**

The ISO, Connecting Transmission Owner, Affected Transmission Owner, and Affected System Operator may utilize a Connecting 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 IA (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”). 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, 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, (vi) 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.

**APPENDIX 1 TO ATTACHMENT HH - 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 multi-unit Generating Facility

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 ongoing Small Generator Facilities Study, Class Year Study, or 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

3. Does this Project have ongoing Optional Feasibility Study, System Impact Study, or System Reliability Impact Study?

Yes                       No

Indicate the Queue Position \_\_\_\_\_

4. Will the Generating Facility be used for any of the following?

Net Metering? Yes \_\_\_ No \_\_\_

To supply power other than to others through wholesale sales over the New York State?

To participate in the wholesale market exclusively through a DER Aggregation? Yes \_\_\_

No \_\_\_

To 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 or location or 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: \_\_\_\_\_

6. MW nameplate rating: \_\_\_\_\_ at \_\_\_\_\_ degrees F (if temperature sensitive)<sup>7</sup>.

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 Capability Generating Facilities and the full facility capacity for Cluster Study Transmission Projects subject to the requirements and limitations set forth in Section [40.5.6.2] of Attachment HH to the ISO OATT).

- If requesting ERIS for a multi-unit facility, specify the requested ERIS for each Generator: \_\_\_\_\_
- Maximum summer net (net MW at the POI) which can be achieved at 90 degrees F: \_\_\_\_\_<sup>1</sup>  
Maximum winter net (net MW at the POI) which can be achieved at 10 degrees F : \_\_\_\_\_<sup>1</sup>
- 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 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) \_\_\_\_\_
- 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: \_\_\_\_\_  
\_\_\_\_\_

8. If a Cluster Study Transmission Project, which of the following forms of CRIS does the Interconnection Customer intend to request:

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<sup>1</sup> Applicable for temperature sensitive resources

\_\_\_ Unforced Capacity Deliverability Rights

\_\_\_ External-to-Rest of State Deliverability Rights

9. 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):

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- One set of metering is required for each generation connection to the new ring bus or existing Connecting Transmission Owner station. Number of generation connections:

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- On the one-line diagram indicate 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 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

- 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?

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- Provide a 7.5-minute quadrangle of the site, depicting the Facility, station, transmission line, and property line.
- 

- Physical dimensions of the proposed interconnection station
- 

- Bus length from generation to interconnection station
- 

- Line length from interconnection station to Connecting Transmission Owner's transmission line.
- 

- Tower number observed in the field. (Painted on tower leg):
- 

- Number of third-party easements required for transmission lines, if known:

10. \_\_\_\_\_ 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.

11. 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.

12. Proposed Initial Feedback Date (Month/Year): \_\_\_\_\_

Proposed Synchronization Date (Month/Year): \_\_\_\_\_

Proposed Commercial Operation Date (Month/Year): \_\_\_\_\_

13. \$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.

14. A Study Deposit must be submitted with this Interconnection Request form pursuant to Section [40.5.5.1.4] of Attachment HH

15. 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 and provides full Site Control for the following number of acres: \_\_\_\_\_; 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 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 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.

16. Attach the PRR151/IEEE 2800 Attestations \_\_\_\_\_

17. Attach the Interconnection Customer signed Cluster Study Agreement \_\_\_\_\_

18. This Interconnection Request shall be submitted to the ISO through the interconnection portal on the NYISO website.

19. This Interconnection Request is submitted by:

Signature: \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Date: \_\_\_\_\_

**DETAILED GENERATING FACILITY DATA**

**(Additional data may be 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):  
\_\_\_\_\_

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: \_\_\_\_\_ (Select from the dropped box in the portal system)

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<sup>2</sup>: (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): \_\_\_\_\_

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<sup>3</sup>:

- Power Flow model \_\_\_\_\_

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2 The Nameplate Output Power Rating is at the inverter terminal for IBRs

3. PSSSE files require in *.raw* or *.sav* and *.dvr* format. ASPEN files are required as *.olr* format.

- Short circuit model \_\_\_\_\_
- Dynamic models \_\_\_\_\_

**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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**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 for each Point of Interconnection (POI). 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:	stakeholder_services_ipsupport@nyiso.com

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, the Connecting Transmission Owner will: (1) inform the Requestor that its proposed interconnection is not subject to the NYISO’s interconnection procedures, and (2) 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 Feedback Date: \_\_\_\_\_

**3. Proposed POI(s) and Project Location:**

Connecting Transmission Owner (CTO), if known:

\_\_\_\_\_

Affected Transmission Owner(s), if known:

\_\_\_\_\_

**a. Primary 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. Secondary 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

**c. Project Location:**

Map identifying the location of project in relation to proposed POI(s) (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(s)”).

**1. Project**

This Pre-Application Report is for the following proposed project:

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**2. Proposed Primary POI**

**a. Transmission or Distribution Line**

<b>Line Name</b>	<b>Utility Line Id Number</b>	<b>Bus Numbers and Circuit Id Number (PSS/e From/To)</b>	<b>Voltage (kV)</b>

- FERC Jurisdictional Distribution     
  Networked     
  Radial

Ratings (MVA):

	<b>Normal</b>	<b>LTE</b>	<b>STE</b>
<b>Summer</b>			
<b>Winter</b>			

Terminal End Stations:

<b>Name</b>	<b>Distance to POI (miles)</b>

For a Generation 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**

Name	PSS/e Bus Number	Voltage (kV)

FERC Jurisdictional Distribution

Substation Connected Line Ratings (MVA):

Line Information		Summer			Winter		
Line Name	Utility Line Id Number	Normal	LTE	STE	Normal	LTE	STE

For a Generation 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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**3. Proposed Secondary POI**

**a. Transmission or Distribution Line**

<b>Line Name</b>	<b>Utility Line Id Number</b>	<b>Bus Numbers and Circuit Id Number (PSS/e From/To)</b>	<b>Voltage (kV)</b>

FERC Jurisdictional Distribution       Networked       Radial

Ratings (MVA):

	<b>Normal</b>	<b>LTE</b>	<b>STE</b>
<b>Summer</b>			
<b>Winter</b>			

Terminal End Stations:

<b>Name</b>	<b>PSS/e Bus Number</b>	<b>Distance to POI (miles)</b>

For a Generation 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

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 Generation 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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