25.6 Cost Allocation Methodology For ERIS

25.6.1 Cost Allocation Between Developers and Connecting Transmission Owners (ATBA).

The cost of System Upgrade Facilities is first allocated between Developers and Connecting Transmission Owners, in accordance with the rules that are discussed below in this Section 25.6.1.

25.6.1.1 The cost of System Upgrade Facilities is allocated between Developers and Connecting Transmission Owners based upon the results of an Annual Transmission Baseline Assessment of the five-year need for System Upgrade Facilities. The Annual Transmission Baseline Assessment, as described in these rules, will be conducted by the **NYISOISO** staff in cooperation with Market Participants. No Market Participant will have decisional control over any determinative aspect of the Annual Transmission Baseline Assessment. The **NYISOISO** and its staff will have decisional control over the entire Annual Transmission Baseline Assessment. If, at any time, the NYISOISO staff decides that it needs specific expert services from entities such as Market Participants, consultants or engineering firms for it to conduct the Annual Transmission Baseline Assessment, then the NYISOISO will enter into appropriate contracts with such entities for such input. As it conducts each Annual Transmission Baseline Assessment, the **NYISOISO** staff 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 Annual Transmission Baseline Assessment will be reviewed and

approved by the Operating Committee. Each Annual Transmission Baseline Assessment is reviewable by the <u>NYISOISO</u> Board of Directors in accordance with provisions of the Commission-approved ISO Agreement.

25.6.1.1.1 The purpose of the Annual Transmission 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.

25.6.1.1.1.1 Procedure for Annual Transmission 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, <u>NYISOISO</u> rules, practices and procedures, and the Connecting Transmission Owner criteria included in FERC Form No. 715 (collectively "Applicable Reliability Requirements"). <u>In order for the ISO to recognize any revisions to Connecting Transmission Owner criteria as Applicable Reliability Requirements</u> under this Attachment S or Applicable Reliability Standards under Attachments X and Z, the <u>Connecting Transmission Owner shall present proposed revisions to such criteria are not</u> inconsistent with Order No. 2003 or the ISO's interconnection procedures set forth in <u>Attachments S, X and Z to the OATT, the ISO will accept such revised criteria.</u> The procedure will use the Applicable Reliability Requirements in effect when the Annual Transmission Baseline Assessment is commenced. The procedure will be: NYISO Tariffs --> Open Access Transmission Tariff (OATT) --> 25 OATT Attachment S - Rules To Allocate Responsibility For --> 25.6 OATT Att S Cost Allocation Methodology For ERIS

25.6.1.1.1.1 The <u>NYISOISO</u> staff will first develop the Existing System Representation.

25.6.1.1.1.1.2 The **NYISOISO** staff will then utilize the Existing System Representation to develop existing system improvement plans with each Transmission Owner. These improvement plans will use NYISOISO 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 NYISOISO staff will integrate these existing system improvement plans into the Annual Transmission 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 Annual Transmission Baseline Assessment will identify each anticipated System Upgrade Facility project, its estimated cost, its anticipated inservice date, and the status of the project (in construction, budget approval received, budget approval pending).

25.6.1.1.1.3 The NYISOISO will identify in the Annual Transmission Baseline Assessment the System Upgrade Facilities needed to reliably meet projected load growth and changes in load pattern without the interconnection of any proposed Developer projects, except for those proposed projects included in the Existing System Representation pursuant to Section 25.5.5.

- 25.6.1.1.1.4 **NYISOISO** staff will perform thermal, voltage, and stability analyses, as appropriate, to determine the normal and emergency transfer capabilities of the statewide existing system.
- 25.6.1.1.1.5 NYISOISO staff will perform resource reliability analysis of the existing system to verify that the existing system meets Applicable Reliability Requirements. The results of this analysis will be reported for the entire state and for each of the New York zones.
- 25.6.1.1.1.1.6 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 NYISOISO staff will develop feasible generic solutions that satisfy the Applicable Reliability Requirements, in accordance with Section 25.6.1.2, below.
- 25.6.1.1.1.7 If the existing system meets Applicable Reliability Requirements, the <u>NYISOISO</u> staff will perform short circuit analysis to determine whether there is sufficient interrupting capability in the existing system. If there are any breaker overloads, the <u>NYISOISO</u> staff will determine the System Upgrade Facilities needed to mitigate the short circuit overloads.
- 25.6.1.1.1.1.8 A reassessment of Sections 25.6.1.1.1.1.4 through 25.6.1.1.1.1.6 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.

- 25.6.1.1.1.1.9 Each Annual Transmission Baseline Assessment conducted by <u>NYISOISO</u> staff 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 <u>NYISOISO</u> shall explain its reasons for all of its recommendations.
- 25.6.1.1.1.1.10 Each most recently completed Annual Transmission Baseline Assessment will be reviewed the following year by the <u>NYISOISO</u> staff and updated, as necessary, following the criteria and procedures described herein.
- 25.6.1.2 In developing solutions as required by Section 25.6.1.2.6, the NYISOISO will, as it develops its own generic solutions, also utilize the following procedures.
- 25.6.1.2.1 The NYISOISO will first select as generic solutions proposed Class Year Developer projects sufficient to meet Applicable Reliability Requirements on a year by year basis. If a proposed Class Year Developer project is larger than necessary, the NYISOISO shall select that portion or segment of the project that is sufficient to meet but not exceed Applicable Reliability Requirements. If the proposed Developer project is not capable of being segmented or if the Developer project cannot meet Applicable Reliability Requirements on a year by year basis, the NYISOISO shall not select it.
- 25.6.1.2.2 If the generation and transmission facilities included in the Existing System Representation, together with any proposed Developer projects that

qualify as solutions pursuant to Section 25.6.1.2.1, above, are not sufficient to meet Applicable Reliability Requirements, the <u>NYISOISO</u> shall complete the development of its own generic solutions, taking into account any generic solutions proposed pursuant to Section 25.6.1.2.3, below, for inclusion in the ATBA.

- 25.6.1.2.3 Market Participants may also propose generic solutions for inclusion in the ATBA. The Market Participant proposing such solutions shall provide the NYISOISO with all data necessary for the NYISOISO to determine the feasibility of such proposed generic solutions.
- 25.6.1.2.4 The NYISOISO shall develop and consider alternative sets of proposed generic solutions that fairly represent the range of feasible solutions to Applicable Reliability Requirements.
- 25.6.1.2.5 The NYISOISO shall determine the feasibility of additional generic solutions developed pursuant to Sections 25.6.1.2.2, 25.6.1.2.3 and 25.6.1.2.3, according to the following criteria:
- 25.6.1.2.5.1 The NYISOISO 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.
- 25.6.1.2.5.2 The NYISOISO shall select as additional generic solutions only units and 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 NYISOISO shall consider the size and type of facility, access to fuel, access to

transmission facilities, transmission upgrade requirements, construction time, and Good Utility Practice.

- 25.6.1.2.6 The NYISOISO 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 25.6.1.2.2, 25.6.1.2.3 and 25.6.1.2.3, and of generic solutions based on the segmentation of any Class Year developer projects under Section 25.6.1.2.1, according to the criteria set forth in Section 25.6.1.2.5.
- 25.6.1.2.6.1 If the independent expert concludes that one or more generic is not feasible, the **NYISOISO** shall eliminate that solution from further review.
- 25.6.1.2.6.2 If the <u>NYISOISO</u> does not adopt the expert's recommendations, it will state in its report to the Operating Committee its reasons for not adopting those recommendations.
- 25.6.1.2.7 Subject to Section 25.6.1.2.7, below, in the event that more than one generic solution or set of solutions satisfies the feasibility requirement of Section 25.6.1.2.7, the NYISOISO 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.

- 25.6.1.2.7.1 The NYISOISO shall be responsible for determining whether any generic solution or proposed Developer Project meets Applicable Reliability Requirements.
- 25.6.1.3 With the exception of those upgrades that were previously allocated to, and accepted by Developer projects as a part of the Annual Transmission
 Reliability Assessment in the Final Decision Round of previous Class Years,
 Developers are not responsible for the cost of any System Upgrade Facilities that are identified in the Annual Transmission Baseline Assessment, or any System
 Upgrade Facilities that resolve in whole or in part a deficiency in the system identified in the Annual Transmission Baseline Assessment.
- 25.6.1.4 Developers are responsible for 100% of the cost of the System Upgrade Facilities, not already identified in the Annual Transmission Baseline Assessment that are needed as a result of their projects, and 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 Developer projects will be determined by the Interconnection Facilities Studies and the Annual Transmission Reliability Assessment. The criteria and procedures that will be followed to conduct the Annual Transmission Reliability Assessment are discussed below.
- 25.6.1.4.1 If a Connecting Transmission Owner or Developer elects to construct System Upgrade Facilities that are larger or more extensive than the minimum facilities required to reliably interconnect the proposed project, and are reasonably related to the interconnection of the proposed project, then the Connecting

Transmission Owner or Developer is responsible for the cost of those System Upgrade Facilities in excess of the minimum System Upgrade Facilities required by the Developer projects. If there is Headroom associated with these larger System Upgrade Facilities and a Developer of any subsequent project interconnects and uses the Headroom within ten years of its creation, such subsequent Developer shall pay the Connecting Transmission Owner or the Developer for this Headroom in accordance with these rules, including Section 25.8.7, below.

- 25.6.1.5 The System Upgrade Facilities cost for which a Developer is responsible will be determined on a "net" basis; that is, the Developer'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 a Developer 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 Developer'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.
- 25.6.1.5.1 The purpose of this approach is to allocate to the Developer the responsibility for the cost of the net impact of its project on the needs of the transmission system for System Upgrade Facilities. Thus, a Developer is responsible for the cost of the System Upgrade Facilities that are required by, or caused by, its project. A Developer is not responsible for the cost of System

Upgrade Facilities that would be required anyway, without the construction of its project. If a Developer's project reduces the cost of System Upgrade Facilities that would be required anyway, that beneficial cost reducing impact will be recognized.

- 25.6.1.5.2 The net System Upgrade Facilities cost and cost reduction benefits of a Developer's project are determined by <u>NYISOISO</u> staff comparing and netting the results of an Annual Transmission Baseline Assessment with the corresponding Annual Transmission Reliability Assessment in accordance with these rules.
- 25.6.1.5.3 The net System Upgrade Facilities cost and cost reduction benefits of a Developer's project are comprised of those costs and cost reduction benefits caused by (1) the construction of System Upgrade Facilities not contained in the Annual Transmission Baseline Assessment, and (2) eliminating or reducing the need for the construction of System Upgrade Facilities contained in the Annual Transmission Baseline Assessment, due to the construction of System Upgrade Facilities associated with the proposed project.
- 25.6.1.5.4 The Developer'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 Annual Transmission Reliability Assessment, with those identified in the Annual Transmission Baseline Assessment, the cost of System Upgrade Facilities in the out-years of the Annual Transmission Baseline Assessment and the out-years of the Annual Transmission Reliability 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.

25.6.2 Cost Allocation Among Developers (ATRA).

The Developers' share of the cost of System Upgrade Facilities is allocated among Developers based upon the NYISOISO Annual Transmission Reliability Assessment. The Annual Transmission Reliability Assessment will be conducted by NYISOISO staff to ensure New York State Transmission System compliance with Applicable Reliability Requirements. The **NYISOISO** staff will conduct the Annual Transmission Reliability Assessment, as described in these rules, in cooperation with Market Participants. No Market Participant will have decisional control over any determinative aspect of the Annual Transmission Reliability Assessment. The NYISOISO and its staff will have decisional control over the entire Annual Transmission Reliability Assessment. If, at any time, the **NYISOISO** staff decides that it needs specific expert services from entities such as Market Participants, consultants or engineering firms for it to conduct the Annual Transmission Reliability Assessment, then the NYISOISO will enter into appropriate contracts with such entities for such input. As it conducts each Annual Transmission Reliability Assessment, the **NYISOISO** staff 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 Annual Transmission Reliability Assessment will be reviewed and approved by the Operating Committee. Each Annual Transmission Reliability Assessment is reviewable by the NYISOISO Board of Directors in accordance with the provisions of the Commission-approved ISO Agreement.

- 25.6.2.1 The Annual Transmission Reliability Assessment for each Class Year will identify the System Upgrade Facilities required for all Class Year Projects, with cost estimates for the System Upgrade Facilities. The System Upgrade Facilities identified through the Annual Transmission Reliability Assessment will only be those System Upgrade Facilities that are not already included in an Annual Transmission Baseline Assessment.
- 25.6.2.2 For each Annual Transmission Reliability Assessment, the <u>NYISOISO</u> will utilize the Existing System Representation used for the corresponding Annual Transmission Baseline Assessment.
- 25.6.2.3 Each Annual Transmission Reliability Assessment will update the results of Interconnection System Reliability Impact Studies that have previously been performed for certain proposed interconnection projects.
- 25.6.2.3.1 Subject to the additional requirements in Sections 25.6.2.3.2 25.6.2.3.4, below, a Large Facility is eligible to have its project included in a given Class Year Study (*i.e.*, become a Class Year Project), if on or before the Class Year Start Date (i) the Operating Committee has approved (1) an Interconnection System Reliability Impact Study for the project performed pursuant to Attachment X of the <u>NYISOISO</u> OATT or (2) a System Impact Study for the project performed pursuant to Attachment P to the <u>NYISOISO</u> OATT, and (ii) either (1) the regulatory milestone has been satisfied in accordance with Sections 25.6.2.3.1.1, 25.6.2.3.1.2, or 25.6.2.3.1.3; or (2) the Developer, in lieu of satisfying the regulatory milestone requirement, submits a two-part deposit consisting of (1) \$100,000; and (2) \$3,000/MW for the nameplate capability of

the Large Facility. The \$100,000 portion of the deposit submitted pursuant to subsection (ii)(2) of this Section 25.6.2.3.1 will be fully refundable if, within twelve months after the Class Year Start Date or the Operating Committee's approval of the Class Year Study, whichever occurs first, the Developer satisfies an applicable regulatory milestone and provides the NYISOISO with adequate documentation that the Large Facility has satisfied an applicable regulatory milestone. The \$3,000/MW deposit will be fully refundable upon the earlier of the Large Facility's satisfaction of an applicable regulatory milestone or the Large Facility's interconnection queue.

- 25.6.2.3.1.1 The Developer must obtain or achieve at least one of the regulatory determinations or actions for the Large Facility described in this Section
 25.6.2.3.1.1. To satisfy the regulatory milestone, an applicable regulatory body (*e.g.*, local, state, or federal) must determine that the permitting application submitted to site and construct the Large Facility is complete, as described below:
- 25.6.2.3.1.1.1 In connection with the Large Facility's air or water permit application, either (i) a notice of determination of completeness mailed to the applicant by the New York State Department of Environmental Conservation ("DEC") pursuant to 6 NYCRR § 621.6(c), as may be amended from time to time, or public notice of a complete application in the Environmental Notice Bulletin, or (ii) in the absence of such notices, a demonstration that the permit application is deemed to be complete pursuant to 6 NYCRR § 621.6(h), as may be amended from time to time.

- 25.6.2.3.1.1.2 A negative declaration issued for the Large Facility by the lead agency pursuant to the New York State Environmental Quality Review Act ("SEQRA").
- 25.6.2.3.1.1.3 Under SEQRA, either (i) a determination by the lead agency, documented in minutes or other official records, that the Draft Environmental Impact Statement for the Large Facility is adequate for public review, (ii) a notice of completion of a Draft Environmental Impact Statement for the project issued by the lead agency pursuant to SEQRA, or (iii) public notice of completion in the Environmental Notice Bulletin.
- 25.6.2.3.1.1.4 For a Large Facility that is a Merchant Transmission Facility, a determination pursuant to Article VII that the Article VII application filed for the Merchant Transmission Facility is in compliance with Public Service Law §122.
- 25.6.2.3.1.1.5 A Notice of Availability of a Draft Environmental Impact Statement for the Large Facility filed with the U.S. Environmental Protection Agency pursuant to the National Environmental Policy Act of 1969 ("NEPA") and its implementing regulations.
- 25.6.2.3.1.1.6 A final Finding of No Significant Impact for the project issued by the lead agency pursuant to NEPA and its implementing regulations.
- 25.6.2.3.1.1.7 For a Large Generator that is larger than 25 MW, a determination pursuant to Article 10 of the Public Service Law that the Article 10 application filed for the Large Generator is in compliance with Public Service Law § 164.
- 25.6.2.3.1.2 A Large Facility located outside New York State will satisfy the regulatory milestone by achieving Section 25.6.2.3.1.1.5 or 25.6.2.3.1.1.6, above,

or by satisfying a milestone comparable to that specified in Section 25.6.2.3.1.1.1 through 25.6.2.3.1.1.4, above, under applicable permitting laws.

- 25.6.2.3.1.3 In the event that none of the permitting processes referred to in Section
 25.6.2.3.1.1 and 25.6.2.3.1.2 apply to the Large Facility, the Large Facility will be considered to have satisfied the regulatory milestone and will qualify for Class
 Year entry as of the date the Operating Committee approved the Large Facility's Interconnection System Reliability Impact Study.
- 25.6.2.3.1.4 After a Large Facility's Interconnection System Reliability Impact Study is approved by the Operating Committee and until the NYISOISO confirms that the Large Facility has satisfied the regulatory milestone, the Developer must inform the NYISOISO upon request, each year, within five business days of the Class Year Start Date, whether or not the Large Facility has satisfied the regulatory milestone described above. <u>Alf-a</u> project <u>Developer must fails to</u> inform the <u>NYISOISO</u> within ten (10) Business Days of the ISO's request for <u>such information</u> by this date, the Interconnection Request of the project will be deemed to be withdrawn in accordance with Section 3.6 of the Large Facility Interconnection Procedures contained in Attachment X.
- 25.6.2.3.2 A project must satisfy the applicable regulatory milestone in Section
 25.6.2.3.1, above, within six (6) months after the date the NYISOISO tenders to
 the project Developer the Standard Large Generator Interconnection Agreement
 for the project pursuant to Section 30.11.1 of Attachment X to the NYISOISO
 OATT.

- 25.6.2.3.3 If a project fails to satisfy the regulatory milestone within this time period, the Interconnection Request of the project will be deemed to be withdrawn in accordance with Section 30.3.6 of the Large Facility Interconnection Procedures contained in Attachment X.
- 25.6.2.3.4 Once a project has an Operating Committee-approved SRIS or the NYISOISO has determined the project is required to enter a Class Year Study pursuant to Attachment Z, then the project may enter up to two, but no more than two, of the next three consecutive Class Year Studies. The first Class Year with a Class Year Start Date after the date the Operating Committee approves a project's Interconnection System Reliability Impact Study will count as the first of the three consecutive Class Year Studies. For purposes of this Section 25.6.2.3.4, a Class Year that a project enters and from which it later withdraws for ERIS evaluation pursuant to Section 25.7.7.1 or 25.6.2.3.3 of this Attachment S or Section 30.8.1.2 of Attachment X, counts as one of the two Class Years a project may enter.
- 25.6.2.3.4.1 Except as provided in Section 25.6.2.3.4.3, the project must accept its System Upgrade Facilities cost allocation and post required security for Energy Resource Interconnection Service from a Class Year ATRA that is no later than the first to occur of either (i) the second Class Year ATRA the project enters, or (ii) the third consecutive Class Year that starts after the project satisfies the eligibility criteria for inclusion in the Class Year ATRA. If the project fails to accept its System Upgrade Facilities cost allocation and post security by this deadline, the Interconnection Request of the project will be deemed to be

withdrawn in accordance with Section 30.3.6 of the Large Facility

Interconnection Procedures contained in Attachment X.

- 25.6.2.3.4.2 Except as provided in Section 25.6.2.3.4.3, below, if a project has not accepted its System Upgrade Facilities cost allocation and posted required security for Energy Resource Interconnection Service from either the first or second Class Year that starts after the project satisfies the eligibility criteria for inclusion in the Class Year ATRA and has not entered both the first and second such Class Year ATRA, then the project must enter the third Class Year ATRA (by executing the Class Year Interconnection Facilities Study Agreement and providing the required data and deposit). If the developer fails to do so within the timeframes specified in Attachments X or Z, as applicable, the Interconnection 30.3.6 of the Large Facilities Interconnection Procedures contained in Attachment X.
- 25.6.2.3.4.3 A project that was a member of a completed Class Year but did not accept its System Upgrade Facilities cost allocation and post any required security as of January 17, 2010 will be able to enter any one of the three consecutive Class Year ATRAs starting after that date. If the project enters one of these Class Year ATRAs and fails to accept its System Upgrade Facilities cost allocation and post required security, the Interconnection Request of the project will be deemed to be withdrawn in accordance with Section 30.3.6 of the Large Facility Interconnection Procedures. If the project has not entered either the first or second such Class Year, then the project must enter the third Class Year ATRA

(by executing the Class Year Interconnection Facilities Study Agreement and providing the required data and deposit). If the Developer fails to do so within the timeframes specified in Attachments X or Z, as applicable, the Interconnection Request of the project will deemed to be withdrawn in accordance with Section 30.3.6 of the Large Facilities Interconnection Procedures.

- 25.6.2.4 The Annual Transmission Reliability Assessment will update Interconnection System Reliability Impact Study results in accordance with the Class Year Interconnection Facilities Study procedures in Section 30.8 of the Large Facility Interconnection Procedures in Attachment X to the <u>NYISOISO</u> OATT.
- 25.6.2.5 For interconnection projects included in each Annual Transmission Reliability Assessment, the Interconnection System Reliability Impact Study updated results will specify the impact of each project in the Class Year on the reliability of the transmission system, that is, the pro rata contribution of each project in the Class Year to each individual System Upgrade Facilities identified in the updates.
- 25.6.2.5.1 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 Class Year on the reliability of the transmission system will be based upon the number of projects in the Class Year contributing to the need for the new System Upgrade Facility. The pro rata impact of each project in the Class Year 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 Class Year needing the new System Upgrade Facility.

- 25.6.2.5.2 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 Class Year will be stated in terms of its pro rata contribution to the total electrical impact on each individual System Upgrade Facility in the Class Year of all projects that have at least a *de minimus* impact, as described in Section 25.6.2.6.1 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.
- 25.6.2.5.2.1 Contribution to short circuit current for interrupting duty beyond the rating of equipment.
- 25.6.2.5.2.2 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.
- 25.6.2.5.2.3 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 Class Year are represented.

- 25.6.2.5.2.4 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.
- 25.6.2.6 For each individual electrical impact standard listed in subsections 6.(a)(1) through 6.(a)(4) below, a Developer 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 Developer's projects but for the sub-*de minimus* impact exemption, shall be allocated 100 percent to the other Developers in the Class Year according to their pro rata contribution.
- 25.6.2.6.1 *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.
- 25.6.2.6.1.1 **Short Circuit Contribution**: Equal to or greater than 100 amperes of the existing rating of the equipment that needs to be replaced.
- 25.6.2.6.1.2 **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.
- 25.6.2.6.1.3 Voltage Effects: Equal to or greater than 2% of the voltage drop occurring with all Class Year Projects at the most critical bus.

- 25.6.2.6.1.4 **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.
- 25.6.2.7 The pro rata contribution of each project in the Class Year to each of the System Upgrade Facilities identified in the Annual Transmission Reliability Assessment.
- 25.6.2.7.1 First, in accordance with Section 25.6.1.5 of these rules, the total cost of System Upgrade Facilities identified in the Annual Transmission Reliability
 Assessment is compared and netted with the total cost of System Upgrade
 Facilities identified in the Annual Transmission Baseline Assessment. If the total cost of System Upgrade Facilities identified in the Annual Transmission
 Reliability Assessment does not exceed the total cost of System Upgrade
 Facilities identified in the Annual Transmission Baseline Assessment, then there is no cost to be allocated among Class Year Developers.
- 25.6.2.7.2 If the total cost of System Upgrade Facilities identified in the Annual Transmission Reliability Assessment does exceed the total cost of System
 Upgrade Facilities identified in the Annual Transmission Baseline Assessment by some amount, then this amount ("Overage Cost") is a cost to be allocated among
 Class Year Developers. Appendix One to this Attachment S sets out an example
 of an allocation of Overage Cost among Class Year Developers.
- 25.6.2.7.3 The Overage Cost represents a percentage of the total cost of System Upgrade Facilities identified in the Annual Transmission Reliability Assessment ("Overage Cost Percentage").

- 25.6.2.7.4 Each System Upgrade Facility identified in the Annual Transmission Reliability Assessment has a cost specified for it in the Annual Transmission Reliability Assessment.
- 25.6.2.7.5 The pro rata contribution of each project in the Class Year to a System Upgrade Facility identified in the Annual Transmission Reliability Assessment represents a percentage contribution to the need for that System Upgrade Facility ("Contribution Percentage").
- 25.6.2.7.6 An individual Developer's pro rata responsibility for the cost of each System Upgrade Facility identified in the Annual Transmission Reliability Assessment is the product of (a) the Overage Cost Percentage; (b) the Developer's Contribution Percentage for the particular System Upgrade Facility; and (c) the cost of the particular System Upgrade Facility as specified in the Annual Transmission Reliability Assessment.
- 25.6.2.7.7 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 NYISOISO staff will determine each Developer's Contribution Percentage by calculating what each Developer'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).