4.5 Additional Study Procedures For Network Integration Transmission Service Requests

The FERC Order No. 888 provisions for initiating a Network Integration Transmission System expansion by an Eligible Customer are contained in this Section. Additional ISO responsibilities for Eligible Customer requests related to Network Integration Transmission System expansion are contained in Section 4.5.7. Study procedures associated with new Load and Large Facility Interconnections to the NYS Power System are contained in Section 4.5.8. Section 3.10 addresses prioritization of network and point-to-point transmission expansion and interconnection studies. Nothing in this Tariff shall preclude the Transmission Owners from proposing or constructing transmission facilities in the public interest in accordance with all applicable regulatory requirements.

4.5.1 Notice of Request for ~~System Impact~~Network Integration Transmission Service Study:

Network Integration Transmission Service is available to an Eligible Customer, including a Transmission Owner, willing to pay Congestion Rent as described in this Tariff. A request for Network Integration Transmission Service would not normally require a Network Integration Transmission Service ~~System Impact~~ Study unless the Eligible Customer specifically requests that the ISO conduct such a study of facilities that could be constructed (for example, if the Eligible Customer requesting Network Integration Transmission Service determines that Congestion Rent or the cost of TCCs is too high and that customer is considering constructing new facilities to create incremental transfer capability resulting in incremental TCCs, or, if an Eligible Customer requests that transmission facilities be constructed to address reliability or other operational concerns) (a "Study Request"). When an Eligible Customer submits a Network Integration Transmission Service Study Request it must give the ISO written notice of whether it

intends to conduct all or part of the Network Integration Transmission Service ~~System Impact~~ Study itself. After receiving a complete Network Integration Transmission Service Study Request, the ISO shall, within thirty (30) days of the date that the Operating Committee approves the scope of the Network Integration Transmission Service~~System Impact~~ Study, or such other time as is agreed upon by the ISO and the Eligible Customer, tender a Network Integration Transmission Service~~System Impact~~ Study agreement pursuant to which the Eligible Customer shall agree to reimburse the ISO for performing the required System Impact Study. The ISO shall coordinate with the affected Transmission Owners in performing the Network Integration Transmission Service~~System Impact~~ Study. A description of the ISO's methodology for completing a Network Integration Transmission Service~~System Impact~~ Study is provided in Attachment D. Before a Network Integration Transmission Service Study Request is evaluated, the Eligible Customer shall execute the Network Integration Transmission Service~~System Impact~~ Study agreement and return it to the ISO within fifteen (15) days. If the Eligible Customer elects not to execute the Network Integration Transmission Service~~System Impact~~ Study agreement, its Study Request shall be deemed withdrawn.

4.5.2 Network Integration Transmission Service~~System Impact~~ Study Agreement and Cost Reimbursement:

The Network Integration Transmission Service~~System Impact~~ Study agreement will clearly specify the ISO's estimate of the actual cost, and time for completion of the Network Integration Transmission Service~~System Impact~~ Study.

The charge shall not exceed the actual cost of the study. In performing the Network Integration Transmission Service~~System Impact~~ Study, the ISO shall rely, to the extent reasonably practicable, on existing transmission planning studies including applicable studies submitted by the Eligible Customer. The Eligible Customer will not be assessed a charge for

such existing studies; however, the Eligible Customer will be responsible for charges associated with any modifications to existing planning studies that are reasonably necessary to evaluate the impact of the Eligible Customer's Network Integration Transmission Service Study Request.

For Network Integration Transmission Service ~~System Impact~~ Studies that a Transmission Owner or the ISO conducts on its own behalf, the Transmission Owner or ISO shall record the cost of the Network Integration Transmission Service~~System Impact~~ Studies pursuant to Section 8.

If a Transmission Owner, on behalf of the ISO, performs all or part of a Network Integration Transmission Service~~System Impact~~ Study, the ISO shall reimburse the Transmission Owner for any costs that the Transmission Owner incurred.

4.5.3 Network Integration Transmission Service ~~System Impact~~ Study Procedures:

The ISO shall coordinate with all affected Transmission Owners in performing the Network Integration Transmission Service~~System Impact~~ Study.

Upon receipt of an executed Network Integration Transmission Service ~~System Impact~~ Study agreement, the ISO will complete the required Network Integration Transmission Service~~System Impact~~ Study as follows:

4.5.3.1 if the Network Integration Transmission Service Study Request specified that the Eligible Customer would not perform any part of the study then the ISO shall use due diligence to complete the study, and to obtain all necessary stakeholder approvals, within a one hundred and twenty (120) day period, or a different period agreed to by the Eligible Customer and the ISO, starting on the date that the ISO receives the executed Network Integration Transmission Service~~System Impact~~ Study Agreement, or an alternative starting date agreed to

by the Eligible Customer and the ISO; or

4.5.3.2 if the Network Integration Transmission Service Study Request specified that the Eligible Customer would perform all or part of the Network Integration Transmission Service~~System Impact~~ Study itself, then:

4.5.3.2.1 the ISO shall use due diligence to complete those portion(s) of the study that the Eligible Customer is not performing, and to obtain all necessary stakeholder approvals of those portions, within a one hundred and twenty (120) day period, or a different period agreed to by the Eligible Customer and the ISO, starting on the date that the ISO receives the executed Network Integration Transmission Service ~~System Impact~~ Study Agreement, or an alternative starting date agreed to by the Eligible Customer and the ISO; and

4.5.3.2.2 the ISO shall use due diligence to review any portion(s) of a study performed by an Eligible Customer within a thirty (30) day period or a different period agreed to by the Eligible Customer and the ISO, starting on the date that the ISO receives a complete draft from the Eligible Customer of its portion(s) of the study, or an alternative starting date agreed to by the Eligible Customer and the ISO. If the ISO determines that the portion(s) of the study performed by the Eligible Customer are incomplete or that changes are required, the Eligible Customer shall make any necessary changes. The ISO shall then use due diligence to review a revised complete draft of the Eligible Customer's portion(s) of the study within thirty days, or a different period agreed to by the Eligible Customer and the ISO, starting on the date that the ISO receives a revised complete draft, or an alternative starting date agreed to by the Eligible Customer

and the ISO.

The ISO will normally submit Network Integration Transmission Service~~System Impact~~ Studies to the Operating Committee before finalizing them. If the Operating Committee directs the ISO to modify a Network Integration Transmission Service~~System Impact~~ Study or to perform other study-related work before granting its approval, then the deadline for completing the study will be extended for an additional time agreed upon by the ISO and the Eligible Customer. If the ISO and the Eligible Customer are unable to agree on an additional time the deadline for completing the study will be extended for another sixty (60) days.

The Network Integration Transmission Service~~System Impact~~ Study shall identify any additional Direct Assignment Facilities or Network Upgrades required to comply with an Eligible Customer's or Transmission Owner's request. In the event that the ISO is unable to complete the required Network Integration Transmission Service~~System Impact~~ Study within such time period, it shall so notify the Eligible Customer and provide an estimated completion date along with an explanation of the reasons why additional time is required to complete the required studies. A copy of the completed Network Integration Transmission Service~~System Impact~~ Study and related work papers shall be made available to the Eligible Customer as soon as the Network Integration Transmission Service~~System Impact~~ Study is complete. The ISO will use the same due diligence in completing the Network Integration Transmission Service~~System Impact~~ Study for an Eligible Customer as it uses when completing studies for

itself or a Transmission Owner. The ISO shall notify the Eligible Customer immediately upon completion of the Network Integration Transmission Service~~System Impact~~ Study if the Network Integration Transmission Service Study Request can be completed at no additional cost (e.g., if the ISO is currently studying requests to construct similar facilities).

4.5.4 ~~Facilities Study Procedures~~Pursuit of Transmission System Additions or Upgrades Identified in a Network Integration Transmission Service Study:

After completion of a Network Integration Transmission Service~~System Impact~~ Study, if an Eligible Customer seeks to pursue construction of transmission upgrades, the Eligible Customer may do so by initiating the Transmission Interconnection Process pursuant to Attachment FF to the NYISO OATT ~~indicates that additions or upgrades to the Transmission System could be constructed in response to the Eligible Customer's Study Request, the Transmission Owner(s) whose facilities may be modified in performing the upgrade or addition (the "affected" Transmission Owner(s)), shall, within thirty (30) days of the later of: (i) the completion of the System Impact Study; (ii) the date on which the Eligible Customer provides the affected Transmission Owner(s) with written notice of whether it intends to perform all or part of the Facilities Study itself, or (iii) such other time as is agreed upon by the Transmission Owner(s) and the Eligible Customer, tender to the Eligible Customer a Facilities Study agreement. The ISO shall cooperate with the affected Transmission Owners in performing any subsequent Facilities Studies. In the Facilities Study agreement, the Eligible Customer shall agree to reimburse the Transmission Owner(s) for performing the required Facilities Study and the ISO for its associated costs. If the Eligible Customer wants the affected Transmission Owner(s) to undertake the Facilities Study, the Eligible Customer shall execute the Facilities~~

~~Study agreement and return it to the affected Transmission Owner(s) within fifteen (15) days.~~

~~Upon receipt of an executed Facilities Study agreement, the affected Transmission Owner(s) will complete the required Facilities Study as follows:~~

~~4.5.4.1 if the Eligible Customer gave written notice that it would not perform any part of the study then the affected Transmission Owners(s) shall use due diligence to complete the study within a one hundred and twenty (120) day period, or a different period agreed to by the Eligible Customer and the affected Transmission Owner(s), starting on the date that the affected Transmission Owner(s) receive the executed Facilities Study Agreement, or an alternative starting date agreed to by the Eligible Customer and the affected Transmission Owner(s); or~~

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~~4.5.4.2 if the Eligible Customer gave written notice that it would perform all or part of the Facilities Study itself, then:~~

~~4.5.4.2.1 the affected Transmission Owner(s) shall use due diligence to complete those portion(s) of the study that the Eligible Customer is not performing within a one hundred and twenty (120) day period, or a different period agreed to by the Eligible Customer and the affected Transmission Owner(s), starting on the date that the affected Transmission Owner(s) receive the executed Facilities Study Agreement, or an alternative starting date agreed to by the Eligible Customer and the affected Transmission Owner(s); and~~

~~4.5.4.2.2 the affected Transmission Owner(s) shall use due diligence to review any portion(s) of a study performed by an Eligible Customer within a thirty (30) day period or a different period agreed to by the Eligible Customer and the affected Transmission Owner(s), starting on the date that the affected Transmission Owner(s) receive a complete draft from the Eligible Customer of its portion(s) of the study, or an alternative starting date agreed to by the~~

~~Eligible Customer and the affected Transmission Owner(s). If the affected Transmission Owner(s) determine that the portion(s) of the study performed by the Eligible Customer are incomplete or that changes are required, the Eligible Customer shall make any necessary changes. The affected Transmission Owner(s) shall then use due diligence to review a revised complete draft of the Eligible Customer's portion(s) of the study within thirty days, or a different period agreed to by the Eligible Customer and the affected Transmission Owner(s), starting on the date that the affected Transmission Owner(s) receive a revised complete draft, or an alternative starting date agreed to by the Eligible Customer and the affected Transmission Owner(s).~~

~~If the Transmission Owner(s) are unable to complete the Facilities Study in the allotted time period, the Transmission Owner(s) shall notify the Transmission Customer and provide an estimate of the time needed to reach a final determination along with an explanation of the reasons that additional time is required to complete the study.~~

~~When completed, the Facilities Study will include a good faith estimate of (i) the cost of Direct Assignment Facilities to be charged to the Eligible Customer, (ii) the Eligible Customer's appropriate share of the cost of any required Network Upgrades, as determined pursuant to the provisions of Part 4 of this Tariff, and (iii) the time required to complete such construction. The Facilities Study shall contain a non-binding estimate as to the feasible TCCs resulting from the construction of the new facilities. If the Eligible Customer decides to proceed with the construction of the facilities described in the Facilities Study, the Eligible Customer shall (1) enter into a construction contract with the Transmission Owner(s) whose system(s) will be directly modified, and with the entity that will construct the facilities under the supervision of the Transmission Owner (if other than the Transmission Owner(s)), and guarantee to compensate the~~

~~Transmission Owner(s) and constructing entity (if other than the Transmission Owner(s)) for all costs incurred associated with the construction, and (2) provide each Transmission Owner with a letter of credit or other reasonable form of security acceptable to the Transmission Owner equivalent to the costs of new facilities or upgrades consistent with commercial practices as established by the Uniform Commercial Code. The construction contract shall contain terms and obligations of the Transmission Customer to pay for the facilities modifications or addition pursuant to the contract~~.

4.5.5 Penalties for Failure to Meet Study Deadlines:

Section 3.7.9 defines penalties that apply for failure to meet the due diligence deadlines for Firm Transmission Service~~System Impact~~ Studies ~~and Facilities Studies~~ under Part 3 of the Tariff. These same requirements and penalties apply to Network Integration Transmission Service studies~~service~~ under Part 4 of the Tariff.

4.5.6 Clustering of Network Integration Transmission Service Studies:

Section 3.7.10 specifies the procedures that shall govern the clustering of System Impact Studies conducted by the ISO~~ and Facilities Studies conducted by affected Transmission Owners~~. These same procedures apply to Network Integration Transmission Service studies under Part 4 of the Tariff.

4.5.7 Development of Transmission Reinforcement Options

4.5.7.1 At the request of the PSC, the ISO shall develop a limited number of illustrative transmission reinforcement options, and associated cost estimates, to increase transfer capability limits on Interfaces identified by the PSC as having significant Congestion. Such reinforcement option results shall be made available to all Customers or potential Customers for

the purpose of evaluating the economic costs and benefits of new facilities. Eligible Customers, including Transmission Owners, may then ~~request a System Impact Study for~~ propose a specific expansion project ~~in accordance with Sections 4.5.1 through 4.5.3~~pursuant to Attachment FF to the OATT. Development of the transmission reinforcement options will not reflect the impacts of alternatives that may be proposed by other Eligible Customers, including generation projects, which could increase or decrease transmission Interface Transfer Capability or Congestion Rents or both. Cost estimates provided will be based on readily available data and shall in no way be binding on the ISO. The ISO will not charge the PSC for this service.

4.5.7.2 Subject to the Eligible Customer's obligation to compensate the ISO, at the request of an Eligible Customer, the ISO will develop illustrative transmission reinforcement options as described in Section 4.5.7.1 above. The Eligible Customer shall comply with the provisions of Sections 4.5.1 through 4.5.3 that require the customer to enter into a Network Integration Transmission Service~~System Impact~~ Study agreement and agree to compensate the ISO for all costs incurred to conduct the study.

4.5.7.3 Requests to proceed with a system expansion shall be subject to the provisions of ~~Section 4.5~~Attachment FF to the OATT.

4.5.8 Study Procedures for New Load or Large Facility Interconnections to the NYS Power System

4.5.8.1 Request for Interconnection Study:

Any Eligible Customer proposing to interconnect its Load or Large Facility with the NYS Power System shall submit its interconnection proposal to the ISO. The ISO, in cooperation with the Transmission Owner with whose system the Eligible Customer proposes to interconnect, shall perform technical studies to determine whether the proposed interconnection may degrade system reliability or adversely affect the operation of the NYS Power System. The

technical studies shall be conducted in accordance with the procedures specified in Section 4.5.8.2. The proposed interconnection shall not proceed if the ISO concludes in the study that the proposed interconnection may degrade system reliability or adversely affect the operation of the NYS Power System. If the proposal is rejected, the ISO shall provide in writing the reasons why the proposal was rejected.

4.5.8.2 Study Procedures:

Upon receipt of the interconnection proposal and a written guarantee by the Eligible Customer to pay all costs incurred by the ISO and Transmission Owner(s) conducting the technical studies, the ISO, in cooperation with the Transmission Owner with whose system the Eligible Customer proposes to interconnect, shall perform the technical studies of the proposed interconnection. The ISO shall evaluate each Large Facility using the Interconnection Studies specified in the Large Facility Interconnection Procedures in Attachment X. The technical studies shall address the following:

(i) An evaluation of the potential significant impacts of the proposed interconnection on NYS Power System reliability, at a level of detail that reflects the magnitude of the impacts and the reasonable likelihood of their occurrence;

(ii) An evaluation of impacts of the proposed interconnection on system voltage, stability and thermal limitations, as prescribed in the Reliability Rules;

(iii) An evaluation as to whether modifications to the NYS Power System would be required to maintain Interface transfer capability or comply with the voltage, stability and thermal limitations, as prescribed in the Reliability Rules. The ISO will apply the criteria established by NERC, NPCC and the NYSRC;

(iv) An evaluation of alternatives that would eliminate adverse reliability impacts, if

any, resulting from the proposed interconnection; and

(v) An estimate of the increase or decrease in the Total Transfer Capability across each affected Interface.

4.5.8.3 Interconnection Agreements:

After receiving the approval of the proposed interconnection, and after the Eligible Customer makes payment to the ISO and Transmission Owner for the cost of the technical studies, the Eligible Customer may elect to continue with the proposed interconnection by entering into an interconnection agreement with the Transmission Owner with whose system the Eligible Customer proposes to interconnect. After completion of the Interconnection Facilities Study and Attachment S cost allocation process, the Developer of a Large Generating Facility may elect, in accordance with the Large Facility Interconnection Procedures in Attachment X, to continue with its proposed interconnection by entering into a Standard Large Generator Interconnection Agreement with the ISO and the Transmission Owner with whose system the Developer proposes to interconnect.

4.5.8.4 Interconnection Facilities Cost:

The Developer of the proposed Large Facility shall be responsible for the cost of the facilities needed for its project to reliably interconnect to the New York State Power System, in accordance with the interconnection facilities cost allocation rules set out in Attachment S.

4.5.9 Small Generator Interconnections:

The interconnection procedures, and standard interconnection agreement, to be used for the interconnection of generating facilities no larger than 20 MWs, are set forth in Attachment Z to this ISO OATT.