New York Interconnection Process Overview
08/26/03

Important notes:

- The process described here provides a high level overview of the key steps to be taken by new or expanding generators and loads in New York State, and is generally applicable to new merchant transmission projects as well.

- This overview is not intended to provide all details or all activities involved in the process. Please consult with a National Grid Transmission Account Manager, and the NYISO, to discuss details not shown.

- This document does not reflect changes that may be required to achieve compliance with FERC Order 2003, Standardization of Generator Interconnection Agreements and Procedures, dated July 24, 2003. Therefore, it is subject to revision to reflect any changes that may result from the FERC order.

- While the process described here in overview fashion applies to merchant transmission projects, inclusion of those projects in this document does not imply that all features of FERC Order 2003 are necessarily applicable to merchant generators. Order 2003 specifically applies to generators, not merchant transmission projects.
New York Interconnection Process Overview
For Merchant Transmission Projects and New/Expanding Generation or Load
(process not applicable for generators or projects in New England)

[1] Initial customer inquiry may be made to either NYISO or NG; both need to be involved early in process

[2] NYISO reviews procedure with customer, refers customer to NG

[3] National Grid Transmission Account Manager reviews procedure with customer


[5] Customer submits SRIS Study Application Form to NYISO, project enters study queue

[6] Customer executes Interconnection Study Agreement with NYISO, pays required deposit

[7] Study Scope prepared by NYISO or customer; NG may assist (NDA & SSA required)

[8] NYISO TPAS and Operating Committee review and approve Study Scope

[9] As necessary, NYISO or customer contract with NG (NDA & SSA required) or consultant to prepare System Reliability Impact Study

[10] NYISO, NG and/or consultant prepare SRIS

[11] NYISO committees (TPAS, Operating Committee) review and approve SRIS

[12] Facilities Study performed by NG (NDA and SSA required), or by a consultant with NG review/approval of results

[13] Customer signs Interconnection Agreement

[14] Detailed design, construction of interconnection proceeds

* Customers may sign agreements with NG at some or all of these times. Most agreements will be between the customer and Niagara Mohawk, a National Grid Company. Depending on the agreement, deposits or payments may be required at these times.

Projects connected at voltages below transmission level and which have no system impacts

In New York, generation projects >80 MW are subject to Article X licensing. Transmission projects >1 mile (230 kV and up) or >10 miles (115 kV) are subject to Article VII licensing. Permits from the US Army Corps of Engineers may also be required. These may be initiated at any time in parallel with these activities, but must be completed before construction commences. All design work is subject to changes imposed as licensing conditions. NG may provide support for Article VII filings under a SSA with the customer.

8/26/03 – Subject to revision as compliance with FERC Order 2003 is implemented
New York Interconnection Process Overview
For Merchant Transmission Projects and New/Expanding Generation or Load
(Process not applicable for generators or projects in New England)

1. Customer notifies either National Grid or the New York Independent System Operator (NYISO) or both about their intention to interconnect with National Grid’s transmission system in New York State. It is important that the customer involve both early on in the process.

2. NYISO reviews interconnection process and procedures with customer and refers customer to National Grid, if proposed project would interconnect with National Grid’s transmission system.

3. National Grid reviews interconnection process and procedures with customer. Customer is informed of all required interconnection standards, documents, and criteria (e.g., Electric System Bulletin 756 B). Preliminary discussions about project may also take place.

   [It if is determined that the project would be connected at voltages below the transmission level (= or < 69 kV) and would have no “system” impacts, customer is referred to (appropriate Retail Account Manager?) and to Niagara Mohawk procedures (e.g., Electric System Bulletin 752) and New York Public Service Commission (PSC) process for generators at less than 300 kW, as applicable.]

3.1. If Customer decides to proceed and if project would not have potential impact on bulk transmission “system” but would be connected at a transmission voltage level, Customer executes a Non-Disclosure Agreement (NDA) and Support Services Agreement (SSA) with National Grid in order for National Grid to provide services. At this point, customer has option of executing a SSA of very limited scope and duration (e.g., agreement to share/exchange preliminary/confidential information) or a more comprehensive agreement that includes the preparation of the Interconnection Study and/or the Facility Study. If project requires certain licenses or regulatory approvals for new or modified generation/transmission facilities (e.g., New York Article VII Certificate of Environmental Capability and Public Need, US Army Corps of Engineering Permit), the SSA may also include support for the preparation, filing and defense of such licenses or regulatory approvals.

3.2. National Grid will prepare an Interconnection Study or a third party consultant will prepare the Interconnection Study with National Grid providing final review and approval of the results.

4. If customer decides to proceed and if project has potential impact on transmission system, the project must go through the NYISO review and
approval process, including the preparation of a System Reliability Impact Study (SRIS) (see below). Prior to submitting a SRIS Study Application Form, some customers may wish to share/exchange preliminary/confidential information with National Grid. In that case, the customer must execute a NDA and SSA in order to exchange information. At this point, the Customer may opt to execute a more comprehensive SSA that includes any or all of the following: preparation of SRIS Scope; performance of the SRIS, or performance of the Facility Study. If project requires certain licenses or regulatory approvals for new or modified generation/transmission facilities (e.g., New York Article VII Certificate of Environmental Capability and Public Need, US Army Corps of Engineering Permit), the SSA may also include support for the preparation, filing and defense of such licenses or regulatory approvals.

[The SRIS identifies (at high level) how the Load, Generation or Merchant Transmission facility would interconnect to the existing transmission, including necessary facility additions and modifications. The SRIS has four objectives: 1) confirm proposed/new facilities comply with reliability standards; 2) assess impact of project on reliability of pre-existing system; 3) evaluate alternatives to eliminate adverse reliability impacts, and 4) assess impact on transmission transfer limits. Depending upon the size (in MWs) of the project, the interconnection voltage, and the impact on transmission transfer capability, a full SRIS may or may not be required (See NYISO System Reliability Impact Study Criteria and Procedures). The purpose of an interconnection is to provide access to the transmission system. In cases where customer desires service across the transmission system (e.g., point-to-point transmission service), which may require a transmission expansion or upgrade, the customer must submit a separate request for System Impact Study (See Sections 19.1 or 32.1 of the NYISO OATT).]

5. Customer completes and submits a SRIS Study Application Form. A copy of the NYISO Study Application Form can be obtained from the NYISO web site (http://www.nyiso.com/services/planning.html#studies). The SRIS Study Application then enters into the study queue.

[The NYISO may receive more requests for studies than can be handled at one time, so the NYISO uses a queuing process for managing study requests. The NYISO prioritizes all study requests and prepares a study list that is made available to the public. For explanation of how studies are prioritized, see Section 4 of the NYISO Transmission and Expansion and Interconnection Manual.]

6. Customer executes SRIS Study Agreement with NYISO and pays required deposit. (Within 30 days of receipt of Study Application, NYISO will tender, in coordination with National Grid, a Study Agreement to the Customer. Customer has 15 days to execute the Study Agreement.) The NYISO determines the appropriate deposit amount depending upon whether the NYISO, National Grid or a third party performs the SRIS. The Study Agreement includes the scope of work, estimated cost, and estimated time for completion of the study, along with statement from Customer that they agree to reimburse the NYISO and the Transmission Owner for the full cost of the study. The Study Agreement confirms the Customer’s serious intent to
proceed with the project. For projects subject to the New York State Article X siting law\(^1\), customer will be asked to supply evidence acceptable to NYISO that project has filed a Pre-Application Report or Preliminary Scoping Statement with the New York PSC. Similarly, for transmission projects subject to the New York Article VII law, customers will be required to supply evidence acceptable to the NYISO that the customer has formally contacted the New York PSC and stated its intention to obtain a Certificate of Environmental Compatibility and Public Need for the transmission facility. (For a more detailed explanation of what is required in the Study Agreement see the NYISO System Reliability Impact Study Criteria and Procedures.)

7. Within 14 days after execution of the Study Agreement, the NYISO prepares and returns to the Customer and Transmission Owner a Study Scope for the SRIS, identifying the minimum base line system. The customer may add to the Scope and then select the party to perform the SRIS. At customer’s (or is it the NYISO?) request, National Grid may prepare the SRIS Scope. If so, National Grid and (Customer? / NYISO?) must execute a Non-Disclosure Agreement and SSA, unless an agreement was previously executed (see Step 4). If so, National Grid then assists in preparation of SRIS Scope.

8. The Study Scope, augmented by additional information from customer, is then provided to NYISO TPAS and affected Control Areas and other affected Transmission Owners for review and comment within 15 days. Upon final approval by NYISO Operating Committee, the NYISO will issue Final Scope. The review and scope approval process is conducted in parallel with selection of the study organization by the Customer.

9. The NYISO or the Customer contracts with National Grid or a third party to perform the SRIS. (In practice, some SRIS work is done directly by NYISO staff and other work performed by National Grid or the customer. Each party may elect to have some or all SRIS work performed by contract consultants. In each case, the Customer pays the actual cost of the Study.)

10. NYISO, National Grid or third party contractor prepares SRIS. If NYISO prepares SRIS, NYISO will endeavor to complete in 60-90 days. If NYISO is only reviewing SRIS, it will endeavor to complete review in 30 days. If the SRIS or the review cannot be completed within these timeframes, the NYISO will inform the customer of that fact and reasons additional time is needed. If National Grid or a third party contractor prepares the SRIS, the completion dates will be spelled out in the SSA. (Other affected parties such as other

\(^1\) The New York State Article X law for siting and constructing new electric power generating plants in New York State expired on [TBD]. For Article X Applications filed as of December [TBD] 2002, the Applicant may continue to go through the Article X process. New projects must go through the New York State Environmental Quality Review Act (SEQR) process. It is anticipated that the New York State Legislature will renew and possibly modify the Article X law in the near future.
Transmission Owners or Control Areas may provide input during preparation of the SRIS.

11. Following the completion of the SRIS, the Study Report will be submitted to the NYISO TPAS and other affected Transmission Owners and Control Areas for review and comment. The SRIS is then given to the NYISO Operating Committee for review and approval. The study review/approval process takes roughly six weeks to complete. Customer is billed remaining cost of SRIS.

[If the SRIS concludes that the proposed interconnection may degrade system reliability or adversely affect the operation of the NYS Power System, the NYISO shall inform the Customer that the proposal is rejected with written explanation of why. In such case, Customer may request a Reinforcement Options Study or System Impact Study to pursue a transmission expansion to mitigate the adverse impacts.]

12. If Customer decides to proceed, Customer contracts with National Grid (SSA/NDA required) or a third party consultant to prepare the Facilities Study. (Customer and National Grid may have already executed a SSA/NDA.) With input from the SRIS, National Grid prepares a Facilities Study or third party consultant prepares the Facilities Study with National Grid providing final review and approval of the results.

[The Facilities Study provides a more detailed design and cost estimate of the new and/or modified facilities and the necessary system upgrades to accommodate the interconnection. The Facilities Study provides a preliminary construction schedule and identifies cost sharing responsibilities between the Customer and National Grid, consistent with Attachment S of the NYISO OATT. All design work is subject to changes imposed by other licensing/regulatory conditions (e.g., PSC Article VII Certificate, US ACOE Permit.)]

13. If Customer decides to proceed, Customer and National Grid negotiate and execute an Interconnection Agreement. The Interconnection Agreement details the business terms and conditions for the construction, commissioning, operation and maintenance, and cost responsibilities of the interconnection facility. The Facilities Study is made a part of the Interconnection Agreement as an attachment. Final licensing/regulatory requirements (e.g., PSC Article VII Certificate, US ACOE Permit) are incorporated into the Interconnection Agreement, as required. (In practice, negotiations for the Interconnection Agreement business terms and conditions are usually completed before the Facilities Study is completed.)

14. Customer, National Grid and any third party consultants proceed with detailed engineering, design and construction of the Interconnection Facilities. The final engineering, design and construction of the Interconnection Facility are subject to final licensing/regulatory requirements (e.g., PSC Article VII Certificate, US ACOE Permit).