31.5 Cost Allocation and Cost Recovery¹

31.5.1 The Scope of Attachment Y Cost Allocation

31.5.1.1 Regulated Responses

The cost allocation principles and methodologies in this Attachment Y cover only regulated transmission solutions to Reliability Needs, regulated transmission responses to congestion identified in the CARIS, and regulated transmission solutions to Public Policy Transmission Needs whether proposed by a Responsible Transmission Owner or a Transmission Owner or Other Developer. The cost allocation principles and methodology covering regulated transmission solutions to Reliability Needs are contained in Sections 31.5.3.1 and 31.5.3.2 of this Attachment Y. The separate cost allocation principles and methodology covering regulated transmission responses to congestion identified in the CARIS are contained in Sections 31.5.4.1 and 31.5.4.2 of this Attachment Y. The separate cost allocation principles and methodology covering regulated transmission solutions to Public Policy Transmission Needs are contained in Sections 31.5.5 and 31.5.6 of this Attachment Y.

31.5.1.2 Market-Based Responses

The cost allocation principles and methodologies in this Attachment Y do not apply to market-based solutions to Reliability Needs or to market-based responses to congestion identified in the CARIS. The cost of a market-based project shall be the responsibility of the developer of that project.

¹ This OATT Section 31.5 is subject to revision per Order on Rehearing and Compliance, 148 FERC ¶ 61,044 (July 17, 2014). Subsequent footnotes identify specific subsections that the NYISO currently anticipates will be revised in its compliance filing. Please be advised that in revising its tariffs in accordance with FERC's directives, the NYISO may be required to revise additional subsections that are not designated by footnotes.

31.5.1.3 Interconnection Cost Allocation

The cost allocation principles and methodologies in this Attachment Y do not apply to the interconnection costs of generation and merchant transmission projects. Interconnection costs are determined and allocated in accordance with Attachment S, Attachment X and Attachment Z of the ISO OATT. Cost related to the deliverability of a resource will be addressed under the ISO's deliverability procedures in Attachment S of the ISO OATT.

31.5.1.4 Individual Transmission Service Requests

The cost allocation principles and methodologies in this Attachment Y do not apply to the cost of transmission expansion projects undertaken in connection with an individual request for Transmission Service. The cost of such a project is determined and allocated in accordance with Section 3.7 or Section 4.5 of the ISO OATT.

31.5.1.5 LTP Facilities

The cost allocation principles and methodologies in this Attachment Y do not apply to the cost of transmission projects included in LTPs or LTP updates. Each Transmission Owner will recover the cost of such transmission projects in accordance with its then existing rate recovery mechanisms.

31.5.1.6 Regulated Non-Transmission Solutions to Reliability Needs

Costs related to regulated non-transmission reliability projects will be recovered by Responsible Transmission Owners, Transmission Owners and Other Developers in accordance with the provisions of New York Public Service Law, New York Public Authorities Law, or other applicable state law. Nothing in this section shall affect the Commission's jurisdiction over the sale and transmission of electric energy subject to the jurisdiction of the Commission.

31.5.1.7 Eligibility for Cost Allocation and Cost Recovery

Any entity, whether a Responsible Transmission Owner, Other Developer, or Transmission Owner, shall be eligible for cost allocation and cost recovery as set forth in Section 31.5 of this Attachment Y and associated rate schedules, as applicable, for any approved reliability, economic, or Public Policy Requirement driven transmission project Interregional Transmission Projects identified in accordance with the Interregional Planning Protocol, and that have been accepted in each region's planning process, shall be eligible for interregional cost allocation and cost recovery, as set forth in Section 31.5 of this Attachment Y and associated rate schedules. The ISO's share of the cost of an Interregional Transmission Project selected pursuant to this Attachment Y to meet a Reliability Need, congestion identified in the CARIS, or a transmission need driven by a Public Policy Requirement shall be eligible for cost allocation consistent with the cost allocation methodology applicable to the type of regional transmission project that would be replaced through the construction of such Interregional Transmission Project under Sections 31.2, 31.3, or 31.4, as applicable.

31.5.2 Cost Allocation Principles Required Under Order No. 1000

31.5.2.1 In compliance with Commission Order No. 1000, the ISO shall implement the specific cost allocation methodology in Section 31.5.3.2, 31.5.4.4, and 31.5.5.4 in accordance with the following Regional Cost Allocation Principles ("Order No. 1000 Regional Cost Allocation Principles"):

Regional Cost Allocation Principle 1: The ISO shall allocate the cost of transmission facilities to those within the transmission planning region that benefit from those facilities in a manner that is at least roughly commensurate with estimated benefits. In determining the beneficiaries of transmission

facilities, the ISO's CSPP will consider benefits including, but not limited to, the extent to which transmission facilities, individually or in the aggregate provide for maintaining reliability and sharing reserves, production cost savings and congestion relief, and/or meeting Public Policy Requirements.

Regional Cost Allocation Principle 2: The ISO shall not involuntarily allocate any of the costs of transmission facilities to those that receive no benefit from transmission facilities.

Regional Cost Allocation Principle 3: In the event that the ISO adopts a benefit to cost threshold in its CSPP to determine which transmission facilities have sufficient net benefits to be selected in a regional transmission plan for the purpose of cost allocation, such benefit to cost threshold will not be so high that transmission facilities with significant positive net benefits are excluded from cost allocation. If the ISO chooses to adopt such a threshold in its CSPP it will not include a ratio of benefits to costs that exceeds 1.25 unless the ISO justifies and the Commission approves a higher ratio.

Regional Cost Allocation Principle 4: The ISO's allocation method for the cost of a transmission facility selected pursuant to the process in the CSPP shall allocate costs solely within the ISO's transmission planning region unless another entity outside the region or another transmission planning region voluntarily agrees to assume a portion of those costs. Costs for an Interregional Transmission Project must be assigned only to regions in which the facility is physically located. Costs cannot be assigned involuntarily to another region. The ISO shall not bear the costs of required upgrades in another region.

Regional Cost Allocation Principle 5: The ISO's cost allocation method and data requirements for determining benefits and identifying beneficiaries for a transmission facility shall be transparent with adequate documentation to allow a stakeholder to determine how they were applied to a proposed transmission facility, as consistent with confidentiality requirements set forth in this Attachment Y and the ISO Code of Conduct in Attachment F of the OATT.

Regional Cost Allocation Principle 6: The ISO's CSPP provides a different cost allocation method for different types of transmission facilities in the regional transmission plan and each cost allocation method is set out clearly and explained in detail in this Section 31.5.

31.5.2.2 In compliance with Commission Order No. 1000, the ISO shall implement the specific cost allocation methodology in Section 31.5.7 of this Attachment Y in accordance with the following Interregional Cost Allocation Principles:

Interregional Cost Allocation Principle 1: The ISO shall allocate the cost of new Interregional Transmission Projects to each region in which an Interregional Transmission Project is located in a manner that is at least roughly commensurate with estimated benefits of the Interregional Transmission Project in each of the regions. In determining the beneficiaries of Interregional Transmission Projects, the ISO will consider benefits including, but not limited to, those associated with maintaining reliability and sharing reserves, production cost savings and congestion relief, and meeting Public Policy Requirements.

Interregional Cost Allocation Principle 2: The ISO shall not involuntarily allocate any of the costs of an Interregional Transmission Project to a region that receives no benefit from an

Interregional Transmission Project that is located in that region, either at present or in a likely future scenario.

Interregional Cost Allocation Principle 3: In the event that the ISO adopts a benefit-cost threshold ratio to determine whether an Interregional Transmission Project has sufficient net benefits to qualify for interregional cost allocation, this ratio shall not be so large as to exclude an Interregional Transmission Project with significant positive net benefits from cost allocation. If the ISO chooses to adopt such a threshold, they will not include a ratio of benefits to costs that exceeds 1.25 unless the Parties justify and the Commission approves a higher ratio.

Interregional Cost Allocation Principle 4: The ISO's allocation of costs for an Interregional Transmission Project shall be assigned only to regions in which the Interregional Transmission Project is located. The ISO shall not assign costs involuntarily to a region in which that Interregional Transmission Project is not located. The ISO shall, however, identify consequences for other regions, such as upgrades that may be required in a third region. The ISO's interregional cost allocation methodology includes provisions for allocating the costs of upgrades among the beneficiaries in the region in which the Interregional Transmission Project is located to the transmission providers in such region that agree to bear the costs associated with such upgrades.

Interregional Cost Allocation Principle 5: The ISO's cost allocation methodology and data requirements for determining benefits and identifying beneficiaries for an Interregional Transmission Project shall be transparent with adequate documentation to allow a stakeholder to determine how they were applied to a proposed Interregional Transmission Project, as consistent with the confidentiality requirements set forth in this Attachment Y and the ISO Code of Conduct in Attachment F of the OATT.

Interregional Cost Allocation Principle 6: Though Order No. 1000 allows the ISO to provide a different cost allocation methodology for different types of interregional transmission facilities, such as facilities needed for reliability, congestion relief, or to achieve Public Policy Requirements, the ISO has chosen to adopt one interregional cost allocation methodology for all Interregional Transmission Planning Projects. The interregional cost allocation methodology is set out clearly and explained in detail in Section 31.5.7 of this Attachment Y. The share of the cost related to any Interregional Transmission Project assigned to the ISO shall be allocated as described in Section 31.5.1.7.

31.5.3 Regulated Responses to Reliability Needs²

31.5.3.1 Cost Allocation Principles

The ISO shall implement the specific cost allocation methodology in Section 31.5.3.2 of this Attachment Y in accordance with the Order No. 1000 Regional Cost Allocation Principles as set forth in Section 31.5.2.1. This methodology shall apply to cost allocation for a regulated transmission solution to an identified Reliability Need, including the ISO's share of the costs of an Interregional Transmission Project proposed as a regulated transmission solution to an identified Reliability Need allocated in accordance with Section 31.5.7 of this Attachment Y.

The specific cost allocation methodology in Section 31.5.3.2 incorporates the following elements:

31.5.3.1.1 The focus of the cost allocation methodology shall be on solutions to Reliability Needs.

This OATT subsection 31.5.3 is subject to revision per Order on Rehearing and Compliance, 148 FERC ¶ 61,044 (July 17, 2014).

- Potential impacts unrelated to addressing the Reliability Needs shall not be considered for the purpose of cost allocation for regulated solutions.
- 31.5.3.1.3 Primary beneficiaries shall initially be those Load Zones or Subzones identified as contributing to the reliability violation.
- 31.5.3.1.4 The cost allocation among primary beneficiaries shall be based upon their relative contribution to the need for the regulated solution.
- 31.5.3.1.5 The ISO will examine the development of specific cost allocation rules based on the nature of the reliability violation (*e.g.*, thermal overload, voltage, stability, resource adequacy and short circuit).
- 31.5.3.1.6 Cost allocation shall recognize the terms of prior agreements among the Transmission Owners, if applicable.
- 31.5.3.1.7 Consideration should be given to the use of a materiality threshold for cost allocation purposes.
- 31.5.3.1.8 The methodology shall provide for ease of implementation and administration to minimize debate and delays to the extent possible.
- 31.5.3.1.9 Consideration should be given to the "free rider" issue as appropriate.

 The methodology shall be fair and equitable.
- 31.5.3.1.10 The methodology shall provide cost recovery certainty to investors to the extent possible.
- 31.5.3.1.11 The methodology shall apply, to the extent possible, to Gap Solutions.
- 31.5.3.1.12 Cost allocation is independent of the actual triggered project(s), except when allocating cost responsibilities associated with meeting a Locational

Minimum Installed Capacity Requirement ("LCR"), and is based on a separate process that results in NYCA meeting its LOLE requirement.

- 31.5.3.1.13 Cost allocation for a solution that meets the needs of a Target Year assumes that backstop solutions of prior years have been implemented.
- 31.5.3.1.14 Cost allocation will consider the most recent values for LCRs. LCRs must be met for the Target Year.

31.5.3.2 Cost Allocation Methodology

The cost allocation mechanism under Rate Schedule 10 of this tariff for regulated transmission solutions to Reliability Needs, whether proposed by a Responsible Transmission Owner or a Transmission Owner or Other Developer, would be used as a basis for allocating costs associated with projects determined to be necessary pursuant to Section 31.2.8.

The formula is not applicable to that portion of a project beyond the size of the solution needed to provide the more efficient or cost effective solution appropriate to the Reliability Need identified in the RNA. Nor is the formula applicable to that portion of the cost of a regulated transmission reliability project that is, pursuant to Section 25.7.12 of Attachment S to the ISO OATT, paid for with funds previously committed by or collected from Developers for the installation of System Deliverability Upgrades required for the interconnection of generation or merchant transmission projects.

This Section 31.5.3.2 establishes the allocation of the costs related to resolving Reliability Needs resulting from resource adequacy, BPTF thermal transmission security, BPTF voltage security, dynamic stability, and short circuit issues. Costs will be allocated in accordance with the following hierarchy: (i) resource adequacy pursuant to Section 31.5.3.2.1, (ii) BPTF thermal transmission security pursuant to Section 31.5.3.2.2, (iii) BPTF voltage

security pursuant to Section 31.5.3.2.3, (iv) dynamic stability pursuant to Section 31.5.3.2.4, and (v) short circuit pursuant to Section 31.5.3.2.5.

31.5.3.2.1 Resource Adequacy Reliability Solution Cost Allocation Formula

For purposes of solutions eligible for cost allocation under this Section 31.5.3.2, this section sets forth the cost allocation methodology applicable to that portion of the costs of the solution attributable to resolving resource adequacy. The same cost allocation formula is applied regardless of the project or sets of projects being triggered; however, the nature of the solution set may lead to some terms equaling zero, thereby dropping out of the equation. To ensure that appropriate allocation to the LCR and non-LCR zones occurs, the zonal allocation percentages are developed through a series of steps that first identify responsibility for LCR deficiencies, followed by responsibility for remaining need. The following formula shall apply to the allocation of the costs of the solution attributable to resource adequacy:

$$Resource \ Adequacy \ Cost \ Allocation_{i} = \left[\begin{array}{c} LCRdef_{i} \\ \hline Soln \ Size \end{array} \right. + \left. \left(\begin{array}{c} Concident \ Peak_{i}*(1) \\ \hline \sum_{k=1}^{n} Coincident \ Peak_{k}* \end{array} \right. * \left. \begin{array}{c} Soln \ STW \ def \\ \hline Soln \ Size \end{array} \right. \right) \\ + \left. \left(\begin{array}{c} Concident \ Peak_{i}*(1) \\ \hline \sum_{l=1}^{m} Coincident \ Peak_{l}*(1) \\ \hline \end{array} \right. * \left. \begin{array}{c} Soln \ Cldef \\ \hline Soln \ Size \end{array} \right. \right) \right] \ *100\%$$

Where *i* is for each applicable zone, *n* represent the total zones in NYCA, *m* represents the zones isolated by the binding interfaces, IRM is the statewide reserve margin, and where LCR is defined as the locational capacity requirement in terms of percentage and is equal to zero for those zones without an LCR requirement, LCRdef_i is the applicable zonal LCR deficiency, SolnSTWdef is the STWdef for each applicable project, SolnCIdef is the CIdef for each

applicable project, and Soln_Size represents the total compensatory MW addressed by each applicable project for all reliability cost allocation steps in this Section 31.5.3.2.

Three step cost allocation methodology for regulated reliability solutions:

- 31.5.3.2.1.1 Step 1 LCR Deficiency
- 31.5.3.2.1.1.1 Any deficiencies in meeting the LCRs for the Target Year will be referred to as the LCRdef. If the reliability criterion is met once the LCR deficiencies have been addressed, that is LOLE ≤ 0.1 for the Target Year is achieved, then the only costs allocated will be those related to the LCRdef MW. Cost responsibility for the LCRdef MW will be borne by each deficient locational zone(s), to the extent each is individually deficient.

For a single solution that addresses only an LCR deficiency in the applicable LCR zone, the equation would reduce to:

$$Allocation_i = \frac{LCRdef_i}{Soln~Size} * 100\%$$

Where *i* is for each applicable LCR zone, LCRdef_i represents the applicable zonal LCR deficiency, and Soln_Size represents the total compensatory MW addressed by the applicable project.

- 31.5.3.2.1.1.2 Prior to the LOLE calculation, voltage constrained interfaces will be recalculated to determine the resulting transfer limits when the LCRdef MW are added.
- 31.5.3.2.1.2 Step 2 Statewide Resource Deficiency. If the reliability criterion is not met after the LCRdef has been addressed, that is an LOLE > 0.1, then a NYCA Free Flow Test will be conducted to determine if NYCA has sufficient resources to meet an LOLE of 0.1.

- 31.5.3.2.1.2.1 If NYCA is found to be resource limited, the ISO, using the transfer limits and resources determined in Step 1, will determine the optimal distribution of additional resources to achieve a reduction in the NYCA LOLE to 0.1.
- 31.5.3.2.1.2.2 Cost allocation for compensatory MW added for cost allocation purposes to achieve an LOLE of 0.1, defined as a Statewide MW deficiency (STWdef), will be prorated to all NYCA zones, based on the NYCA coincident peak load. The allocation to locational zones will take into account their locational requirements. For a single solution that addresses only a statewide deficiency, the equation would reduce to:

$$Allocation_{i} = \begin{bmatrix} \frac{Concident \, Peak_{i} * (1 + IRM - LCR_{i})}{\sum_{k=1}^{n} Coincident \, Peak_{k} * (1 + IRM - LCR_{k})} & * & \frac{Soln \, STW \, def}{Soln \, Size} \end{bmatrix} *100\%$$

Where *i* is for each applicable zone, *n* is for the total zones in NYCA, IRM is the statewide reserve margin, and LCR is defined as the locational capacity requirement in terms of percentage and is equal to zero for those zones without an LCR requirement, Soln STWdef is the STWdef for the applicable project, and Soln_Size represents the total compensatory MW addressed by the applicable project.

- 31.5.3.2.1.3 Step 3 Constrained Interface Deficiency. If the NYCA is not resource limited as determined by the NYCA Free Flow Test, then the ISO will examine constrained transmission interfaces, using the Binding Interface Test.
- 31.5.3.2.1.3.1 The ISO will provide output results of the reliability simulation program utilized for the RNA that indicate the hours that each interface is at limit in each

- flow direction, as well as the hours that coincide with a loss of load event. These values will be used as an initial indicator to determine the binding interfaces that are impacting LOLE within the NYCA.
- 31.5.3.2.1.3.2 The ISO will review the output of the reliability simulation program utilized for the RNA along with other applicable information that may be available to make the determination of the binding interfaces.
- 31.5.3.2.1.3.3 Bounded Regions are assigned cost responsibility for the compensatory MW, defined as CIdef, needed to reach an LOLE of 0.1.
- 31.5.3.2.1.3.4 If one or more Bounded Regions are isolated as a result of binding interfaces identified through the Binding Interface Test, the ISO will_determine the optimal distribution of compensatory MW to achieve a NYCA LOLE of 0.1. Compensatory MW will be added until the required NYCA LOLE is achieved.
- Test, which identifies the bounded interface limits that can be relieved and have the greatest impact on NYCA LOLE. The Bounded Region that will have the greatest benefit to NYCA LOLE will be the area to be first allocated costs in this step. The ISO will determine if after the first addition of compensating MWs the Bounded Region with the greatest impact on LOLE has changed. During this iterative process, the Binding Interface Test will look across the state to identify the appropriate Bounded Region. Specifically, the Binding Interface Test will be applied starting from the interface that has the greatest benefit to LOLE (the greatest LOLE reduction per interface compensatory MW addition), and then extended to subsequent interfaces until a NYCA LOLE of 0.1 is achieved.

31.5.3.2.1.3.6 The CIdef MW are allocated to the applicable Bounded Region isolated as a result of the constrained interface limits, based on their NYCA coincident peaks.

Allocation to locational zones will take into account their locational requirements.

For a single solution that addresses only a binding interface deficiency, the equation would reduce to:

$$Allocation_{i} = \begin{bmatrix} \frac{Concident \, Peak_{i} * (1 + IRM - LCR_{i})}{\sum_{l=1}^{m} Coincident \, Peak_{l} * (1 + IRM - LCR_{l})} & * & \frac{SolnCIdef}{Soln \, Size} \end{bmatrix} *100\%$$

Where *i* is for each applicable zone, *m* is for the zones isolated by the binding interfaces, IRM is the statewide reserve margin, and where LCR is defined as the locational capacity requirement in terms of percentage and is equal to zero for those zones without an LCR requirement, SolnCIdef is the CIdef for the applicable project and Soln_Size represents the total compensatory MW addressed by the applicable project.

31.5.3.2.2 BPTF Thermal Transmission Security Cost Allocation Formula

For purposes of solutions eligible for cost allocation under this Section 31.5.3.2, this section sets forth the cost allocation methodology applicable to that portion of the costs of the solution attributable to resolving BPTF thermal transmission security issues. If, after consideration of the compensatory MW identified in the resource adequacy reliability solution cost allocation in accordance with Section 31.5.3.2.1, there remains a BPTF thermal transmission security issue, the ISO will allocate the costs of the portion of the solution attributable to resolving the BPTF thermal transmission security issue(s) to the Subzones that contribute to the BPTF thermal transmission security issue(s) in the following manner.

- 31.5.3.2.2.1 Calculation of Nodal Distribution Factors. The ISO will calculate the nodal distribution factor for each load bus modeled in the power flow case utilizing the output of the reliability simulation program that identified the Reliability Need, including the NYCA generation dispatch and NYCA coincident peak Load. The nodal distribution factor represents the percentage of the Load that flows across the facility subject to the Reliability Need. The sign (positive or negative) of the nodal distribution factor represents the direction of flow.
- 31.5.3.2.2.2 Calculation of Nodal Flow. The ISO will calculate the nodal megawatt flow, defined as Nodal Flow, for each load bus modeled in the power flow case by multiplying the amount of Load in megawatts for the bus, defined as Nodal Load, by the nodal distribution factor for the bus. Nodal Flow represents the number of megawatts that flow across the facility subject to the Reliability Need due to the Load.
- 31.5.3.2.2.3 Calculation of Contributing Load and Contributing Flow. The Nodal Load for a load bus with a positive nodal distribution factor is a contributing Load, defined as CLoad, and the Nodal Flow for that Load is contributing flow, defined as CFlow. To identify contributing Loads that have a material impact on the Reliability Need, the ISO will calculate a contributing materiality threshold, defined as CMT, as follows:

$$CMT = \frac{\sum_{k=1}^{m} \sum_{Lk=1}^{n} CFlow_{Lk}}{\sum_{k=1}^{m} \sum_{Lk=1}^{n} CLoad_{Lk}}$$

Where m is for the total number of Subzones and n is for the total number of load buses in a given Subzone.

31.5.3.2.2.4 Calculation of Helping Load and Helping Flow. The Nodal Load for a load bus with a negative or zero nodal distribution factor is a helping Load, defined as HLoad, and the Nodal Flow for that Load is helping flow, defined as HFlow. To identify helping Loads that have a material impact on the Reliability Need, the ISO will calculate a helping materiality threshold, defined as HMT, as follows:

$$HMT = \frac{\sum_{k=1}^{m} \sum_{Lk=1}^{n} HFlow_{Lk}}{\sum_{k=1}^{m} \sum_{Lk=1}^{n} HLoad_{Lk}}$$

Where m is for the total number of Subzones and n is for the total number of load buses in a given Subzone.

31.5.3.2.2.5 Calculation of Net Material Flow for Each Subzone. The ISO will identify material Nodal Flow for each Subzone and calculate the net material flow for each Subzone. For each load bus, the Nodal Flow will be identified as material flow, defined as MFlow, if the nodal distribution factor is (i) greater than or equal to CMT, or (ii) less than or equal to HMT. The net material flow for each Subzone, defined as SZ NetFlow, is calculated as follows:

$$SZ_NetFlow_j = \sum_{Lj=1}^{n} MFlow_{Lj}$$

Where j is for each Subzone and n is for the total number of load buses in a given Subzone.

- 31.5.3.2.2.6 Identification of Allocated Flow for Each Subzone. The ISO will identify the allocated flow for each Subzone and verify that sufficient contributing flow is being allocated costs. For each Subzone, if the SZ_NetFlow is greater than zero, that Subzone has a net material contribution to the Reliability Need and the SZ_NetFlow is identified as allocated flow, defined as SZ_AllocFlow. If the SZ_NetFlow is less than or equal to zero, that Subzone does not have a net material contribution to the Reliability Need and the SZ_AllocFlow is zero for that Subzone. If the total SZ_AllocFlow for all Subzones is less than 60% of the total CFlow for all Subzones, then the CMT will be reduced and SZ_NetFlow recalculated until the total SZ_AllocFlow for all Subzones is at least 60% of the total CFlow for all Subzones.
- 31.5.3.2.2.7 Cost Allocation for a Single BPTF Thermal Transmission Security Issue. For a single solution that addresses only a BPTF thermal transmission security issue, the equation for cost allocation would reduce to:

$$BPTF\ Thermal\ Cost\ Alloction_{j} = \frac{SZ_AllocFlow_{j}}{\displaystyle\sum_{k=1}^{m} SZ_AllocFlow_{k}} \times \frac{SolnBTSdef}{Soln_Size}$$

Where j is for each Subzone; m is for the total number of Subzones;

- SZ_AllocFlow is the allocated flow for each Subzone; SolnBTSdef is the number of compensatory MW for the BPTF thermal transmission security issue for the applicable project; and Soln_Size represents the total compensatory MW addressed by the applicable project.
- 31.5.3.2.2.8 Cost Allocation for Multiple BPTF Thermal Transmission Security Issues.

 If a single solution addresses multiple BPTF thermal transmission security issues,

the ISO will calculate weighting factors based on the ratio of the present value of the estimated costs for individual solutions to each BPTF thermal transmission security issue. The present values of the estimated costs for the individual solutions shall be based on a common base date that will be the beginning of the calendar month in which the cost allocation analysis is performed (the "Base Date"). The ISO will apply the weighting factors to the cost allocation calculated for each Subzone for each individual BPTF thermal transmission security issue. The following example illustrates the cost allocation for such a solution:

- A cost allocation analysis for the selected solution is to be performed during a given month establishing the beginning of that month as the Base Date.
- The ISO has identified two BPTF thermal transmission security issues, Overload X and Overload Y, and the ISO has selected a single solution (Project Z) to address both BPTF thermal transmission security issues.
- The cost of a solution to address only Overload X (Project X) is Cost(X),
 provided in a given year's dollars. The number of years from the Base Date to the
 year associated with the cost estimate of Project (X) is N(X).
- The cost of a solution to address only Overload Y (Project Y) is Cost(Y),
 provided in a given year's dollars. The number of years from the Base Date to the
 year associated with the cost estimate of Project Y is N(Y).
- The discount rate, D, to be used for the present value analysis shall be the current after-tax weighted average cost of capital for the Transmission Owners.
- Based on the foregoing assumptions, the following formulas will be used:
 - Present Value of Cost (X) = PV Cost (X) = Cost (X) / $(1+D)^{N(X)}$

- Present Value of Cost $(Y) = PV Cost(Y) = Cost(Y) / (1+D)^{N(Y)}$
- Overload X weighting factor = PV Cost (X)/[PV Cost (X) + PV Cost (Y)]
- Overload Y weighting factor = PV Cost (Y)/[PV Cost (X) + PV Cost (Y)]
- Applying those formulas, if:

Cost
$$(X) = $100 \text{ Million and } N(X) = 6.25 \text{ years}$$

Cost
$$(Y) = $25$$
 Million and $N(Y) = 4.75$ years

$$D = 7.5\%$$
 per year

Then:

PV Cost (X) =
$$100/(1+0.075)^{6.25} = 63.635$$
 Million

PV Cost (Y) =
$$25/(1+0.075)^{4.75}$$
 = 17.732 Million

Overload X weighting factor = 63.635 / (63.635 + 17.732) = 78.21%

Overload Y weighting factor = 17.732 / (63.635 + 17.732) = 21.79%

• Applying those weighing factors, if:

Subzone A cost allocation for Overload X is 15%

Subzone A cost allocation for Overload Y is 70%

Then:

Subzone A cost allocation % for Project Z =

$$(15\% * 78.21\%) + (70\% * 21.79\%) = 26.99\%$$

31.5.3.2.2.9 Exclusion of Subzone(s) Based on De Minimis Impact. If a Subzone is assigned a BPTF thermal transmission security cost allocation less than a *de minimis* dollar threshold of the total project costs, that Subzone will not be allocated costs; *provided however*, that the total *de minimis* Subzones may not exceed 10% of the total BPTF thermal transmission security cost allocation. The

de minimis threshold is initially \$10,000. If the total allocation percentage of all *de minimis* Subzones is greater than 10%, then the *de minimis* threshold will be reduced until the total allocation percentage of all *de minimis* Subzones is less than or equal to 10%.

31.5.3.2.3 BPTF Voltage Security Cost Allocation

If, after consideration of the compensatory MW identified in the resource adequacy cost allocation in accordance with Section 31.5.3.2.1 and BPTF thermal transmission security cost allocation in accordance with Section 31.5.3.2.2, there remains a BPTF voltage security issue, the ISO will allocate the costs of the portion of the solution attributable to resolving the BPTF voltage security issue(s) to the Subzones that contribute to the BPTF voltage security issue(s). The cost responsibility for the portion (MW or MVAr) of the solution attributable to resolving the BPTF voltage security issue(s), defined as SolnBVSdef, will be allocated on a Load-ratio share to each Subzone to which each bus with a voltage issue is connected, as follows:

$$BPTF\ Voltage\ Cost\ Alloction_{j} = \frac{Coincident\ Peak_{j}}{\displaystyle\sum_{k=1}^{m} Coincident\ Peak_{k}} \times \frac{SolnBVSdef}{Soln_Size}$$

Where *j* is for each Subzone; *m* is for the total number of Subzones that are subject to BPTF voltage cost allocation; Coincident Peak is for the total peak Load for each Subzone; SolnBVSdef is for the portion of the solution necessary to resolve the BPTF voltage security issue(s); and Soln_Size represents the total compensatory MW addressed by the applicable project.

31.5.3.2.4 Dynamic Stability Cost Allocation

If, after consideration of the compensatory MW identified in the resource adequacy cost allocation in accordance with Section 31.5.3.2.1, BPTF thermal transmission security cost allocation in accordance with Section 31.5.3.2.2, and BPTF voltage security cost allocation in accordance with Section 31.5.3.2.3, there remains a dynamic stability issue, the ISO will allocate the costs of the portion of the solution attributable to resolving the dynamic stability issue(s) to all Subzones in the NYCA on a Load-ratio share basis, as follows:

$$Dynamic \, Stability \, Cost \, Alloction_{j} = \frac{Coincident \, Peak_{j}}{\displaystyle \sum_{k \, = \, 1}^{m} Coincident \, Peak_{k}} \times \frac{DynamicMW}{Soln_Size}$$

Where *j* is for each Subzone; *m* is for the total number of Subzones; Coincident Peak is for the total peak Load for each Subzone; DynamicMW is for the megawatt portion of the solution necessary to resolve the dynamic stability issue(s) for the applicable project; and Soln Size represents the total compensatory MW addressed by the applicable project.

31.5.3.2.5 Short Circuit Issues

If, after the completion of the prior reliability cost allocation steps, there remains a short circuit issue, the short circuit issue will be deemed a local issue and related costs will not be allocated under this process.

31.5.4 Regulated Economic Projects

31.5.4.1 The Scope of Section **31.5.4**

As discussed in Section 31.5.1 of this Attachment Y, the cost allocation principles and methodologies of this Section 31.5.4 apply only to regulated economic transmission projects ("RETPs) proposed in response to congestion identified in the CARIS.

This Section 31.5.4 does not apply to generation or demand side management projects, nor does it apply to any market-based projects. This Section 31.5.4 does not apply to regulated backstop solutions triggered by the ISO pursuant to the CSPP, provided, however, the cost allocation principles and methodologies in this Section 31.5.4 will apply to regulated backstop solutions when the implementation of the regulated backstop solution is accelerated solely to reduce congestion in earlier years of the Study Period. The ISO will work with the ESPWG to develop procedures to deal with the acceleration of regulated backstop solutions for economic reasons.

Nothing in this Attachment Y mandates the implementation of any project in response to the congestion identified in the CARIS.

31.5.4.2 Cost Allocation Principles

The ISO shall implement the specific cost allocation methodology in Section 31.5.4.4 of this Attachment Y in accordance with the Order No. 1000 Regional Cost Allocation Principles as set forth in Section 31.5.2.1 The specific cost allocation methodology in Section 31.5.4.4 incorporates the following elements:

- 31.5.4.2.1 The focus of the cost allocation methodology shall be on responses to specific conditions identified in the CARIS.
- 31.5.4.2.2 Potential impacts unrelated to addressing the identified congestion shall not be considered for the purpose of cost allocation for RETPs.
- 31.5.4.2.3 Projects analyzed hereunder as proposed RETPs may proceed on a market basis with willing buyers and sellers at any time.
- 31.5.4.2.4 Cost allocation shall be based upon a beneficiaries pay approach. Cost allocation under the ISO tariff for a RETP shall be applicable only when a super

- majority of the beneficiaries of the project, as defined in Section 31.5.4.6 of this Attachment Y, vote to support the project.
- 31.5.4.2.5 Beneficiaries of a RETP shall be those entities economically benefiting from the proposed project. The cost allocation among beneficiaries shall be based upon their relative economic benefit.
- 31.5.4.2.6 Consideration shall be given to the proposed project's payback period.
- 31.5.4.2.7 The cost allocation methodology shall address the possibility of cost overruns.
- 31.5.4.2.8 Consideration shall be given to the use of a materiality threshold for cost allocation purposes.
- 31.5.4.2.9 The methodology shall provide for ease of implementation and administration to minimize debate and delays to the extent possible.
- 31.5.4.2.10 Consideration should be given to the "free rider" issue as appropriate. The methodology shall be fair and equitable.
- 31.5.4.2.11 The methodology shall provide cost recovery certainty to investors to the extent possible.
- 31.5.4.2.12 Benefits determination shall consider various perspectives, based upon the agreed-upon metrics for analyzing congestion.
- 31.5.4.2.13 Benefits determination shall account for future uncertainties as appropriate (e.g., load forecasts, fuel prices, environmental regulations).
- 31.5.4.2.14 Benefits determination shall consider non-quantifiable benefits as appropriate (*e.g.*, system operation, environmental effects, renewable integration).

31.5.4.3 Project Eligibility for Cost Allocation

The methodologies in this Section 31.5.4.3 will be used to determine the eligibility of a proposed RETP to have its cost allocated and recovered pursuant to the provisions of this Attachment Y.

- 31.5.4.3.1 The ISO will evaluate the benefits against the costs (as provided by the Developer) of each proposed RETP over a ten-year period commencing with the proposed commercial operation date for the project. The Developer of each project will pay the cost incurred by the ISO to conduct the ten-year benefit/cost analysis of its project. The ISO, in conjunction with the ESPWG, will develop methodologies for extending the most recently completed CARIS database as necessary to evaluate the benefits and costs of each proposed RETP.
- 31.5.4.3.2 The benefit metric for eligibility under the ISO's benefit/cost analysis will be expressed as the present value of the annual NYCA-wide production cost savings that would result from the implementation of the proposed project, measured for the first ten years from the proposed commercial operation date for the project.
- 31.5.4.3.3 The cost for the ISO's benefit/cost analysis will be supplied by the

 Developer of the project, and the cost metric for eligibility will be expressed as
 the present value of the first ten years of annual total revenue requirements for the
 project, reasonably allocated over the first ten years from the proposed
 commercial operation date for the project.
- 31.5.4.3.4 For informational purposes only, the ISO will also calculate the present value of the annual total revenue requirement for the project over a 30 year period commencing with the proposed commercial operation date of the project.

- 31.5.4.3.5 To be eligible for cost allocation and recovery under this Attachment Y, the benefit of the proposed project must exceed its cost measured over the first ten years from the proposed commercial operation date for the project, and the requirements of section 31.5.4.2 must be met. The total capital cost of the project must exceed \$25 million. In addition, a super-majority of the beneficiaries must vote in favor of the project, as specified in Section 31.5.4.6 of this Attachment Y.
- 31.5.4.3.6 In addition to calculating the benefit metric as defined in Section 31.5.4.3.2, the ISO will calculate additional metrics to estimate the potential benefits of the proposed project, for information purposes only, in accordance with Section 31.3.1.3.5, for the applicable metric. These additional metrics shall include those that measure reductions in LBMP load costs, changes to generator payments, ICAP costs, Ancillary Service costs, emissions costs, and losses. TCC revenues will be determined in accordance with Section 31.5.4.4.2.3. The ISO will provide information on these additional metrics to the maximum extent practicable considering its overall resource commitments.
- 31.5.4.3.7 In addition to the benefit/cost analysis performed by the ISO under this Section 31.5.4.3, the ISO will work with the ESPWG to consider the development and implementation of scenario analyses, for information only, that shed additional light on the benefit/cost analysis of a proposed project. These additional scenario analyses may cover fuel and load forecast uncertainty, emissions data and the cost of allowances, pending environmental or other regulations, and alternate resource and energy efficiency scenarios. Consideration

of these additional scenarios will take into account the resource commitments of the ISO.

31.5.4.4 Cost Allocation for Eligible Projects

As noted in Section 31.5.4.2 of this Attachment Y, the cost of a RETP will be allocated to those entities that would economically benefit from implementation of the proposed project. This methodology shall apply to cost allocation for a RETP, including the ISO's share of the costs of an Interregional Transmission Project proposed as a RETP allocated in accordance with Section 31.5.7 of this Attachment Y.

- 31.5.4.4.1 The ISO will identify the beneficiaries of the proposed project over a tenyear time period commencing with the proposed commercial operation date for the project. The ISO, in conjunction with the ESPWG, will develop methodologies for extending the most recently completed CARIS database as necessary for this purpose.
- 31.5.4.4.2 The ISO will identify beneficiaries of a proposed project as follows:
- 31.5.4.4.2.1 The ISO will measure the present value of the annual zonal LBMP load savings for all Load Zones which would have a load savings, net of reductions in TCC revenues, and net of reductions from bilateral contracts (based on available information provided by Load Serving Entities to the ISO as set forth in subsection 31.5.4.4.2.5 below) as a result of the implementation of the proposed project. For purposes of this calculation, the present value of the load savings will be equal to the sum of the present value of the Load Zone's load savings for each year over the ten-year period commencing with the project's commercial operation date. The load savings for a Load Zone will be equal to the difference

between the zonal LBMP load cost without the project and the LBMP load cost with the project, net of reductions in TCC revenues and net of reductions from bilateral contracts.

- 31.5.4.4.2.2 The beneficiaries will be those Load Zones that experience net benefits measured over the first ten years from the proposed commercial operation date for the project. If the sum of the zonal benefits for those Load Zones with load savings is greater than the revenue requirements for the project (both load savings and revenue requirements measured in present value over the first ten years from the commercial operation date of the project), the ISO will proceed with the development of the zonal cost allocation information to inform the beneficiary voting process.
- 31.5.4.4.2.3 Reductions in TCC revenues will reflect the forecasted impact of the project on TCC auction revenues and day-ahead residual congestion rents allocated to load in each zone, not including the congestion rents that accrue to any Incremental TCCs that may be made feasible as a result of this project. This impact will include forecasts of: (1) the total impact of that project on the Transmission Service Charge offset applicable to loads in each zone (which may vary for loads in a given zone that are in different Transmission Districts); (2) the total impact of that project on the NYPA Transmission Adjustment Charge offset applicable to loads in that zone; and (3) the total impact of that project on payments made to LSEs serving load in that zone that hold Grandfathered Rights or Grandfathered TCCs, to the extent that these have not been taken into account

- in the calculation of item (1) above. These forecasts shall be performed using the procedure described in Appendix B to this Attachment Y.
- 31.5.4.4.2.4 Estimated TCC revenues from any Incremental TCCs created by a proposed RETP over the ten-year period commencing with the project's commercial operation date will be added to the Net Load Savings used for the cost allocation and beneficiary determination.
- 31.5.4.4.2.5 The ISO will solicit bilateral contract information from all Load Serving Entities, which will provide the ISO with bilateral energy contract data for modeling contracts that do not receive benefits, in whole or in part, from LBMP reductions, and for which the time period covered by the contract is within the ten-year period beginning with the commercial operation date of the project.

 Bilateral contract payment information that is not provided to the ISO will not be included in the calculation of the present value of the annual zonal LBMP savings in section 31.5.4.4.2.1 above.
- 31.5.4.4.2.5.1 All bilateral contract information submitted to the ISO must identify the source of the contract information, including citations to any public documents including but not limited to annual reports or regulatory filings
- 31.5.4.4.2.5.2 All non-public bilateral contract information will be protected in accordance with the ISO's Code of Conduct, as set forth in Section 12.4 of Attachment F of the ISO OATT, and Section 6 of the ISO Services Tariff.
- 31.5.4.4.2.5.3 All bilateral contract information and information on LSE-owned generation submitted to the ISO must include the following information:
- (1) Contract quantities on an annual basis:

- (a) For non-generator specific contracts, the Energy (in MWh) contracted to serve each Zone for each year.
- (b) For generator specific contracts or LSE-owned generation, the name of the generator(s) and the MW or percentage output contracted or self-owned for use by Load in each Zone for each year.
- (2) For all Load Serving Entities serving Load in more than one Load Zone, the quantity (in MWh or percentage) of bilateral contract Energy to be applied to each Zone, by year over the term of the contract.
- (3) Start and end dates of the contract.
- (4) Terms in sufficient detail to determine that either pricing is not indexed to LBMP, or, if pricing is indexed to LBMP, the manner in which prices are connected to LBMP.
- (5) Identify any changes in the pricing methodology on an annual basis over the term of the contract.
- 31.5.4.4.2.5.4 Bilateral contract and LSE-owned generation information will be used to calculate the adjusted LBMP savings for each Load Zone as follows:

 $AdjLBMPS_{y,z}$, the adjusted LBMP savings for each Load Zone z in each year y, shall be calculated using the following equation:

$$AdjLBMPS_{y,z} = max \left[0, TL_{y,z} - \sum_{b \in B_{y,z}} (BCL_{b,y,z} * (1 - Ind_{b,y,z})) - SG_{y,z} \right] * (LBMP1_{y,z} - LBMP2_{y,z})$$

Where:

 $^{TL}_{y,z}$ is the total annual amount of Energy forecasted to be consumed by Load in year y in Load Zone z;

 $B_{y,z}$ is the set of blocks of Energy to serve Load in Load Zone z in year y that are sold under bilateral contracts for which information has been provided to the ISO that meets the requirements set forth elsewhere in this Section 31.5.4.4.2.5

 $^{BCL}_{b,y,z}$ is the total annual amount of Energy sold into Load Zone z in year y under bilateral contract block b;

 $Ind_{b,y,z}$ is the ratio of (1) the increase in the amount paid by the purchaser of Energy, under bilateral contract block b, as a result of an increase in the LBMP in Load Zone z in year y to (2) the increase in the amount that a purchaser of that amount of Energy would pay if the purchaser paid the LBMP for that Load Zone in that year for all of that Energy (this ratio shall be zero for any bilateral contract block of Energy that is sold at a fixed price or for which the cost of Energy purchased under that contract otherwise insensitive to the LBMP in Load Zone z in year y);

 $SG_{y,z}$ is the total annual amount of Energy in Load Zone z that is forecasted to be served by LSE-owned generation in that Zone in year y;

 $LBMP1_{y,z}$ is the forecasted *annual load-weighted average LBMP* for Load Zone z in year y, calculated under the assumption that the project is not in place; and

 $LBMP2_{y,z}$ is the forecasted annual load-weighted average LBMP for Load Zone z in year y, calculated under the assumption that the project is in place.

 NZS_z , the Net Zonal Savings for each Load Zone z resulting from a given project, shall be calculated using the following equation:

$$NZS_{z} = max \left[0, \sum_{y=PS}^{PS+9} \left(\left(AdjLBMPS_{y,z} - TCCRevImpact_{y,z} \right) * DF_{y} \right) \right]$$

Where:

PS is the year in which the project is expected to enter commercial operation;

AdjLBMPS_{y,z}is as calculated in Section 31.5.4.4.2.5;

 $TCCRevImpact_{y,z}$ is the forecasted impact of TCC revenues allocated to Load Zone z in year y, calculated using the procedure described in Appendix B in Section 31.7 of this Attachment Y; and

 ^{DF}y is the discount factor applied to cash flows in year y to determine the present value of that cash flow in year PS.

- 31.5.4.4.3 Load Zones not benefiting from a proposed RETP will not be allocated any of the costs of the project under this Attachment Y. There will be no "make whole" payments to non-beneficiaries.
- 31.5.4.4.4 Costs of a project will be allocated to beneficiaries as follows:
- 31.5.4.4.4.1 The ISO will allocate the cost of the RETP based on the zonal share of total savings to the Load Zones determined pursuant to Section 31.5.4.4.2 to be beneficiaries of the proposed project. Total savings will be equal to the sum of load savings for each Load Zone that experiences net benefits pursuant to Section 31.5.4.4.2. A Load Zone's cost allocation will be equal to the present value of the following calculation:

$$Zonal\ Cost\ Allocation = Project\ Cost\ * \left(\frac{(Zonal\ Benefits)}{Total\ Zonal\ Benefits\ for\ zone\ with\ positive\ net\ benefits}\right)$$

31.5.4.4.4.2 Zonal cost allocation calculations for a RETP will be performed prior to the commencement of the ten-year period that begins with the project's commercial operation date, and will not be adjusted during that ten-year period.

31.5.4.4.3 Within zones, costs will be allocated to LSEs based on MWhs calculated for each LSE for each zone using data from the most recent available 12 month period. Allocations to an LSE will be calculated in accordance with the following formula:

$$LSE\ Intrazonal\ Cost\ Allocation = Zonal\ Cost\ Allocation * \left(\frac{LSE\ Zonal\ MWh}{Total\ Zonal\ MWh}\right)$$

- 31.5.4.4.5 Project costs allocated under this Section 31.5.4.4 will be determined as follows:
- 31.5.4.4.5.1 The project cost allocated under this Section 31.5.4.4 will be based on the total project revenue requirement, as supplied by the Developer of the project, for the first ten years of project operation. The total project revenue requirement will be determined in accordance with the formula rate on file at the Commission. If there is no formula rate on file at the Commission, then the Developer shall provide to the ISO the project-specific parameters to be used to calculate the total project revenue requirement.
- 31.5.4.4.5.2 Once the benefit/cost analysis is completed the amortization period and the other parameters used to determine the costs that will be recovered for the project should not be changed, unless so ordered by the Commission or a court of applicable jurisdiction, for cost recovery purposes to maintain the continued validity of the benefit/cost analysis.
- 31.5.4.4.5.3 The ISO, in conjunction with the ESPWG, will develop procedures to allocate the risk of project cost increases that occur after the ISO completes its benefit/cost analysis under this Attachment Y. These procedures may include

- consideration of an additional review and vote prior to the start of construction and whether the developer should bear all or part of the cost of any overruns.
- 31.5.4.4.6 The Commission must approve the cost of a proposed RETP for that cost to be recovered through the ISO OATT. The developer's filing with the Commission must be consistent with the project proposal evaluated by the ISO under this Attachment Y in order to be cost allocated to beneficiaries.

31.5.4.5 Collaborative Governance Process and Board Action

- 31.5.4.5.1 The ISO shall submit the results of its project benefit/cost analysis and beneficiary determination to the ESPWG and TPAS, and to the identified beneficiaries of the proposed RETP for comment. The ISO shall make available to any interested party sufficient information to replicate the results of the benefit/cost analysis and beneficiary determination. The information made available will be electronically masked and made available pursuant to a process that the ISO reasonably determines is necessary to prevent the disclosure of any Confidential Information or Critical Energy Infrastructure Information contained in the information made available. Following completion of the review by the ESPWG and TPAS of the project benefit/cost analysis, the ISO's analysis reflecting any revisions resulting from the TPAS and ESPWG review shall be forwarded to the Business Issues Committee and Management Committee for discussion and action.
- 31.5.4.5.2 Following the Management Committee vote, the ISO's project benefit/cost analysis and beneficiary determination will be forwarded, with the input of the Business Issues Committee and Management Committee, to the ISO Board for

review and action. In addition, the ISO's determination of the beneficiaries' voting shares will be forwarded to the ISO Board for review and action. The Board may approve the analysis and beneficiary determinations as submitted or propose modifications on its own motion. If any changes to the benefit/cost analysis or the beneficiary determinations are proposed by the Board, the revised analysis and beneficiary determinations shall be returned to the Management Committee for comment. If the Board proposes any changes to the ISO's voting share determinations, the Board shall so inform the LSE or LSEs impacted by the proposed change and shall allow such an LSE or LSEs an opportunity to comment on the proposed change. The Board shall not make a final determination on the project benefit/cost analysis and beneficiary determination until it has reviewed the Management Committee comments. Upon final approval of the Board, project benefit/cost analysis and beneficiary determinations shall be posted by the ISO on its website and shall form the basis of the beneficiary voting described in Section 31.5.4.6 of this Attachment Y.

31.5.4.6 Voting by Project Beneficiaries

31.5.4.6.1 Only LSEs serving Load located in a beneficiary zone determined in accordance with the procedures in Section 31.5.4.4 of this Attachment Y shall be eligible to vote on a proposed project. The ISO will, in conjunction with the ESPWG, develop procedures to determine the specific list of voting entities for each proposed project.

- 31.5.4.6.2 The voting share of each LSE shall be weighted in accordance with its share of the total project benefits, as allocated by Section 31.5.4.4 of this Attachment Y.
- 31.5.4.6.3 The costs of a RETP shall be allocated under this Attachment Y if eighty percent (80%) or more of the actual votes cast on a weighted basis are cast in favor of implementing the project.
- 31.5.4.6.4 If the proposed RETP meets the required vote in favor of implementing the project, and the project is implemented, all beneficiaries, including those voting "no," will pay their proportional share of the cost of the project.
- 31.5.4.6.5 The ISO will tally the results of the vote in accordance with procedures set forth in the ISO Procedures, and report the results to stakeholders. Beneficiaries voting against approval of a project must submit to the ISO their rationale for their vote within 30 days of the date that the vote is taken. Beneficiaries must provide a detailed explanation of the substantive reasons underlying the decision, including, where appropriate: (1) which additional benefit metrics, either identified in the tariff or otherwise, were used; (2) the actual quantification of such benefit metrics or factors; (3) a quantification and explanation of the net benefit or net cost of the project to the beneficiary; and (4) data supporting the metrics and other factors used. Such explanation may also_include uncertainties, and/or alternative scenarios and other qualitative factors considered, including state public policy goals. The ISO will report this information to the Commission in an informational filing to be made within 60 days of the vote. The informational filing will include: (1) a list of the identified beneficiaries; (2) the

results of the benefit/cost analysis; and (3) where a project is not approved, whether the developer has provided any formal indication to the ISO as to the future development of the project.

31.5.5 Regulated Transmission Solutions to Public Policy Transmission Needs³ 31.5.5.1 The Scope of Section 31.5.5

As discussed in Section 31.5.1 of this Attachment Y, the cost allocation principles and methodologies of this Section 31.5.5 apply only to regulated transmission projects proposed as solutions to Public Policy Transmission Needs. This Section 31.5.5 does not apply to generation or demand side management projects, nor does it apply to any market-based projects. This Section 31.5.5 does not apply to regulated reliability solutions implemented pursuant to the reliability planning process, nor does it apply to RETPs proposed in response to congestion identified in the CARIS.

A regulated backstop transmission solution or an alternative regulated reliability transmission solution shall only utilize the cost allocation methodology set forth in Section 31.5.3 where it either is: (1) selected by the ISO as the more efficient or cost effective regulated transmission solution to satisfy a Reliability Need and triggered by the ISO pursuant to Section 31.2.8 of Attachment Y of the ISO OATT, or (2) seeking cost recovery where it has been halted or cancelled pursuant to the provisions of Section 31.2.8.2. A regulated economic transmission solution proposed in response to congestion identified in the CARIS, and approved pursuant to Section 31.5.4.6, shall only be eligible to utilize the cost allocation principles and methodologies set forth in Section 31.5.4.

31.5.5.2 Cost Allocation Principles

This OATT subsection 31.5.5 is subject to revision per Order on Rehearing and Compliance, 148 FERC ¶ 61,044 (July 17, 2014).

The ISO shall implement the specific cost allocation methodology in Section 31.5.5.4 of this Attachment Y in accordance with the Order No. 1000 Regional Cost Allocation Principles as set forth in Section 31.5.2.1 The specific cost allocation methodology in Section 31.5.5.4 incorporates the following elements:

- The focus of the cost allocation methodology shall be on proposed regulated transmission solutions to Public Policy Transmission Needs.
- 31.5.5.2.2 Projects analyzed hereunder as proposed solutions to Public Policy

 Transmission Needs may proceed on a market basis with willing buyers and sellers at any time.
- 31.5.5.2.3 Cost allocation shall be based on a beneficiaries pay approach.
- 31.5.5.2.4 Project benefits will be identified in accordance with Section 31.5.4.4.
- 31.5.5.2.5 Identification of beneficiaries for cost allocation and cost allocation among those beneficiaries shall be according to the methodology specified in Section 31.5.5.4.

31.5.5.3 Project Eligibility for Cost Allocation

A project that is proposed as a solution for a Public Policy Transmission Need is eligible for cost allocation when: (i) it is selected by the ISO as the more efficient or cost effective regulated transmission solution to satisfy the Public Policy Transmission Need, and (ii) as determined by the Commission . If the NYPSC requests a Transmission Owner or Other Developer to provide a more detailed study or cost estimate for a proposed transmission project, such study costs shall be eligible for cost recovery.

At this point in the process, cost allocation for selected projects will be calculated by the ISO using the process set forth in Section 31.5.5.4 of this Attachment Y.

31.5.5.4 Cost Allocation for Eligible Projects

As noted in Section 31.5.5.2 of this Attachment Y, the identification of beneficiaries for cost allocation and the cost allocation of a proposed solution to a transmission need driven by a Public Policy Requirement will be conducted in accordance with the process described in this Section 31.5.5.4. This Section will also apply to the allocation within New York of the ISO's share of the costs of an Interregional Transmission Project proposed as a solution to a transmission need driven by a Public Policy Requirement allocated in accordance with Section 31.5.7 of this Attachment Y. Nothing herein shall deprive a Transmission Owner or Other Developer of any rights it may have under Section 205 of the Federal Power Act to submit filings proposing any other cost allocation methodology to the Commission or create any Section 205 filing rights for any Transmission Owner, Other Developer, the ISO, or any other entity. The ISO shall apply the cost methodology accepted by the Commission.

31.5.5.4.1 If the Public Policy Requirement that results in the construction of a transmission project prescribes the use of a particular cost allocation and recovery methodology, then the ISO shall file that methodology with the Commission.

Nothing herein shall deprive a Transmission Owner or Other Developer of any rights it may have under Section 205 of the Federal Power Act to submit filings proposing any other cost allocation methodology to the Commission or create any Section 205 filing rights for any Transmission Owner, Other Developer, the ISO, or any other entity. If the Transmission Owner or Other Developer files a different proposed cost allocation methodology under Section 205 of the Federal Power Act, it shall have the burden of demonstrating that its proposed methodology is compliant with the Order No. 1000 Regional Cost Allocation

Principles taking into account the methodology specified in the Public Policy Requirement.

- 31.5.5.4.2 Subject to the provisions of Section 31.5.5.4.1, the Transmission Owner or Other Developer of the project may, after consideration of any guidance that may be provided by the NYDPS/NYPSC, propose a cost allocation methodology, which may include a cost allocation based on load ratio share, adjusted to reflect, as applicable, the Public Policy Requirement or Public Policy Transmission Need, the party(ies) responsible for complying with the Public Policy Requirement, and the party(ies) who benefit from the transmission facility ("Adjusted Load Ratio Share").
- 31.5.5.4.2.1 If the NYDPS/NYPSC supports the proposed cost allocation methodology, the Transmission Owner or Other Developer shall file that cost allocation methodology with the Commission for its acceptance under Section 205 of the Federal Power Act. The Transmission Owner or Other Developer shall have the burden of demonstrating that the proposed cost allocation methodology is compliant with the Order No. 1000 Regional Cost Allocation Principles.
- 31.5.5.4.2.2 If the NYDPS/NYPSC does not support the proposed cost allocation methodology, then the Transmission Owner or Other Developer shall take reasonable steps over a period of no more than 60 days after the Transmission Owner or Other Developer has informed the NYDPS/NYPSC of its proposed methodology to respond to the NYDPS/NYPSC's concerns and to develop a mutually agreeable cost allocation methodology.

- 31.5.5.4.2.3 If a mutually acceptable cost allocation methodology is developed, the Transmission Owner or Other Developer shall file it with the Commission for acceptance under Section 205 of the Federal Power Act. The Transmission Owner or Other Developer shall have the burden of demonstrating that the proposed cost allocation methodology is compliant with the Order No. 1000 Regional Cost Allocation Principles.
- 31.5.5.4.2.4 If no mutually agreeable cost allocation methodology is developed, the

 Transmission Owner or Other Developer shall promptly file its preferred cost
 allocation methodology with the Commission for acceptance under Section 205 of
 the Federal Power Act. The Transmission Owner or Other Developer shall have
 the burden of demonstrating that its proposed methodology is compliant with the
 Order No. 1000 Regional Cost Allocation Principles in consideration of the
 position of the NYDPS/NYPSC. The filing shall include the methodology
 supported by NYDPS/NYPSC for the Commission's consideration. If the
 Transmission Owner or Other Developer elects to use the load ratio share cost
 allocation methodology referenced below in Section 31.5.5.4.3, the Transmission
 Owner or Other Developer shall notify the Commission of its intent to utilize the
 load ratio share methodology and shall include in its notice the NYDPS/NYPSC
 supported methodology for the Commission's consideration.
- 31.5.5.4.3. Unless the Commission has accepted an alternative cost allocation methodology pursuant to this Section, the ISO shall allocate the costs of the transmission project to all Load Serving Entities in the NYCA using the default cost allocation methodology, based upon a load ratio share methodology.

- 31.5.5.4.4 The NYISO will make any Section 205 filings related to this Section on behalf of NYPA to the extent requested to do so by NYPA. NYPA shall bear the burden of demonstrating that such a filing is compliant with the Order No. 1000 Regional Cost Allocation Principles. NYPA shall also be solely responsible for making any jurisdictional reservations or arguments related to their status as non-Commission-jurisdictional utilities that are not subject to various provisions of the Federal Power Act.
- 31.5.5.4.5 The inclusion in the ISO OATT or in a filing with the Commission on an informational basis of the cost allocation and charges for recovery of costs incurred by NYPA related to a solution to a transmission need driven by a Public Policy Requirement or Interregional Transmission Project as provided for in Sections 31.5.5.4.3 and 31.5.5.4.4 shall not be deemed to modify the treatment of such rates as non-jurisdictional pursuant to Section 201(f) of the FPA.

31.5.6 Cost Recovery for Regulated Projects

Responsible Transmission Owners, Transmission Owners and Other Developers will be entitled, if eligible for cost recovery under Section 31.2 of this Attachment Y, to full recovery of all reasonably incurred costs, including a reasonable return on investment and any applicable incentives, related to the development, construction, operation and maintenance of regulated solutions, including Gap Solutions, proposed or undertaken pursuant to the provisions of this Attachment Y to meet a Reliability Need. Transmission Owners and Other Developers will be entitled to recovery of costs associated with the implementation of a regulated economic transmission project ("RETP") in accordance with the provisions of Section 31.5.6 of this Attachment Y. Transmission Owners and Other Developers will be entitled, if eligible for cost

recovery under Section 31.4 of this Attachment Y, to full recovery of all reasonably incurred costs, including a reasonable return on investment and any applicable incentives, related to the development, construction, operation and maintenance of regulated solutions, associated with the implementation of regulated transmission projects undertaken to meet a Public Policy Transmission Need in accordance with the provisions of Section 31.5.6 of this Attachment Y, including recovery of any prudently incurred costs pursuant to a request for a proposed transmission solution of the NYDPS/NYPSC under Section 31.4.3.2.

- The Responsible Transmission Owner, Transmission Owner or Other

 Developer will receive cost recovery for a regulated solution it undertakes to meet
 a Reliability Need pursuant to Section 31.2 of this Attachment Y that is
 subsequently halted in accordance with the criteria established pursuant to Section
 31.2.8.2 of this Attachment Y. Such costs will include reasonably incurred costs
 through the time of cancellation, including any forward commitments made.
- 31.5.6.2 The Responsible Transmission Owner, Transmission Owner or Other

 Developer will recover its costs described in this Section 31.5 incurred with
 respect to the implementation of a regulated transmission solution to Reliability
 Needs in accordance with the provisions of Rate Schedule 10 of this ISO OATT,
 or as determined by the Commission. Provided further that cost recovery for
 regulated transmission projects undertaken by a Transmission Owner pursuant to
 this Attachment Y shall be in accordance with the provisions of the NYISO/TO
 Reliability Agreement.
- 31.5.6.3 Costs related to non-transmission regulated solutions to Reliability Needs will be recovered by Responsible Transmission Owners, Transmission Owners

and Other Developers in accordance with the provisions of New York Public
Service Law, New York Public Authorities Law, or other applicable state law. A
Responsible Transmission Owner, a Transmission Owner, or Other Developer
may propose and undertake a regulated non-transmission solution, provided that
the appropriate state agency(ies) has established cost recovery procedures
comparable to those provided in this tariff for regulated transmission solutions to
ensure the full and prompt recovery of all reasonably-incurred costs related to
such non-transmission solutions. Nothing in this section shall affect the
Commission's jurisdiction over the sale and transmission of electric energy
subject to the jurisdiction of the Commission.

- 31.5.6.4 For a regulated economic transmission project that is approved pursuant to Section 31.5.4.6 of this Attachment Y, the Transmission Owner or Other Developer shall have the right to make a filing with the Commission, under Section 205 of the Federal Power Act, for approval of its costs associated with implementation of the project. The filing of the Transmission Owner or Other Developer must be consistent with its project proposal made to and evaluated by the ISO under Section 31.5.4 of this Attachment Y. Costs will be recovered when the project is completed pursuant to a rate schedule filed with and accepted by the Commission in accordance with the cost recovery requirements set forth in this Section, or as otherwise determined by the Commission. Upon request by NYPA, the ISO will make a filing on behalf of NYPA.
- 31.5.6.5 For a regulated transmission project that is implemented to meet a Public Policy Transmission Need, the Transmission Owner or Other Developer shall

have the right to make a filing with the Commission under Section 205 of the Federal Power Act, for approval of its costs associated with implementation of the project. The filing of the Transmission Owner or Other Developer must be consistent with its project proposal submitted to, evaluated by and selected by the ISO under Section 31.4 of this Attachment Y. The period for cost recovery, if any cost recovery is approved, will be determined by the Commission and will begin if and when the project is completed, or as otherwise determined by the Commission. Such cost recovery will include reasonable costs incurred, by the Transmission Owner or Other Developer, to provide a more detailed study or cost estimate for such project at the request of the NYPSC, and to prepare the application required to comply with New York Public Service Law Article VII, or any successor statute or any other applicable permits, and to seek other necessary authorizations.

If the appropriate federal, state or local agency(ies) either does not approve a necessary authorization, or approves and later withdraws authorization, for the project, all of the necessary and reasonable costs incurred and commitments made up to the final federal, state or local regulatory decision, including reasonable and necessary expenses incurred to implement an orderly termination of the project, will be recoverable by the Transmission Owner or Other Developer.

Upon request by NYPA, the ISO will make a filing on behalf of NYPA.

31.5.6.6 To the extent that Incremental TCCs are created as a result of a regulated economic transmission project that has been approved for cost recovery under the NYISO Tariff, those Incremental TCCs that can be sold will be auctioned or

otherwise sold by the ISO. The ISO shall determine the amount of Incremental TCCs that may be awarded to an expansion in accordance with the provisions of Section 19.2.2 of Attachment M of the ISO OATT. The ISO will use these revenues to offset the revenue requirements for the project. The Incremental TCCs shall continue to be sold for the depreciable life of the project, and the revenues offset will commence upon the first payment of revenues related to a sale of Incremental TCCs on or after the charge for a specific RETP is implemented.

31.5.7 Cost Allocation for Eligible Interregional Transmission Projects 31.5.7.1 Costs of Approved Interregional Transmission Projects

The cost allocation methodology reflected in this Section 31.5.7.1 shall be referred to as the "Northeastern Interregional Cost Allocation Methodology" (or "NICAM"), and shall not be modified without the mutual consent of the Section 205 rights holders in each region.

The costs of Interregional Transmission Projects, as defined in the Interregional Planning Protocol, evaluated under the Interregional Planning Protocol and selected by ISO-NE, PJM and the ISO in their regional transmission plans for purposes of cost allocation under their respective tariffs shall, when applicable, be allocated to the ISO-NE region, PJM region and the ISO region in accordance with the cost allocation principles of FERC Order No. 1000, as follows:

(a) To be eligible for interregional cost allocation, an Interregional Transmission

Project must be selected in the regional transmission plan for purposes of cost allocation in each

of the transmission planning regions in which the transmission project is proposed to be located,

pursuant to agreements and tariffs on file at FERC for each region. With respect to Interregional

Transmission Projects and other transmission projects involving the ISO and PJM, the cost

allocation of such projects shall be in accordance with the Joint Operating Agreement ("JOA") among and between the ISO and PJM. With respect to Interregional Transmission Projects and other transmission projects involving the ISO and ISO-NE, the cost allocation for such projects shall be in accordance with this Section 31.5.7 of Attachment Y of the NYISO Open Access Transmission Tariff and with the respective tariffs of ISO-NE.

- (b) The share of the costs of an Interregional Transmission Project allocated to a region will be determined by the ratio of the present value of the estimated costs of such region's displaced regional transmission project to the total of the present values of the estimated costs of the displaced regional transmission projects in all regions that have selected the Interregional Transmission Project in their regional transmission plans.
 - (i) The present values of the estimated costs of each region's displaced regional transmission project shall be based on a common base date that will be the beginning of the calendar month of the cost allocation analysis for the subject Interregional Transmission Project (the "Base Date").
 - (ii) In order to perform the analysis in this Section 31.5.7.1(b), the estimated cost of the displaced regional transmission projects shall specify the year's dollars in which those estimates are provided.
 - (iii) The present value analysis for all displaced regional transmission projects shall use a common discount rate. The regions having displaced projects will mutually agree, in consultation with their respective transmission owners, and for purposes of the ISO, its other stakeholders, on the discount rate to be used for the present value analysis.

- (iv) For the purpose of this allocation, cost estimates shall use comparable cost estimating procedures. In the Interregional Planning Stakeholder Advisory Committee review process, the regions having displaced projects will review and determine, in consultation with their respective transmission owners, and for purposes of the NYISO, its other stakeholders, that reasonably comparable estimating procedures have been used prior to applying this cost allocation.
- (c) No cost shall be allocated to a region that has not selected the Interregional Transmission Project in its regional transmission plan.
- (d) When a portion of an Interregional Transmission Project evaluated under the Interregional Planning Protocol is included by a region (Region 1) in its regional transmission plan but there is no regional need or displaced regional transmission project in Region 1, and the neighboring region (Region 2) has a regional need or displaced regional project for the Interregional Transmission Project and selects the Interregional Transmission Project in its regional transmission plan, all of the costs of the Interregional Transmission Project shall be allocated to Region 2 in accordance with the NICAM and none of the costs shall be allocated to Region 1. However, Region 1 may voluntarily agree, with the mutual consent of the Section 205 rights holders in the other affected region(s) (including the Long Island Power Authority and the New York Power Authority in the NYISO region) to use an alternative cost allocation method filed with and accepted by the Commission.
- (e) The portion of the costs allocated to a region pursuant to the NICAM shall be further allocated to that region's transmission customers pursuant to the applicable provisions of the region's FERC-filed documents and agreements, for the ISO in accordance with Section 31.5.1.7 of Attachment Y of the ISO OATT.

- (f) The following example illustrates the cost allocation for such an Interregional Transmission Project:
 - A cost allocation analysis of the costs of Interregional Transmission Project Z is to be performed during a given month establishing the beginning of that month as the Base Date.
 - Region A has identified a reliability need in its region and has selected a transmission project (Project X) as the preferred solution in its regional plan. The estimated cost of Project X is: Cost (X), provided in a given year's dollars. The number of years from the Base Date to the year associated with the cost estimate of Project (X) is: N(X).
 - Region B has identified a reliability need in its region and has selected a transmission project (Project Y) as the preferred solution in its Regional Plan. The estimated cost of Project Y is: Cost (Y), provided in a given year's dollars. The number of years from the Base Date to the year associated with the cost estimate of Project (Y) is: N(Y).
 - Regions A and B, through the interregional planning process have determined that an Interregional Transmission Project (Project Z) will address the reliability needs in both regions more efficiently and cost-effectively than the separate regional projects. The estimated cost of Project Z is: Cost (Z). Regions A and B have each determined that Interregional Transmission Project Z is the preferred solution to their reliability needs and have adopted that Interregional Transmission Project in their respective regional plans in lieu of Projects X and Y respectively. If Regions A and B have agreed to bear the costs of upgrades in other affected transmission planning regions, these costs will be considered part of Cost (Z).

- The discount rate used for all displaced regional transmission projects is: D
- Based on the foregoing assumptions, the following formulas will be used:
 - Present Value of Cost (X) = PV Cost (X) = Cost (X) $/ (1+D)^{N(X)}$
 - Present Value of Cost $(Y) = PV Cost(Y) = Cost(Y) / (1+D)^{N(Y)}$
 - Cost Allocation to Region A = Cost (Z) x PV Cost (X)/[PV Cost (X) + PV Cost (Y)]
 - Cost Allocation to Region B = Cost (Z) x PV Cost (Y)/[PV Cost (X) + PV Cost (Y)]
- Applying those formulas, if:

Cost
$$(X) = $60$$
 Million and $N(X) = 8.25$ years

Cost
$$(Y) = $40$$
 Million and $N(Y) = 4.50$ years

$$Cost(Z) = $80 Million$$

$$D = 7.5\%$$
 per year

Then:

PV Cost
$$(X) = 60/(1+0.075)^{8.25} = 33.039$$
 Million

PV Cost
$$(Y) = 40/(1+0.075)^{4.50} = 28.888$$
 Million

Cost Allocation to Region A = $\$80 \times 33.039/(33.039 + 28.888) = \42.681 Million

Cost Allocation to Region B = $\$80 \times 28.888/(33.039+28.888) = \37.319 Million

31.5.7.2 Other Cost Allocation Arrangements

(a) Except as provided in Section 31.5.7.2(b), the NICAM is the exclusive means by which any costs of an Interregional Transmission Project may be allocated between or among PJM, the ISO, and ISO-NE.

(b) Nothing in the FERC-filed documents of ISO-NE, the ISO or PJM shall preclude agreement by entities with cost allocation rights under Section 205 of the Federal Power Act for their respective regions (including the Long Island Power Authority and the New York Power Authority in the ISO region) to enter into separate agreements to allocate the cost-of Interregional Transmission Projects proposed to be located in their regions as an alternative to the NICAM, or other transmission projects identified pursuant to assessments and studies conducted pursuant to Section 6 of the Interregional Planning Protocol. Such other cost-allocation methodologies must be approved in each region pursuant to the Commission-approved rules in each region, filed with and accepted by the Commission, and shall apply only to the region's share of the costs of an Interregional Transmission Project or other transmission projects pursuant to Section 6 of the Interregional Planning Protocol, as applicable.

31.5.7.3 Filing Rights

Nothing in this Section 31.5.7 will convey, expand, limit or otherwise alter any rights of ISO-NE, the ISO, PJM, each region's transmission owners, market participants, or other entities to submit filings under Section 205 of the Federal Power Act regarding interregional cost allocation or any other matter.

Where applicable, the regions have been authorized by entities that have cost allocation rights for their respective regions to implement the provisions of this Section 31.5.7.

31.5.7.4. Merchant Transmission and Individual Transmission Owner Projects

Nothing in this Section 31.5.7 shall preclude the development of Interregional Transmission Projects that are funded solely by merchant transmission developers or by individual transmission owners.

31.5.7.5 Consequences to Other Regions from Regional or Interregional Transmission Projects

Except as provided herein in Sections 31.5.7.1 and 31.5.7.2, or where cost responsibility is expressly assumed by ISO-NE, the ISO or PJM in other documents, agreements or tariffs on file with FERC, neither the ISO-NE region, the ISO region nor the PJM region shall be responsible for compensating another region or each other for required upgrades or for any other consequences in another planning region associated with regional or interregional transmission facilities, including but not limited to, transmission projects identified pursuant to Section 6 of the Interregional Planning Protocol and Interregional Transmission Projects identified pursuant to Section 7 of the Interregional Planning Protocol.