30 Attachment X – Standard Large Facility Interconnection Procedures (Applicable to Generating Facilities that exceed 20 MWs and to Class Year Transmission Facilities)

# **30.3** Interconnection Requests

# 30.3.1 General

A Developer proposing to interconnect a new Large Facility to the New York State Transmission System or to the Distribution System, or proposing to materially increase the capacity of, or make a material modification to the operating characteristics of, an existing Large Facility that is interconnected to the New York State Transmission System or to the Distribution System shall submit to the ISO an Interconnection Request in the form of Appendix 1 to these Large Facility Interconnection Procedures. The requirement to submit an Interconnection Request applies to all Large Facilities seeking evaluation under this Attachment X to the ISO OATT, including (1) material modifications; (2) increases in capacity that results in total output in excess of 20 MW; and (3) 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 Large Facility Interconnection Procedures in order to request CRIS. An increase in the capacity of an existing Large Facility is a material increase for purposes of this Section 30.3.1 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 the Large Facility's baseline ERIS level that is equal to or less than ten (10) megawatts or five (5) percent, whichever is greater. For purposes of this Section 30.3.1, the baseline ERIS level of an existing Large Facility is (a) the greater of (i) the existing Large Facility's CRIS level determined as a facility pre-dating Class Year 2007 pursuant to Section 25.9.3.1 of Attachment S of the ISO OATT, 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 Large Facility; or (b) if neither (a)(i)

nor (a)(ii) are applicable, the baseline ERIS level is the value reflected in the Large Facility's interconnection agreement or other applicable documentation governing the Large Facility's interconnection; however, if the Large 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 Large 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 Large Facility is a temperature sensitive unit, the maximum capacity of which varies based on ambient temperature, the increase in 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.

The Interconnection Request in the form of Appendix 1 to these Large Facility Interconnection Procedures must be accompanied by a non-refundable application fee of \$10,000, unless the Large 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 Large Facility 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 equally between the ISO and Connecting Transmission Owner(s). The Developer shall submit a separate Interconnection Request for each site unless the Large Facility is a proposed Large Facility comprised of multiple Generators behind a single Point of Injection, in which case the Developer may submit separate Interconnection Requests ormust submit a single Interconnection Request.\_; provided however, a multi-unit Large Facility can only be evaluated under a single Interconnection Request if The Interconnection Request for a Large Facility comprised of multiple Generators behind a single Point of Injection must be submitted by a -(1) the Large Facility is proposed by a single Developer; (2) the individual Generators comprising the Large Facility are co-located behind the same Point of Interconnection; and (3) units in the Large Facility propose to interconnect at the same voltage levels (unless, as it proposes to interconnect, the Large Facility includes either (a) a 3 winding transformer with the potential to connect to two different voltage level lines simultaneously; or (b) a combined cycle with a generator turbine and steam turbine connected at two different voltage levels). A Developer may submit multiple Interconnection Requests for a single site <u>only if the proposed Large Facilities</u> are alternatives to each other.

The Developer must submit an application fee and study deposit with each Interconnection Request even when more than one request is submitted for a single site. A proposed Large Generating Facility requesting to evaluate one site at two different voltage levels shall require two Interconnection Requests unless the Large Generating Facility, as it proposes to interconnect, includes either (1) a 3-winding transformer with the potential to connect to two different voltage level lines simultaneously; or (2) a combined cycle with a generator turbine and steam turbine connected at two different voltage levels.

At Developer's option, the ISO, Connecting Transmission Owner and Developer will provide input regarding alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. During the Optional Interconnection Feasibility Study, System Reliability Impact Study, or Class Year Study, as applicable, the Connecting Transmission Owner and Affected Transmission Owner(s), identified pursuant to Section 30.3.5 of this Attachment X, shall provide input regarding proposed Point(s) of Interconnection and configurations. Developer will select the definitive Point of Interconnection to be studied no later than the commencement of the Interconnection System Reliability Impact Study.

A Developer seeking to return a Large Generating Facility to Commercial Operations after it is Retired must submit a new Interconnection Request as a new facility. A Developer returning a Large 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 Large Generating Facility is making modifications or is increasing its capacity such as would otherwise trigger a new Interconnection Request for an existing Large Generating Facility.

#### **30.3.2** Types of Interconnection Service

#### **30.3.2.1** Two Types of Service

The ISO offers Energy Resource Interconnection Service under the Large Facility Interconnection Procedures for interconnection in compliance with the NYISO Minimum Interconnection Standard. The ISO also offers CRIS under the Large Facility Interconnection Procedures for interconnection in compliance with the NYISO Deliverability Interconnection Standard.

### **30.3.2.2** Service Elections, Generally

All Large Facilities must interconnect in compliance with the NYISO Minimum Interconnection Standard. In addition, Large Facilities must also comply with the NYISO Deliverability Interconnection Standard before Large Generating Facilities can become qualified Installed Capacity Suppliers and before Class Year Transmission Projects can receive Unforced Capacity Deliverability Rights. A Developer initially states its election to be evaluated in its Interconnection Studies for ERIS alone, or for both ERIS and CRIS, as a part of its Interconnection Request. For Projects comprised of multiple Generators, a Developer must request a single ERIS value for the Large Facility and also specify the ERIS of, such ERIS to be allocated among the multiple Generators comprising the Large Facility as requested by Developer in its Interconnection Request. For projects comprised of multiple Generators, the total ERIS for the Large Facility may be less than the sum of the ERIS for the individual Generators; provided however, the The requested allocation for ERIS of the individual Generators is subject to the following limitations: for the Intermittent Power Resource in a Colocated Storage Resource cannot exceed the Point of Injection limit plus the full withdrawal capability of the Energy Storage Resource. (1) the requested ERIS for the Energy Storage Resource in a Co-located Storage Resource or Hybrid Storage Resource cannot exceed the lesser of the Point of Injection limit or its nameplate; and (2) the requested ERIS for each Resource in a Co-located Storage Resource or Hybrid Storage Resource other than the Energy Storage Resource cannot exceed the lesser of the Point of Injection limit plus the full withdrawal capability of the Energy Storage Resource or the relevant Resource's nameplate. An existing Large Generating Facility requesting only CRIS must request CRIS in an Open Class Year Study or an Expedited Deliverability Study unless it is requesting CRIS pursuant to Section 30.3.2.6 of this Attachment X. The ISO evaluates an Interconnection Request for compliance with the Minimum Interconnection Standard throughout the Interconnection Study process. The ISO evaluates an Interconnection Request for compliance with the Deliverability Interconnection Standard formally during the Class Year Deliverability Study. At other times during the Interconnection Study process, during the Optional Interconnection Feasibility Study and the

Interconnection System Reliability Study, the ISO will assist any Developer requesting CRIS to assess potential system deliverability issues by providing the Developer, upon its request, with the Annual Transmission Reliability Assessment case from the most recently completed Class Year Deliverability Study. The Developer may modify its interconnection service evaluation election (whether the Large Facility requests ERIS or ERIS and CRIS) and, for Large Facilities comprised of multiple Generators, the requested allocation of ERIS and or CRIS among its multiple units, to the extent the modification is not a Material Modification, when it executes the Class Year Study Agreement for its project in accordance with Section 30.8.1 of these Large Facility Interconnection Procedures. At that time, the Developer may Permissible modifications include modifying the allocation of ERIS and CRIS among multiple Generators being evaluated in the same Interconnection Request; provided however, an increase to the total requested ERIS or CRIS would be a Material Modification. The Developer can<sub>7</sub> reduce the number of MW it initially requested to be evaluated for <u>ERIS or CRIS</u>, and such a reduction shall not constitute a Material Modification.

# **30.3.2.3 ERIS Elections**

A Large Facility that elects ERIS, and not CRIS, will not be able to become an eligible Installed Capacity Supplier or to receive Unforced Capacity Deliverability Rights. Such a Large Facility will be eligible to participate only in the energy and applicable ancillary service markets. When a Developer elects ERIS its project will be evaluated in the Interconnection Studies at full output, unless the Developer requests ERIS below the full generating capacity of a Large Generating Facility or full facility capacity for a Class Year Transmission Project. If the Developer requests ERIS below the full capacity of the Large Facility, the ISO shall study the Large 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 Large Facility is capable of injecting into the New York State Transmission System (or Distribution System as applicable) is limited (i.e., through the use of control system, power relay(s), or other similar device settings or adjustments), then the Developer 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 Developer 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 Developer can either withdraw its Interconnection Request or modify its Interconnection Request to specify the maximum capacity that the Large 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 Developer, may require further studies of the Large 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 Developer. The ISO and Connecting Transmission Owner shall provide the Developer with an explanation of its determination to perform studies at the Large 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

Developer 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 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 Large Generator Interconnection Agreement, shall be set forth in Appendix C of the executed, or requested to be filed unexecuted, Standard Large Generator Interconnection Agreement.

When a Developer elects ERIS and interconnects under ERIS, the Developer may at a later date ask the ISO to reevaluate the Large Facility for CRIS by including the Large Facility in a Class Year Study or Expedited Deliverability Study.

#### **30.3.2.4** CRIS Elections

The amount of CRIS requested by a Developer shall be stated in MW of Installed Capacity ("ICAP"), and cannot exceed the permissible levels set forth in Section 25.8.1 of Attachment S to the ISO OATT. When a Developer elects CRIS, the ISO will evaluate the deliverability of the Large Facility by applying the test methodology described in Section 25.7 of Attachment S to the ISO OATT. The ISO will apply this test methodology to identify the System Deliverability Upgrades, if any, needed to make the Large Facility deliverable at its requested CRIS MW level and will also identify the MW of Installed Capacity, if any, that are deliverable from the Large Facility with no System Deliverability Upgrades. A Large 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 funded or committed to fund any required System Deliverability Upgrades in accordance with the relevant provisions of Attachment S to the ISO OATT. A Developer 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 25.7 of Attachment S to the ISO OATT. The CRIS value for the winter capability period, also in MW of Installed Capacity, will be set in accordance with Section 25.7.6 of Attachment S to the ISO OATT.

# **30.3.2.5** Partial CRIS Service

A Developer may elect partial CRIS, measured in whole MW of Installed Capacity, for its Large Facility.

# 30.3.2.6 Increases In Established CRIS Values

Any facility with an established CRIS value may at a later date, without submitting a new Interconnection Request, ask the ISO to reevaluate the Large Facility for a higher level of MW of Installed Capacity, not to exceed the levels permitted by Section 25.8.1 of -Attachment S, by including the Project in a Class Year Study or Expedited Deliverability Study to identify whether the Project is deliverable at the higher level of MW. Any facility with an established CRIS value may, without such evaluation and without submitting a new Interconnection Request, increase that CRIS value by a total of no more than 2 MW of Installed Capacity during the operating life of the facility, to the extent such increase in CRIS does not exceed the levels permitted by Section 30.3.2.4 of this Attachment X; provided however, for facilities comprised of multiple Generators, this CRIS increase is permitted only at the facility (i.e., Project) level, not at the individual Generator level. A Project that receives a CRIS increase pursuant to this Section 30.3.2.6, to the extent it later combines with another facility or Project to become a co-located resource (e.g., Co-located Storage Resources, Hybrid Storage Resource or a Distributed Energy Resource), is not eligible for any additional CRIS increase above a single increase up to 2 MW, without proceeding through a deliverability evaluation in a Class Year Study or Expedited Deliverability Study. For purposes of this Section 30.3.2.6, an "established CRIS value" for facilities subject to a CRIS set and reset period pursuant to Section 25.9.3.3, Section 25.9.3.1.4.1, Section 25.9.3.1.4.2, or Section 25.9.3.5 of Attachment S to the ISO OATT is the final CRIS value established after the termination of the CRIS set and reset period.